# Graduate Catalog

2024 - 2025





# Preamble:

The Río Piedras Campus of the University of Puerto Rico, through the Academic Policy for Graduate Studies at the Campus (Certification No. 95 of the 2019-2020 Academic Year, Academic Senate)<sup>1</sup> and the Dean of Graduate Studies and Research (DEGI), aims to promote and facilitate research and academic excellence among students and faculty in graduate programs. With this objective in mind, the Associate Dean of Academic Affairs of DEGI, in collaboration with the Faculties and Graduate Schools of the Campus, presents the 2024-2025 Graduate Catalog.

At the Dean's Office, we make every effort to verify and provide updated information as documented in the Campus's Student Information System (SIE) up to November 30, 2024. The provisions of this Catalog do not constitute an irrevocable contract between any student and the University of Puerto Rico, Río Piedras Campus. Likewise, no responsibility is assumed for outdated, erroneous, or omitted information in previous publications. All information contained in this Catalog is subject to change without prior notice by the relevant DEGI authorities and officials.

Students are responsible for reading and understanding academic, administrative, and disciplinary policies and regulations, as well as the general degree requirements they must meet from the moment they enroll at the University. They are also responsible for complying with the requirements of their study program.

Associate Dean's Office for Academic Affairs

Dean's Office for Graduate Studies and Research

<sup>&</sup>lt;sup>1</sup> At the following link, you can access Certification No. 95 of the 2019-2020 Academic Year: <a href="http://senado.uprrp.edu/wp-content/uploads/2020/05/CSA-95-2019-2020.pdf">http://senado.uprrp.edu/wp-content/uploads/2020/05/CSA-95-2019-2020.pdf</a>

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# **School of Architecture**



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**DEGREE:** 

# **Master of Architecture - M.Arch Track 1.5**

**ACCREDITATION:** National Architectural Accrediting Board (NAAB)

The architecture practice requires a state-issued license. To pursue licensure, the State Examining Board requires a professional degree in Architecture from an accredited university. Our School of Architecture holds the highest possible Accreditation from the *National Architectural Accrediting Board* (NAAB).

NAAB is the only authorized accrediting board for Architecture programs in the U.., and Canada. In 2014, and again during the next visit in April of 2023, NAAB has continued our accreditation with the longest possible accreditation period of eight years.

The accreditation evaluation process is based on our institution's values, the decision-making processes, the ability to develop and provide a post-secondary education within the institution's history and mission, and the fundamental principles of educational and ideological freedom. This freedom has prevailed in our School for the past 58 years.

The professional master's degree in architecture offers two routes: Track 1.5 and Track 3.5. Track 1.5 is designed for students from our Bachelor of Environmental Design (BED) or from an equivalent architecture pre-professional degree from other accredited institutions. The M.Arch Track 1.5 consists of 37 credits and is a continuation of the knowledge and skills learned in the pre-professional architecture baccalaureate. Track 3.5 accepts students from bachelors in disciplines other than architecture. Track 3.5 is comprised of 106 credits. The M.Arch 3.5 curriculum path began in the summer of 2020, while the M.Arch 1.5 began in August 2020. These two career paths lead to research-based graduate education for informed and evidence-based decision-making which promotes interdisciplinarity and is designed to satisfy the NAAB Conditions of Accreditation.

### **FACULTY MEMBERS:**

**Carola Ballester Descartes**, Master in Planning, University of Puerto Rico, 2013; and Master in Landscape Architecture, Polytechnic University of Puerto Rico, 2010. Associate Dean. Landscape Architecture.

**Blanquita Calzada Acosta**, M.Arch, University of Puerto Rico, 1983. Graduate Program Coordinator, Licensed Architect. Design.

José Coleman-Davis, M.Arch, Tulane University of New Orleans, Louisiana, 2004. Diseño.

Luis Daza Duarte, Ph.D., University of Puerto Rico, Mayagüez, 1996. Professor. Structures. Anna L. Georas Santos, Ph.D., Complutense University, Madrid, 2015. Associate Professor, Licensed Architect. Design, Professional Practice Internship.

**Mayra O. Jiménez Montano**, Ph.D., University of Granada, 2016. Design, Research Methodologies in Design.

**Jorge L. Lizardi Pollock**, Ph.D., University of Puerto Rico, 2002. Associate Professor. History and Theory, Urban Studies.

Brenda Martínez Quiñones, MA, University of Puerto Rico, 2008, Instructor. Sustainability.

**Pedro Muñiz Rivera**, D. in Architecture, Virginia Polytechnic Institute State University 1985, Professor.

**José Pagán Parés**, Master in Design and Restoration of Architectural Structures, Polytechnic University of Catalonia, Barcelona, Spain, 2006. Master of Architecture, Illinois Institute of Technology, Crown Hall College of Architecture, Chicago, 2002. Instructor, Licensed Architect. Design and Structures.

Luis Pico Lacomba, M.Arch, University de Puerto Rico, 1981; MBA, University of Phoenix, 1996. Project Management Professional Certification, Project Management Institute, 2001. Instructor, Arquitecto Licenciado. Práctica profesional.

**Juan C. Penabad Sánchez**, M.Arch, Yale University, 1989. Assistant Professor, Licensed Architect. Design and Technology.

**Inés Penabad Peña**, M.Arch, University of Puerto Rico, 2018. Instructor. Architectural design, representation, and visualization.

**Robin Planas Casado,** M.Arch, University of Puerto Rico at Río Piedras, 2007, Associate Professor. Licensed Architect.

**Omayra Rivera Crespo**, Ph.D., La Salle School of Architecture, Barcelona, 2011. Associate Professor. Participatory design.

**Ernesto Rodríguez Matos**, M.Arch, Massachusetts Institute of Technology, 1996. Coordinator of the Bachelor's Degree Program in Environmental Design. Design.

Osvaldo J. Santiago Rodríguez, M.Arch, University of Puerto Rico at Río Piedras, 2020, Instructor.

Esteban Sennyey Halasz, M.Arch, Cornell University, New York 1982, Full Professor.

Rafael Vargas Correa, M.Arch, University of Puerto Rico at Río Piedras 2015, Associate

Professor.

# **ADMISSIONS REQUIREMENTS: M.Arch 1.5**

# **General Requirements of Rio Piedras Campus:**

http://graduados.uprrp.edu/index.php?option=com\_content&view=article&id=105&Itemid=360 & lang=es

# **SPECIFIC ADMISSIONS REQUIREMENTS:**

Applicants who come from our Bachelor of Environmental Design, will be evaluated, according to compliance with the admission requirements of our School. These students may be admitted to the M.Arch Track 1.5, a 37-credit master's program. The admission requirements are as follows:

- 1. Admission Requirements for the Master of Architecture degree leading to the professional degree (37 credits):
- 2. A Bachelor of Environmental Design, Architecture, or a Pre-professional Bachelor of Architecture or its equivalent from an accredited or recognized University or College.
- 3. Application form.
- 4. A 3.00 GPA or higher on a scale of 4.00 max.
- 5. A 3.00 GPA or higher on a scale of 4.00 max in Design Studio courses.
- 6. Oral and written proficiency in English and Spanish. Certification of courses taken or academic record that proves it.

# **REQUIRED DOCUMENTS:**

- 1. Two official academic transcripts, sent directly to the Graduate Program by the Register's Office of the institution where the applicant studied. They can send a copy initially to open the file.
- 2. Two letters of recommendation (electronic format) are required for students from academic institutions other than the School of Architecture at the University of Puerto Rico.
- 3. Applicants from other recognized academic institutions will submit a catalog description of the approved courses and a syllabus of the courses taken during the Bachelor, related to the discipline of Architecture.
- 4. Essay (600-800 words) with the statement of purpose to pursue graduate studies and career plans.
- 5. Digital portfolio of design and research works with at least 2 of the best projects of each design year at the rate of one project per semester. Must show the production and creative development of the four years of the Bachelor (Portfolio rubric).

Students who have graduated from our BED, are exempt from submitting the portfolio if their academic index in design courses is 3.70 GPA or more.

Applicants who come from a Bachelor of NAAB accredited Environmental Design, Prearchitecture, or a non-professional non-NAAB accredited Architecture degree from a recognized

university will also be evaluated according to the fulfillment of the admission requirements of our School. These students may be admitted to the Track 1.5, 37-credit master's program. All of the above is required, plus the following:

# Interview with the Graduate Program Committee:

- 1. Two (2) letters of recommendation from people who know the student's academic and professional performance and can attest to the candidate's ability and commitment to pursue graduate studies.
- 2. Catalog description of approved university courses and syllabi of courses taken during the bachelor's degree related to the architecture discipline to assess compliance with the NAAB SPC's.

In addition to all the requested documents, courses' syllabi of the program previously completed by the applicant are evaluated, these are compared with the syllabi of the courses of our baccalaureate in Environmental Design and with the NAAB SPC Compliance matrix to evaluate content and NAAB's domains. If the Committee finds that the applicant does not meet any of the requirements and admission criteria (knowledge and skills), a study plan has been prepared that includes courses to correct said deficiencies. These courses are not part of the Track 1.5 program's curricular sequence, and the student must take them before or concurrently to the established curriculum through a prepared study plan.

# **GRADUATION REQUIREMENTS:**

- 1. A 3.00 grade point average.
- 2. Four (4) years to complete degree for full time M.Arch 1.5 students.
- 3. Five (5) years for part time M.Arch 1.5 students.
- 4. Submittal of End of Career Project or Thesis in the
- 5. UPR Institutional Repository <a href="https://repositorio.upr.edu">https://repositorio.upr.edu</a> up to one month after final presentation. Submittal in *Dissertations & Theses Global* to *University Microfilms International* is optional.

### **STUDY PROGRAM:**

M.Arch Track 1.5 Curriculum Courses	Crs
CORE COURSES	18
Technology IV	3
Professional Practice I	3
Professional Practice II	3
Professional Experience Internship ixP	3

Research Seminar	2
Publication Seminar	1
Applied Structural Design	3
END OF CAREER PROJECT or Thesis	10
Design Laboratory or Thesis I	5
End-of Career-Project or Thesis II	5
ELECTIVES	9
TOTAL	37

# **COURSE DESCRIPTIONS:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# ARQU 6336 Architectural Design VI: Advanced Design Laboratory

Five credits: 12 studio hours a week

Prerequisites: ARQU6335

Course integrated to the Research Seminar course. It has an interdisciplinary and participatory connection to the broad study of the city. Through questioning the variables that affect the city, the critical capacity is encouraged before the demands of a society with wide and diverse problems. Conditions at different scales, linked to the territory, the city, the block, and the building: flows, functions, forms of occupation and habitability, services, the socio-economic/cultural reality, layers of history, and operational and regulatory requirements will give way to research, and regulatory requirements will give way to demands of society with wide and diverse problems. Conditions at different scales, linked to the territory, the city, the block, and the building: flows, functions, forms of occupation and habitability, services, the socio-economic/cultural reality, layers of history, and operational and regulatory requirements will give way to research, and regulatory requirements will give way to a research that recognizes the connections or disconnections of the city. The students can work individually or as a group to propose design solutions that respond to improving the city through architecture. e course concludes with the preliminary proposal to be further developed in the end of career project or the individual thesis project. Course offered face to face, hybrid and online.

# ARQU 6337 Architectural Design VII: Integrated End of Career Project or Thesis

Five credits: 12 studio hours a week.

Prerequisites: AROU 6336

Corequisites: ARQU 6328, ARQU 6432

The course is the final path of the master's degree. The student must develop his architectural project in an integrated manner to expose the set of knowledge and skills acquired during the

student's career. It initiates with the theoretical framework, analysis, and previous studies in aspects related to the territory, the program, and the urban spatial solutions made in the previous course. It synthesizes, from an integral and complex perspective of architecture, the different humanistic and technical disciplines that intervene in the drafting of a professional architecture project. The operative sequences are defined without losing the conceptual argument of the initial design, the environmental control systems (HVAC/ Electric), and the building's tectonics through the design of constructive details. The final product is of substantial complexity, developed with poetry, depth, and definition to demonstrate that the student has the merits to be considered a peer among architects. Course offered face to face, hybrid and online.

# **ARQU 6328 Applied Structural Design**

Three credits: 3 credits (3 Hours Conference)

Prerequisites: ARQU 6XX3 Structure III or Admissions to the Graduate Program (For students admitted

to the bachelor's in environmental design or equivalent Bachelor)

Corequisites: ARQU 6337

Course focused on structural design for architects. Architectural precedents, which integrate structural systems to their architecture, will be studied. In such cases, the structure will not be restricted only to its supporting function but to its visual materialization, aesthetic, and tectonic significance. It introduces students to structural analysis using structural modeling in three dimensions (ETABS software), study of the aspects related to the mechanical properties of the material, advantages and disadvantages of its application, analysis and design of different types of loads, design methods and their application in real construction projects. Emphasize in the management of technical vocabulary, as well as the application of minimum requirements from building codes. Design of structural components of a student's final project, governed by structural norms and calculations to support the proposed solution, including material, loads, form and dimensions, as well as the construction process. Course offered face to face 100%.

# **ARQU 6431 Research Seminar**

Two credits: Two hours of lecture per week.

Prerequisite: ARQU 6145 Corequisite: ARQU 6336

The course exposes the student to the use of appropriate research methodologies for advanced studies, particularly those related to the discipline of architecture. In this, the skills and competences in research are applied so that the student can define a problem, make a theorical reflection and design the research method pertinent to the problem, selecting and using tools that allow him to rigorously develop the research, based on bibliographic resources search, as well as the collection, analysis, and evaluation of data. The course is closely related to the Research Laboratory in Design course to contribute to the development of methodologies that allow scientifically study the contexts of architectural interventions. In addition, the student is expose to workshops and support seminars conducted by external resources to help in the understanding of the concrete and practical aspects of architecture with those of theory. Course offered face to face, hybrid and online.

# **ARQU 6432 Publication Seminar**

One credit: One seminar hour a week.

Prerequisite: ARQU 6431 Corequisite: ARQU 6336

This course consists of a practical workshop to learn how to design the written and graphic document required for the final year project (PIFC). Throughout the course, the student designs the PICF document, applying the writing and graphic editing skills and knowledge discussed in class. In addition, the course teaches and practices oral presentation skills for architectural projects. This course relates to Research Seminar and supports the course for the design of end of career project or thesis. Students are exposed to support workshops and seminars, offered by invited experts. Course offered face to face, hybrid and online.

# ARQU 6425 Professional Experience Internship (iXP)

Three credits: Three conference hours a week.

Prerequisites: Admission to the program. Admissions to the Graduate Program (For students

admitted to the bachelor's in environmental design or equivalent bachelor)

The Professional Experience Internship (iXP in Spanish) course exposes the student to professional experience, working in a firm, organization or agency to perform tasks relevant to architecture. The course discusses the requirements for *The Path to Licensure* as defined by the local State Department and NCARB; the support services offered by the College of Architects and Landscape Architects of Puerto Rico (CAAPPR in Spanish); and general aspects of the professional practice of architecture from multiple perspectives. The internship has three components: 1. Professional Experience Internship; 2. Community Service; 3. Academic Work. Course offered face to face, hybrid and online.

# **ARQU 6514 Technology IV: Energy Systems**

Three credits. Three conference hours a week.

Prerequisites: ARQU 6513

The course exposes the student to the study of electrical power systems and specific issues of environmental control in buildings: power electrical systems, communication systems, artificial lighting, and acoustic systems. Explores the current context of energetic including the basic knowledge of renewable energy systems and energy efficiency. The control of light and sound is included as an indispensable topic in the architect's technical training. The student will be able to apply these principles and the basic development of these systems in the architectural design workshop. Course offered face to face, hybrid and online.

# ARQU 6383 Professional Practice I: Design Project

Three credits: Three conference hours a week.

Prerequisite: Admission to the program.

Introduction to concepts, ethical processes, administrative and regulatory aspects of the professional practice of architecture. Presentation of the considerations of the legal and regulatory

procedures that guide the preparation of construction related documents that are the architect's responsibility as a professional services provider. Discussion of the responsibilities of an architect in the certification of construction documents. Review of the considerations, duties and responsibilities of the architect in a professional services contract. Course offered face-to-face, online and hybrid.

# ARQU 6384 Professional Practice II: Design Firm

Three credits. Three conference hours a week. Prerequisite: Admission to graduate program.

The course defines the professional practice of architecture and analyzes the social, economic, ethical and legal context within which the professional practice of architecture must insert itself. Basic economic and financial management concepts are discussed that influence and determine the organization of a design firm and its range of professional services and responsibilities. The course also covers issues pertaining to the different stages in the development of an architectural project, including: the establishment of a designer-client relationship, the design process, the production of construction documents, and supervision of the construction process of a project. Course offered face-to-face, online and hybrid.

# OTHER COURSE DESCRIPTIONS:

# **AROU 6895 Continued Thesis**

No credits.

Continuation of Thesis Project so students can continue receiving Library and other facilities services during the semester and in the summer session.

# **ARQU6991 Specialized Study**

1 to 12 credits. Individual work the professor's consent.

Prerequisites: For graduate students, authorization of the professor.

Designed to give the student an opportunity for specialized graduate study in an area of their particular interest as related to environmental design. Topics, readings, and research methods to be arranged by agreement between the student and the professor. Students may be registered for 1 to 6 credits per semester depending upon the nature of the study and the time allotted to it. Areas of study accepted shall be complementary to those covered in other courses, avoiding unnecessary duplication. The nature of assignments may include experimental or research projects, independent work. Field experiences in cooperative projects, and the like, in order to maximize curricular flexibility and accommodate relevant student interests and needs. Enrollment is limited to graduate students with previous approval of their area of specialialized study. To complete course requirements the student must submit two copies of the comprehensive report on his work and conclusions. (Can be repeated up to 12 credits). The course is offered face to face hybrid and online.

# ARQU 6992 SPECIALIZED STUDY

1 to 12 credits: Individual work with consent of the professor.

Prerequisites: For graduate students, an opportunity for specialized graduate students. Designed to give the student an opportunity for specialized graduates study in an area of their particular interest related to environmental design. Topics, reading and research methods to be arranged by agreement between the student and the professor. Students may register for 1 to 5 credits per semester depending upon the nature of the study and the the time allotted to it. Areas of study accepted shall be complementary to those covered in other courses, avoiding unnecessary duplication. The nature of assignments may include experimental or research projects, independent work, field experience, cooperative projects and the like, in order to maximize curricular flexibility and accommodate relevant student interest and needs. Enrollment is limited and accommodates relevant student interests and needs. Enrollment is limited to graduate students with previous approval of their area of specialized study. In order to complete course requirements, the student must submit two copies of a comprehensive report on their work and conclusions. This course can be taken up to 12 times under different themes.

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Email: escuela.arquitectura@upr.edu

Websites: http://graduados.uprrp.edu/; https://earq.uprrp.edu/programa/maestria-en-

arquitectura/

# **DEGREE:**

# Master of Architecture - M. Arch Track 3.5 ..

**ACCREDITATION:** *National Architectural Accrediting Board (NAAB)* 

The architecture practice requires a state issued license. In order to pursue licensure, the State Examining Board requires a professional degree in Architecture from an accredited university. Our Architecture School holds the highest possible Accreditation from the *National Architectural Accrediting Board* (NAAB).

NAAB is the only authorized accrediting board for Architecture programs in the US, and Canada. In 2014, and again during the recent visit in April of 2023, NAAB has continued granting the program with the longest possible accreditation period of eight years.

The accreditation evaluation process is based on our institution's values, the decision-making processes, the ability to develop and offer a post-secondary education within the UPR's historic context and mission, and its fundamental principles of educational and ideological freedom. This freedom has prevailed in our School for the past 58 years.

The professional master's degree in architecture offers two routes: Track 1.5 and Track 3.5. Track 1.5 is designed for students from our Bachelor of Environmental Design (BED) or from an equivalent architecture pre-professional degree from other accredited institutions. The MA Track 1.5 consists of 37 credits and is a continuation on the knowledge and skills learned in the pre-professional architecture baccalaureate. Track 3.5 accepts students from bachelors in disciplines other than architecture and is comprised of 106 credits. The MA 3.5 curriculum path began in the summer of 2020, while the MA 1.5 began in August 2020. These two career paths lead to research-based graduate education for informed and evidence-based decision-making, which promotes interdisciplinarity and which is designed to satisfy the NAAB Conditions of Accreditation.

In order to complete a professional architecture degree at our School of Architecture, students must either complete: 1) a combined undergraduate and graduate sequence of 168 semester credit hours made up of 131 undergraduate credit hours, and 37 graduate credit hours (four year BED program plus the 1.5 MA Track) or, 2) 106 semester credit hours through the MA 3.5, track for students with bachelor's degrees in disciplines other than architecture.

### **FACULTY:**

**Carola Ballester Descartes,** Master in Planning, University of Puerto Rico, 2013; and Master in Landscape Architecture, Polytechnic University of Puerto Rico, 2010. Associate Dean. Landscape Architecture.

**Blanquita Calzada Acosta**, MA, University of Puerto Rico, 1983. Graduate Program Coordinator, Licentiate Architect. Design.

José Coleman-Davis, MA, Tulane University of New Orleans, Louisiana, 2004. Design.

Luis Daza Duarte, Ph.D., University of Puerto Rico, Mayagüez, 1996. Professor. Structures.

**Anna L. Georas Santos**, Ph.D., University Complutense, Madrid, 2015. Associate Professor, Licensed Architect. Design, Professional Practice Internship.

**Mayra O. Jiménez Montano,** Ph.D., University of Granada, 2016. Design, Research Methodologies in Design.

**Jorge L. Lizardi Pollock**, Ph.D., University of Puerto Rico, 2002. Associate Professor. History and Theory, Urban Studies.

Brenda Martínez Quiñones, MA, University of Puerto Rico, 2008, Instructor. Sustainability.

**Pedro Muñiz Rivera**, PhD in Architecture, Virginia Polytechnic Institute State University 1985, Professor.

**José Pagán Parés,** Master in Design and Restoration of Architectural Structures, Polytechnic University of Catalonia, Barcelona, Spain, 2006. Master of Architecture, Illinois Institute of Technology, Crown Hall College of Architecture, Chicago, 2002. Instructor, Licensed Architect. Design and Structures.

**Luis Pico Lacomba,** M.Arch, University of Puerto Rico, 1981; MBA, University of Phoenix, 1996. Project Management Professional Certification, Project Management Institute, 2001. Instructor, Licensed Architect. Professional Practice.

**Juan C. Penabad Sánchez,** M.Arch, Yale University, 1989. Assistant Professor, Licensed Architect. Design and Technology.

**Inés Penabad Peña,** M.Arch, University of Puerto Rico, 2018. Instructor. Architectural Design, Representation and Visualization.

**Robin Planas Casado,** M.Arch, University of Puerto Rico at Río Piedras, 2007. Associate Professor. Licensed Architect.

**Omayra Rivera Crespo,** Ph.D., Escuela Técnica Superior de Arquitectura La Salle, Barcelona, 2011. Associate Professor. Participatory Design.

**Ernesto Rodríguez Matos,** M.Arch, Massachusetts Institute of Technology, 1996. Coordinator of the Bachelor's Program in Environmental Design. Design.

Osvaldo J. Santiago Rodríguez, M.Arch, University of Puerto Rico at Río Piedras, 2020, Instructor.

Esteban Sennyey Halasz, M.Arch, Cornell University, New York 1982, Professor.

Rafael Vargas Correa, M.Arch, University of Puerto Rico at Río Piedras 2015, Associate Professor.

# **ADMISSION REQUIREMENTS M.Arch 3.5**

# **General Requirements for Rio Piedras Campus**

http://graduados.uprrp.edu/index.php?option=com\_content&view=article&id=105&Itemid=360 & lang=es

# **Specific Admission Requirements for the MA:**

- 1. A bachelor's degree in any discipline from an accredited university.
- 2. A minimum grade point average (GPA) of 3.00 points, on a 4.00 scale.
- 3. Students from foreign universities must contact our Graduate Program's Office to validate courses taken. All documents, including official transcripts and descriptions, must be sent to the School of Architecture, 11 Ave. University Ste. 1101 San Juan PR 00925-2531
- 4. Fluency in the Spanish language.
- 5. Complete and submit the electronic Graduate Program Application.
- 6. Letter of intent (600-800 words). This essay must expose your motivation and interest in studying architecture and your professional goals.
- 7. Two (2) letters of recommendation from people who know you professionally and academically.
- 8. Two (2) official transcripts sent to: Escuela de Arquitectura, 11 Ave. Universidad, Sta. 1101, San Juan, PR 00925-2531
- 9. Interview by the Graduate Committee.
- 10. Optional portfolio with art and design research and work. A digital version may substitute the paper portfolio. It can be uploaded with the Letter of Intent.
- 11. Calculus. You may be admitted without having taken a Calculus course but will have to take it upon admission to the program.
- 12. Admission to the program may be conditioned to taking certain courses during the first and second semester of the program.

# **MA 3.5 GRADUATION REQUIREMENTS:**

- 1. A GPA of 3.00 points on Architecture core courses.
- 2. Full-time M.Arch 3.5 students have up to seven (7) years to complete the program.
- 3. Part-time M.Arch 3.5 students have up to eight (8) years.

4. Up to one month to deposit final document to the UPR's Institutional Repository. Depositing documents to *Dissertations & Theses Global* of the *Microfilms International University* is optional after presenting the End of Career project or the Thesis.

# **PROGRAM:**

	M	.ARCI	H Track 3.5		
Curriculum Courses		Crs.	Curriculum Courses		Crs.
	CORE COURSES	78	COERE COURSES		78
ARQU 6331	Design I: Design Fundamentals	5	ARQU 6212	History II	3
ARQU 6332	Design II: Elemental Design	5	ARQU 6213	History III	3
ARQU 6333	Design III: Intermediate Design	5	ARQU 6214	History of Architecture of Puerto Rico	3
ARQU 6334	Design IV	5	ARQU 6145	Research Techniques in Architecture	2
ARQU 6335	Design	5	ARQU 6431	Research Seminar	2
ARQU 6511	Technology I	3	ARQU 6432	Publication Seminar	1
ARQU 6512	Technology II	3	ARQU 6325	Structures I	3
ARQU 6513	Technology III	3	ARQU 6326	Structures II	3
ARQU 6514	Technology IV	3	ARQU 6327	Structures III	3
ARQU 6383	Professional Practice I	3	ARQU 6328	Applied Structural Design	3
ARQU 6384	Professional Practice II	3	END OF CAREER PROJECT		10
ARQU 6425	ixP – Professional Experience Internship	3	ARQU 6336	Design VI: Design Laboratory	5
ARQU 6225	Architecture Theory / Criticism	3	ARQU 6337	Design VII: End-of- Career-Project	5
ARQU 6211	History I	3	<b>ELECTIVES</b> : (12 credits of the School of Architecture, 6 of these credits in visualization and representation and up to 6 credits in another faculty)		18
		TOTA	L		106

### **COURSE DESCRIPTIONS:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# ARQU 6331 Architectonic Design I: Design Fundamentals of Design

Five credits: 12 studio hours of workshop per week. Prerequisite: Admission to the Graduate Program.

Introductory course to fundamental topics of the design process. The student will understand that the act of design is an orchestrated process of decision making to simultaneously solve multiple problems. The student will become familiar with architectural vocabulary, principles of spatial arrangement, formal and spatial aspects of architectural composition such as: point / line-line / plane-plane / volume-volume / space; positive / negative space; color, light / shadow and shape management. The student will recognize the role of diagramming as a basis to propose a solution (strategy) and will develop representation skills to produce free hand and technical drawings, as well as analytical, conceptual or representative models of his/her projects. The concept of inhabitant will be introduced as a manifestation of design. Develop skills to conceptualize, organize the program and understand the concepts of form and function, analysis and synthesis, while handling context variables. The course is offered face to face hybrid and online.

# ARQU 6332 Architectonic Design II: Elemental Design

Five credits: 12 studio hours. Prerequisite: ARQU 6331

The course introduces the student to the multiple dimensions of the design process: composition, sequence, urban context, and climatic conditions. It deals with issues of typology, programming, as well as considerations of sustainability and tectonics. The course integrates strategies to work with the variables in the design process looking for coherent answers to simultaneous problems. The principles of composition, the architectural elements and spatial characteristics that define the architectural object are studied. The student is exposed to mathematical-geometric concepts such as scale, proportion, perspective, and shadow projection. It sharpens two-dimensional representation skills: orthogonal drawings, perspectives, and other graphic resources to develop three-dimensional visualization as a design tool. The introduction to digital representation media will commence. The study of precedents in architecture will allow the students to familiarize themselves with concrete experiences.

# ARQU 6333 Architectonic Design III: Intermediate Design

Five credits: 12 studio hours. Prerequisite: ARQU 6332

The course exposes the student to the integration of architectural design variables and the development of approaches to face the design process from the object to the urban scale. It examines the form-function relationships for the insertion in the urban context, the spatial sequence management, accommodation, use and, expression of the character of the

construction. It develops the project at the level of constructive details that show dexterity in the management of construction systems, including aspects of building sustainability. The course includes the requirements of current building codes research component with the objective to recognize the relevance of precedents, site conditions and their occupants. It will generate a programmatic agenda and develop students' skills on architectural representation, using digital tools for architectural representation. The course could be offered face-to-face, hybrid or online.

# ARQU 6334 Advanced Architectural Design IV: Architecture as a component of Urbanism

Five credits: 12 studio hours a week.

Prerequisite: ARQU 6333

The workshop exposes the student to the understanding of the relationship that mediates between the building as a constituent of an urban enclave and the city. It is focused on the understanding and exploration of the city as a collective and complex body made up of its inhabitants, social rituals, operational uses, ecology, economy, and adaptation to the physical context: geographic / topographic / climatic. The student will face the design of the building as a multifunctional urban component coordinated to establish a sense of cohesion and coherence in the city. It will present urban sustainability strategies: the concept of recycling and re-use of buildings, energy efficiency, the reduction of heat islands, sustainable water management, alternative mobility, and others, based on guides, programs and environmental evaluation systems with greater acceptance in the contemporary industry of design and construction. The course could be offered face to face, hybrid or online.

# ARQU 6335 Advanced Architectural Design V: Building Anatomy

Five credits: 12 studio hours a week.

Prerequisite: ARQU 6334

The workshop proposes a synthetic process applied to a medium-scale architectural project that integrates symbolic, spatial, structural, and technical aspects in the urban context. It focuses on both creativity and technical rigor to realize the proposed idea. The student works from the formulation of a problem that arises from the urban enclave and the program of uses and develops the building considering requirements and charges imposed by technical and regulatory issues so that the building becomes a habitable reality, including aspects of being technologically sustainable and resilient. The student creates drawings at different scales (location plans, sections, and construction details). The final project must demonstrate the integration of technologies from the associated disciplines: civil, structural, plumbing, electrical, fire, mechanical ventilation, and informatics.

# ARQU 6336 Architectural Design VI: Advanced Design Laboratory

Five credits: 12 hours of workshop per week.

Co requisites: ARQU 6335

Course integrated to the Research Seminar course. It has an interdisciplinary and participatory connection for the broad study of the city. Through a questioning of the variables that affect the city, the critical capacity and the social responsibility of the student are encouraged before the demands of a society with wide and diverse problems. Conditions at different scales, linked to the

territory, the city, the block, and the building: flows, functions, forms of occupation and habitability, services, the socio-economic / cultural reality, layers of history, and operational and regulatory requirements will give way to research that recognizes the connections or disconnections of the city. The student can work individually or as a group to propose design solutions that respond to improve the city through architecture. The courses concludes with the preliminary proposal to be further developed in the end of career project or the individual thesis project.

# ARQU 6337 Architectural Design VII: Integrated End of Career Project/Thesis

Five credits: 12 hours of workshop per week.

Prerequisites: ARQU 6336

Corequisites: ARQU 6324, ARQU 6432

The course is the final path of the master's degree. The student must develop his architectural project in an integrated manner to expose the set of knowledge and skills acquired during the student's career. The course initiates with the theoretical framework, analysis and previous studies in aspects related to the territory, the program and the urban spatial solutions made in the previous course. It synthesizes, from an integral and complex perspective of architecture, the different humanistic and technical disciplines that intervene in the drafting of a professional architecture project. The operative sequences are defined, without losing the conceptual argument of the initial design, as well as the environmental control systems (HVAC / Electric) and the tectonics of the building, through the design of constructive details. The final product is of substantial complexity, developed with poetry, depth, and definition to demonstrate that the student has the merits to be considered a colleague architect. The course could be offered face to face, hybrid or online.

# **ARQU 6211 History of Architecture I: The Invention of the Classic**

Three credits: Three hours of lecture per week.

This course offers a panoramic view of Western Architecture from its prehistoric origins, Mesopotamia, and Egypt to the Italian Risorgimento. By discussing and analyzing built environments and texts about them, the course will promote a critical understanding of the foundations and classical development of Western Architecture. The course will explore continuities/differences in the building practices of the different periods, regions, and cultures, framed in their political and geographical contexts to promote a deeper understanding of the concepts and successive interpretations of the "classical" architecture that is our common Western heritage. The course could be offered face to face, hybrid or online.

# ARQU 6212 Architectural History II: Genealogy of Modernity

Three credits: Three hours of lecture per week.

Prerequisite: ARQU 6211

This course teaches students how the architectonic and urban theories and practices in Europe and America have evolved since the Renaissances' aesthetic canons crisis until the revival and modernism styles of late 19th century avant-garde ideals. This course will cover two aspects: first, students will learn about the thinkers, contexts, and works that laid the groundwork for modern architecture's ideals. Second, the class discussion will promote critical inquiry by discussing the set of treaties, historic texts, and buildings that played a decisive role in the definition of contemporary architecture in both the eastern and western hemispheres. The course is offered face to face, hybrid or online.

# ARQU 6213 History of Architecture III: Architecture and Contemporary Urbanism

Three credits: Three hours of lecture per week.

Prerequisite: ARQU 6212

This course covers the architects' response to the following issues: modernization, industrialization, immigration to the cities, and political and social conflicts that have affected humanity in the last century. This course covers the first three decades of European avantgardes of the 20th century, mid and post-Second World War architecture, and urban views, which led to the debates about present-time cities. At the same time, students will have a critical view of the reinterpretations and transfers of global architectural knowledge in emerging nations of Latin America. Students will become familiar with the resistance and alternative proposals to the globalization of practices within Latin-American specific identity policies and cultural practices. The course is offered face to face, hybrid or online.

# **ARQU 6214 History of Architecture in Puerto Rico**

Three credits: Three hours of lecture per week.

Prerequisite: ARQU 6213

History of Architecture in Puerto Rico is a survey course of the architecture developed in Puerto Rico from pre-Colombian to present times. The course offers students fundamental knowledge about the urban development of Puerto Rican cities and towns, prevailing tendencies in architectural thought and production, and on the historical development of his profession of architecture in Puerto Rico. The course uses primary sources from archives and libraries and secondary sources as described in the bibliography.

# ARQU 6325 Structure I: Static, Equilibrium, and Analysis of Statically Determinate Structures

Three credits. Three hours of lecture per week. Prerequisite: Admission to the graduate program.

This course prepares students with basic knowledge for the analysis and conceptualization of simple structures. Students study the principles of static and force decomposition; vectorial operations; non-concurrent and concurrent force systems; static equilibrium laws (in particles and rigid structures, both in 2D and 3D); types of supports and reactions; the use and generation of free body diagrams in the analysis of structures; analysis of force distribution, centroids, and gravity centers; and calculation of reactions in simple structures and analysis of truss-type structures. A

final project explores the different structural systems and their functionality in transferring loads. The course is offered face to face, hybrid or online.

# ARQU 6326 Structure II: Resistance of Materials and Structural Behavior

Three credits. Three hours of lecture per week.

Prerequisite: ARQU 6325

The course is oriented towards the analysis of simple structures such as beams and trusses. The analysis of trusses is studied by the methods of joints and sections; the effects of external loads on simple beams are explored in terms of the state of internal forces by generating the diagrams of axial loads, and shear and bending moments. The sectional properties of flat areas are studied (area, centroids, inertia moments, turning radius, etc.) Students learn to calculate the different types of force and stress on any point of the structure. The double integration method is investigated for the calculation of deformations in beams. Lastly, column stability and how to quantify structural capacity is studied. The final project is related to one of the main topics covered in the course.

# ARQU 6327 Structure III: Indetermined structural analysis from gravitational, wind and earthquake loads

Three credits. Three hours of lecture per week.

Prerequisite: ARQU 6326

This course is oriented towards the analysis of simple structures such as beams and trusses. The course will provide basic knowledge for students to analyze indeterminate structures (continuous beams and frames) using exact methods (method of moment distribution) and also using approximate procedures (methods for gravity and lateral loads analysis). The course elaborates on the structural risk threats caused by hurricanes and earthquakes, emphasizing the quantification of side loads using the current code (ASCE-7- 2010). The student receives scientific technical information related to the seismic vulnerability of Puerto Rico (earthquakes and tsunamis) and the recurring threats of hurricanes in our environment. At the end of the course students prepare a final project that incorporates wind loads and earthquake assessment of a real building structure. The course is offered face to face, hybrid or online.

# **ARQU 6328 Applied Structural Design**

Three credits: Three hours conference.

Prerequisite: ARQU 6327 Structures III or Admissions to the Graduate Program (For students

admitted to a bachelor's in environmental design or equivalent bachelor.) Corequisite: ARQU 6337 - Integrated Project for the end of the career PIFC

Course focused on structural design for architects. Architectural precedents, which integrate structural systems to their architecture, will be studied. In such cases, the structure will not be restricted only to its supporting function but to its visual materialization, aesthetic, and tectonic significance. It introduces students to structural analysis using structural modeling in three dimensions (ETABS software), study of the aspects related to the mechanical properties of the material, advantages and disadvantages of its application, analysis and design of different types of loads, design methods and their application in real construction projects. The course emphasizes the management of technical vocabulary, as well as the application of minimum requirements from

building codes, and design of structural components of a student's final project, governed by structural norms and calculations to support the proposed solution, including material, loads, form and dimensions, as well as the construction process. The course is offered face to face 100%

# **ARQU 6431 Research Seminar**

Two credits: Two seminar hours a week. Prerequisite: Admission to the program.

Corequisite: ARQU 6336

The course exposes the student to the use of appropriate research methodologies for advanced studies, particularly those related to the discipline of architecture. In this, the skills and competences in research are applied so that the student can define a problem, make a theorical reflection and design the research method pertinent to the problem, selecting and using tools that allow him to rigorously develop the research, based on bibliographic resources search, as well as the collection, analysis, and evaluation of data. The course is closely related to the Research Laboratory in Design course to contribute to the development of methodologies that allow to scientifically study the contexts of architectural interventions. In addition, the student is exposed to workshops and support seminars, conducted by external resources, to help in the understanding of the concrete and practical aspects of architecture with those of theory.

# ARQU 6511 Technology I: Design of Bioclimatic Architectural

Three credits: Three hours of lecture per week. Prerequisite: Admission to the graduate program.

This course incorporates the concepts of the natural and physical environment and, the strategic application of passive techniques and methods inherent in architectural design. Students learn the bioclimatic principles and characteristics particular to materials used in vernacular architecture of diverse climatic regions. The students learn about alternative and renewable energy production systems such as heliostats, photovoltaic systems, thermic solar collectors, cogeneration systems, and Aeolic systems utilized in architectural projects. The course creates discussions of the characteristics of the diverse Puerto Rico, tropical and other region's climate components and controls. Students learn how to evaluate diverse human being's adaptability and thermic exchange through the use of thermal bioclimatic and psychrometric charts. Students will become familiar with diverse thermic human interchange methods and adaptability through the use of thermic indexes and bioclimatic and psychometric cards. The principles, strategies, and methods of passive architectural bioclimatic control systems such as: orientation; building form and proportion in relation to immediate context; organization and distribution of interior spaces; building envelope; thermic behavior of materials used; color; walls; windows, floors, roofs, solar protection systems; solar cards; shadows; solar radiation indexes; thermic wall systems 'trombe wall'; passive heating and cooling systems used in direct, indirect, and annex forms; sun blocking or perforated systems and shade patterns as sun protection systems; design criteria of internal and external spaces; conductive and radiative cooling systems for interiors; strategic vegetation and permaculture principles will be thoroughly discussed. The course is offered face to face, hybrid and online.

# ARQU 6512 Technology II: Site Design; Materials, and Construction techniques

Three credits: Three hours of lecture per week.

Prerequisite: ARQU 6511

This course focuses on identifying and incorporating physical, biological, and cultural attributes that factor into the analysis, selection, and site design for the construction location and the techniques and construction materials associated with finding solutions to the design challenges. This course teaches students topographic, geologic, hydrologic, climatic, ecological, and different soil (series, types and phases of the USDA, AASHTO, and Unified classification systems) characteristics and the problems associated with soils (water table, freezing level, settlement, erosion, sliding, earthquakes, clay concentrations, thermal load, etc.). Students learn how to apply building codes and regulations (IBC, UBC, PR Building Code, Plan CES, Act 25) and to consider legal aspects that regulate site selection decision making and compliance. Terrain leveling and preparation methods for the most efficient site selection and proper connections with vehicular and pedestrian circulation is studied. In addition, students study the most efficient methods for receiving, managing, and disposing of ground and rooftop rainwater. The characteristics and properties, processing, assembly and finishes of various materials and, construction techniques are discussed (concrete, masonry, wood, metals, terminations and moisture control and waterproofing systems). The course is offered face to face, hybrid and online.

# **ARQU 6513 Technology III: Building systems**

Three credits: Two hours of lecture and two hours of discussion per week.

Prerequisite: ARQU 6512

The course promotes the discussion and study of the mechanical systems that are part of the buildings' design. It is essential to consider the way of integrating the mechanical systems in the constitution of a building and its possibilities affecting the shape, texture, and character of the built environment. The student will be provided with a general understanding regarding the theory and practice of mechanical systems in terms of environmental control, the different systems of air conditioning, climatology, plumbing, fire safety, and mechanical circulation systems and their application to the architectural design. All the above will be discussed in accordance with the requirements established by the applicable regulations for commercial and residential projects, emphasizing vernacular, traditional and contemporary solutions. The course is offered face to face, hybrid and online.

# **ARQU 6514 Technology IV: Energy Systems**

Three credits. Three hours of lecture per week.

Prerequisite: ARQU 6513

The course exposes the student to the study of electrical power systems and specific issues of environmental control in buildings: power electrical systems, communication systems, artificial lighting, and acoustic systems. It explores the current context of energy including the basic knowledge of renewable energy systems and energy efficiency. The control of light and sound is included as an indispensable topic in the architect's technical training. The student will be able to apply these principles and the basic development of these systems in the architectural design workshop. The course is offered face to face, hybrid and online.

# **ARQU 6146 Research Methods and Techniques in Arquitecture**

Two credits.

The course exposes the students to the fundamental concepts and research methods for its application to the field of architecture. The course, through practical exercises, assists students to develop skills and competences in research techniques to learn to define a problem, establish a theoretical reflection and define research methods, while selecting and using tools that enable them to rigorously develop research, based on data collection and analysis. The students are exposed to guidelines on basic writing and style, to the correct use of images, and to the use of available bibliographic resources, through the search in local and international databases. In addition, they are exposed to support workshops offered by the staff and technical resources of the Library, while learning and understanding the ethical and legal implications regarding the use of information.

# ARQU 6225 Architectural Theory and Criticism

Three credits: Two hours of lecture and one hour of discussion per week.

Prerequisite: Admission to the graduate program.

Theoretical course that prepares the student to critically analyze and judge architectural work. Analysis of subjects, images, issues and personalities in contemporary architectural work. International perspective with application to Puerto Rico.

# **ARQU 6432 Publication Seminar**

One credit: One seminar hour a week.

Corequisite: ARQU 6336

This course consists of a practical workshop to learn how to design the written and graphic document required as the final year project (PIFC). Throughout the course, the student designs the PICF document, applying the writing and graphic editing skills and knowledge discussed in class. In addition, the course teaches and practices oral presentation skills for architectural projects. This course relates to Research Seminar and supports the course for the design of end of career project or thesis. Students are exposed to support workshops and seminars, offered by invited experts.

# **ARQU 6425 Professional Experience Internship**

Three credits: Three hours of lecture per week.

Prerequisite: ARQU 6334. Admissions to the Graduate Program (For students who come from

the environmental design bachelor or equivalent bachelor.)

The Professional Experience Internship (iXP in Spanish) course exposes the student to professional experiences, working in a firm, organization, or agency to perform tasks relevant to architecture. The course discusses the requirements for *The Path to Licensure* as defined by the local State Department and NCARB; the support services offered by the College of Architects and Landscape Architects of Puerto Rico (CAAPPR in Spanish); and general aspects of the professional practice of architecture from multiple perspectives. The internship has three

components: 1. Professional Experience Internship; 2. Community Service; 3. Academic Work. The course is offered face to face, hybrid and online.

# **ARQU 6431 Research Seminar**

Two credits: Two hours of lecture per week.

Prerequisite: ARQU 6145 Corequisite: ARQU 6336

The course exposes the student to the use of appropriate research methodologies for advanced studies, particularly those related to the discipline of architecture, in this, the skills and competencies in research are applied so that the student can define a problem, make a theoretical reflection and design the research method pertinent to the problem; make a theoretical reflection and design the research method pertinent to the problem, selecting and using tools that allow the student to rigorously develop the research, based on bibliographic resources search, as well as the collection, analysis and evaluation of data. The course is closely related to the research laboratory in design course to contribute to the development of methodologies that alow to scientifically study the contexts of architectural intervention. In addition, the student is exposed to workshops and support seminars, conducted by external resources, to help in the understanding of concrete and practical aspects of architecture with those of theory. The course is offered face to face, hybrid and online.

# **ARQU 6432 Publication Seminar**

One credit. One hour of seminar per week.

Prerequisite: ARQU 6431. Corequisite: ARQU 6337.

This course consists of a practical workshop to learn how to design the written and graphic document required as the final year project (PIFC). Throughout the course, the student designs the PIFC document, applying the writing and graphic editing skills and knowledge discussed in class. In addition, the course teaches and practices oral presentation skills for architectural projects. This course relates to research seminar and supports the course for the design of end of career project or thesis. Students are exposed to support workshops and seminars, offered by invited experts. This course is offered face to face hybrid and online course.

# ARQU 6383 Professional Practice I: Design Project

Three credits: Three conference hours a week.

Prerequisite: Admission to the program.

Introduction to concepts, ethical processes, administrative and regulatory aspects of the professional practice of architecture. Presentation of the considerations of the legal and regulatory procedures that guide the preparation of construction related documents that are the architect's responsibility as a professional services provider. Discussion of the responsibilities of an architect in the certification of construction documents. Review of the considerations, duties and responsibilities of the architect in a professional services contract. Course offered face-to-face, online and hybrid.

# **ARQU 6384 Professional Practice: Design Firm**

Three credits. Three hours of lecture per week.



Prerequisite: Admission to the graduate program.

The course defines the professional practice of architecture and analyzes the social, economic, ethical and legal context within which the professional practice of architecture must insert itself. Basic economic and financial management concepts are discussed that influence and determine the organization of a design firm and its range of professional services and responsibilities. The course also covers issues pertaining to the different stages in the development of an architectural project, including: the establishment of a designer-client relationship, the design process, the production of construction documents, and supervision of the construction process of a project. Course offered face-to-face, online and hybrid.

# **ARQU 6991 Specialized Study**

One to twelve credits. Individual work with consent of the professor.

Prerequisites: for graduate students, authorization of the professor.

Designed to give the student an opportunity for specialized graduate study in an area of his particular interest as related to environmental design. Topics, readings and research methods to be arranged by agreement between the student and the professor. Students may register for one to six credits per semester depending upon the nature of the study and the time allotted to it. Areas of study accepted shall be complementary to those covered in other courses, avoiding unnecessary duplication. The nature of assignments may include experimental or research projects, independent work. field experience cooperative projects, and the like, to maximize curricular flexibility and accommodate relevant student interests and needs. Enrollment is limited to graduate students with previous approval of their area of specialized study. To complete course requirements the student must submit two copies of a comprehensive report on his work and conclusions (can be repeated up to twelve credits).

The course is offered face-to face, hybrid and online.

# **ARQU 6992 Specialized Study**

One to twelve credits. Individual work with consent of the professor.

Prerequisites: for graduate students, an opportunity for specialized graduate studies.

Designed to give the student an opportunity for specialized graduate studies in an area of their particular interest related to environmental design. Topics, readings and research methods to be arranged by agreement between the student and the professor. Students may register for one to six credits per semester depending upon the nature of the study and the time allotted to it. Areas of study accepted shall be complementary to those covered in other courses, avoiding unnecessary duplication. The nature of assignments may include experimental or research projects, independent work, field experience, cooperative projects, and the like, to maximize curricular flexibility and accommodate relevant student interests and needs. Enrollment is limited to graduate students with previous approval of their area of specialized study. To complete course requirements the student must submit two copies of a comprehensive report on his work and conclusions. This course can be taken up to twelve times under different themes.

# OTHER COURSE DESCRIPTIONS:

**ARQU 6895 Continued Thesis** 



# No credits

Continuation of Thesis Project so students can continue receiving Library and other services during the semester.

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**Phone**: (787) 764-0000, Ext. 87827 / 87823 / 87802

**Email:** escuela.arquitectura@upr.edu

Website: <a href="https://earq.uprrp.edu/programa/maestria-en-gerencia-de-proyectos/">https://earq.uprrp.edu/programa/maestria-en-gerencia-de-proyectos/</a>

# **DEGREE:**

# **Master in Project Management Online**

The Master's Degree in Project Management is an online graduate program created to meet the growing demand for specialized online master's degrees. The program is a modular Project Management and Specialization curriculum oriented towards construction projects. This degree began in 2023 and is offered by the School of Architecture in collaboration with the School of Business Administration.

The program's mission is to prepare successful project management professionals and leaders capable of applying cutting-edge processes, methods, strategies, and techniques in project management. It offers students practical and collaborative learning experiences while applying traditional and innovative concepts in complex, real-life projects.

The program consists of 34 credits to be completed in one (1) year by full-time students or two (2) years by part-time students, and an extension of the term can be requested. The time to complete the degree aligns with what is established in Certification 95 (2019-2020) Academic Policy for Graduate Studies and Research of the Río Piedras Campus of the UPR.

# **ADMISSIONS REQUIREMENTS:**

In addition to the requirements established by the Rio Piedras Campus (<a href="https://graduados.uprrp.edu/estudiantiles/requisitosgraduados/">https://graduados.uprrp.edu/estudiantiles/requisitosgraduados/</a>), every applicant must have the following:

- 1. A Bachelor's Degree (or equivalent) from a duly recognized university accredited by the MSCHE or its equivalent, with a grade point average of at least 3.00 on a 4.00 scale.
- 2. Verbal and written fluency in Spanish and ability to read and understand English. Language skills are to be demonstrated by presenting evidence of having studied any of said languages at an accredited university or presenting results of standardized exams for these purposes.
- 3. Capacity for critical analysis.
- 4. Knowledge in computer and program use-study tools of the program.

# **TECHNOLOGICAL REQUIREMENTS:**

1. A computer with high-speed internet access and sufficient capacity to play multimedia

material, built-in or external speakers, and a webcam.

The applicant must submit the following documentation as an admission requirement: Application for Admission duly completed.

- 1. Two official transcripts of all university credits approved or validated by the institution of origin. The applicant must require that the university institution where they completed their degree, send the official sealed transcripts directly to the School of Architecture via email or regular mail. In those cases in which the university institution of origin is from abroad, the transcripts must be duly authenticated and apostilled by the competent authorities of the country of the university that issues them.
- 2. Evidence of Spanish and English language proficiency.
- 3. Two letters of recommendation, at least one of which must be academic, describing in detail the applicant's academic aptitudes, professional experience, and character.
- 4. Curriculum Vitae.
- 5. Personal statement (600-800 words) that includes background, work experience, if any, and personal profile, as well as your motivation to study for a master's degree in Project Management.

The admission deadlines will be determined according to the Campus processes.

# **GRADUATION REQUIREMENTS:**

The student must meet the current general requirements for graduation at the Río Piedras Campus, and the following specific requirements of the Program:

- 1. Minimum of 34 credit hours approved of the required courses and electives established in the Program with an index of 3.0 points on a scale of 4.0.
- 2. Complete all degree requirements in the established period, one year for full-time or two years for part-time students.

# **FACULTY MEMBERS:**

**María E. Alvarado**, BA Comp Science, PMP, CSM; Project Management Professional (PMP) License # 308659 Certified through the Project Management Institute; Bachelor's Degree in Computer Sciences University of Puerto Rico, Instructor.

**Lcda. Carmen Cortés**, Juris Doctor, University of Puerto Rico School of Law (Rio Piedras), B.S. Industrial Engineering, University of Puerto Rico Mayaguez Campus, Instructor.

**Glorielisa González**, BSCE, MPM, PMP, PE y CSM, World Campus Master in Project Management, Pennsylvania State University; Bachelor's Degree in Civil Engineering, Polytechnic University of Puerto Rico; CERTIFICATIONS/ LICENSES, Professional Engineer (Lic. 25145) \*PMP (Lic. 2012164)\*CSM, Instructor.

Pedro González Cerrud, Ph.D., Business and Economics, Lehigh University, Bethlehem,

Pennsylvania; MBA in Finance and Accounting, University of Puerto Rico, Rio Piedras Campus; Bachelors in Economics, University of Panamá. Professor FAE.

**Arq. Juan Penabad**, Masters' Degree in Architecture Yale University; Bachelor's Degree in Environmental Design, University of Puerto Rico Rio Piedras, Professor.

**Arq. Luis Pico Lacomba**, Master of Architecture, MBA, PMP, DASSM; Masters Degree in Business Administration, University of Phoenix, Masters Degree in Architecture, University of Puerto Rico, School of Architecture; Bachelors Degree in Environmental Design, University of Puerto Rico, School of Architecture.

**Enid Vargas**, Master's in Business Administration, Florida Metropolitan University (now Everest College), Master's Certificate in Project Management, George Washington University, Bachelor's degree in Business Administration, University of Puerto Rico, Río Piedras Campus. Instructor.

# **STUDY PROGRAM:**

- PMAR 6001 Project and Project Setup Contexts
- PMAR 6002 Performance Management
- PMAR 6003 Performance Assurance, Compliance, and the Agile Approach
- PMAR 6004 Strategy, Governance, and the Global Context
- PMAR 6005 Legal Aspects in Project Management
- PMAR 6006 Applied Project and Advanced Techniques
- PMAR 6007 Construction Project Considerations in PM
- PMAR 6008 Project Health, Safety, Security and Environmental Considerations
- PMAR 6009 Project Financial Management
- ADMI 6531 Leadership and Business Ethics
- CONT 6501 Accounting for Analysis and Control

# **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# PMAR 6001 The Context of Projects and Project Setup

Three credits. Three hours of lecture per week.

Prerequisites: Admission to the program.

Introductory course to the fundamentals of Project management and planning and its essential concepts from a theoretical and applied perspective. Upon completion, the participant is expected to master project management framework theory and the fundamentals of creating an initial project plan. Its content covers the concepts of organizational framework, justifications for the project and its initial processes, the process groups and the project life cycle, as well as the fundamentals of the project plan. By creating a simulated plan, the participant will demonstrate and apply the acquired knowledge. This course can be taken up to twelve times under different

themes.

# PMAR 6002 Management for Performance Three credits. Three hours of lecture per week.

Continuation course on project execution focusing on several additional knowledge areas to ensure excellent management. Emphasis is placed on quality control and risk identification and planning. Alignment with business objectives and organizational strategies abound. The fundamentals of resource acquisition and communications management are expanded. By creating a simulated plan, the participant will demonstrate and apply the acquired knowledge. This course will be offered under the face-to-face, hybrid and online modalities.

# PMAR 6003 Performance Assurance, Compliance, and the Agile Approach

Continuation course where students are exposed to advanced topics in project execution in their role as project managers. It will focus on the aspects of compliance with procurement procedures, contracts, project performance evaluation and the maintenance of documentation in compliance with audit guidelines. General foundations of the global environment are also raised in projects and there is plenty of alternative practice following the Agile project management philosophy. By creating a simulated plan, the participant will demonstrate and apply the acquired knowledge. This course will be offered under the face-to-face, hybrid and online modalities.

# PMAR 6004 Strategy, Governance, and the Global Context

Continuation course where the participant is exposed to the introduction of more advanced concepts and topics related to the impact of the project in the broader context of other projects, portfolios and project programs, their alignment with the strategic plan of the sponsoring organization and the project execution in the global context. Upon completion, the participant must master the concepts that will help align the business vision with the objectives and projects of the organization and projects on a global scale. By creating a simulated plan, the participant will demonstrate and apply the acquired knowledge. This course will be offered under the face-to-face, hybrid and online modalities.

# PMAR 6005 Legal Aspects in Project Management Three credits. Three hours of lecture per week.

The course introduces students to the legal issues that are generally addressed in projects. The operation of the Courts in Puerto Rico and the United States and the hierarchy of laws and regulations are taught. In addition, the legal requirements of contracts according to the Civil Code of Puerto Rico are discussed. Different alternatives of legal structure that service providers may have and the advantages and disadvantages of each one will be analyzed. Topics of labor legislation, legislation related to health and safety in projects, and regulatory compliance in projects will be included. Students will learn about clauses relevant to contracts between the

parties to a project (suppliers, contractors) and will learn about some of the most common legal actions in court related to construction projects. This course will be offered under the face-to-face, hybrid and online modalities.

# PMAR 6006 Applied Project and Advanced Techniques Four credits. Five hours of conclusion project (Capstone) per week.

End-of-degree course to demonstrate mastery of project planning principles, applying them when composing a project plan applicable to a real case or initiative. It delves into advanced issues of cost and project scheduling. The topics of ethics and professional conduct in the manager and the project team are covered. An option for the generation of the project plan applicable to a real need may be to opt for research work on one or more aspects of project management.

# PMAR 6007 Construction Project Considerations in PM

Three credits. Three hours of lecture per week.

The student is exposed to the specific variation and considerations that apply to construction projects within the ten knowledge areas of predictive project management. This course also describes the project management framework in the construction industry and specific aspects of the project and product life cycle. At the end, the participant must fully recognize the concepts that will be applied to the management of the processes of a construction project. By reviewing the simulated plan created in the core courses, the participant will demonstrate and apply the knowledge acquired specifically to construction projects. This course will be offered face-to-face, hybrid and online modalities

# PMAR 6008 Project Health, Safety, Security, and Environmental Considerations Three credits. Three hours of lecture per week. Prerequisites. PMAR 6001 y PMAR 6007

The participant will be exposed to health, safety, and environmental considerations necessary to the processes of the planning of construction projects to seek a safe project environment where personal injury, fatality, and other damage to people and property are avoided. Concepts include health, safety, and environmental considerations to be included in contract requirements, organizational policies, metrics, and safety measures, safety-related plans, emergency response plans, construction waste management, health audits, Safety and Environment (SSA), analysis and measurements, and its application to the planning and management of construction project processes. By reviewing the simulated plan created in the core courses, the participant will demonstrate and apply the knowledge acquired specifically applicable to construction projects. This course will be offered face-to-face, hybrid and online modalities

# PMAR 6009 Project Financial Management

Three credits. Three hours of lecture per week.

Prerequisites: CONT 6501, PMAR 6001, PMAR 6007.

The participant will be exposed to the processes and activities of the financial management of the

projects to be considered while planning construction projects. Concepts include considerations of the economic environment, financial management, analytical techniques, legal and tax implications, project accounting, reporting and evaluations. Upon completion, the participant should be fully familiar with the financial concepts that apply to planning and managing the processes in a construction project. By reviewing the simulated plan created in the core course, the participant will demonstrate and apply the knowledge acquired specifically applicable to construction projects. This course will be offered face-to-face, hybrid and online modalities.

# **ADMI 6531 - Leadership and Business Ethics**

Three credits. three hours of lecture per week.

Prerequisites: authorization of director.

Foundations of the managerial process in organizations. integration of contemporary approaches to the study of organizational behavior, the human aspect in organizations, leadership in administration and corporate management. This course allows for online and onsite interaction.

# **CONT 6501 - Accounting for Analysis and Control** Three credits. Three hours of lecture per week.

Introduction to concepts, terminologies, processes, problems, and methodologies of managerial and financial accounting (including tax accounting). This course emphasizes the needs of information management to perform consistent analysis and select optimal decisions for the planning and control of operations with the aim of increasing the value of the company in an efficient and effective way, in dynamic business environments. This course will be offered face-to-face, hybrid and online modalities.

# **School of Law**

Mailing Address: School of Law UPR, 7 University Ave., Ste. 701, San Juan PR 00925-2527

**Telephone**: (787) 999-9561, 999-9613

Fax: (787) 999-9564

Email: derecho.llm@upr.edu
Website: http://derecho.uprrp.edu

**DEGREE:** 

## Master of Law (LLM)

The Master of Law program aims to develop well-versed lawyers and legal scholars in the processes and principles of the Anglo-American tradition as well as those of the Caribbean and Latin American world. Puerto Rico is a mixed jurisdiction where both the traditions of Civil Law and Common Law interact. This makes the University of Puerto Rico School of Law an ideal location for law students to study and become familiar with the phenomena of legal integration and standardization in an educational environment where those traditions converge, in a climate of common cultural and legal foundations. It is the only Master of Law Program accredited by the American Bar Association that is offered in Spanish. Among our alumni are jurists from Brazil, Chile, Costa Rica, Honduras, Nicaragua, and Panama and magistrates from the Dominican Republic.

The Program also offers three curricular sequences with specific thematic emphases: Judicial Formation, Mercantile Law and Intellectual Property Law. These three areas of curricular emphasis are available to students with a prior degree in Puerto Rico or the United States.

## **ACCREDITATIONS:**

American Bar Association (1945) 321 Clark Street Chicago, IL 60611 www.abanet.org/legaled

Association of American School of Laws (1944) 1201 Connecticut Ave., N.W. Suite 800 Washington, D.C. 20036-2717 <a href="https://www.aals.org">www.aals.org</a>

#### **FACULTY MEMBERS:**

José Julián Álvarez González, LLM, 1978, Yale University; JD, 1977, University of Puerto Rico, Professor. Constitutional Law, Tort Liability, Federal Jurisdiction; Comparative Law. Luis A. Avilés Pagán, BS, 1984, University of Puerto Rico; MA, 1986, JD, 1992, Harvard University; LLM, 2011, Université de Paris II (Panthéon-Assas). Professor. Corporate Law, Energy and Law, European Union Law, Legal Aspects of International Business Transactions, The Legal Profession, Administrative Law Seminar, Corporate Law Seminar.

Rubén Berríos Martínez, Diploma in Law, 1966, LLM, 1965, LLB, 1964, Yale University;

Oxford University. Professor. Public International Law, Seminars in International Law, Seminars in Constitutional Law.

**Ernesto Chiesa Aponte,** JD, 1974, MA, 1967, University of Puerto Rico. Professor and Distinguished Professor. Criminal Law, Criminal Procedure Law, Evidence and Evidence Law, Seminar on Criminal Procedure Law.

**Carmelo Delgado Cintrón,** MA, 1977, New York University; Juris Doctor, 1974 University Complutense of Madrid; LLB, 1966, University of Puerto Rico. Professor. History of Puerto Rican Law, History of Constitutional Law of Puerto Rico, Law and Literature, Seminars in Advanced Legal Research.

**Carlos Díaz Olivo,** LLM, 1985, Harvard University; JD, 1983, University of Puerto Rico. Professor. Partnerships and Corporations, Civil Procedure Law, Antitrust Law, Seminars in Partnerships and Corporations.

**Guillermo Figueroa Prieto,** LLB, 1969, University of Puerto Rico. Professor. Ethics and Professional Responsibility, The Legal Profession, Law and Sports, Seminar on Ethics and Professional Responsibility.

**Erika Fontánez Torres,** LLM, 2002, London School of Economics and Political Sciences; JD, 1999, University of Puerto Rico; Ph.D., 2017, Autonomous University of Barcelona. Professor. Natural Resources Law, Theory of Obligations and Contracts, Seminars in Environmental Law, Seminar in Theory of Law.

**Antonio García Padilla,** LLM, 1981, Yale University; JD, 1978, University of Puerto Rico. Professor and Dean Emeritus. Civil Procedure Law, Commercial Law.

Chloé S. Georas Santos, BA, 1987, University of Puerto Rico; M.A. 1997, State University of New York; JD, 2004, New York University; LLM, University of Ottawa. Professor. Legal Aid Clinic.

**Ana C. Gómez Pérez,** JD 2004 University of Puerto Rico; LLM 2007 Carlos III University, Madrid; 2010 Doctorate in Law, University Complutense of Madrid. Professor. Real Estate Registry Law, Inheritance Law, Family Law, Trust Law.

**Hiram A. Meléndez Juarbe,** JSD, 2013, New York University (NYU); LLM, 2002, Harvard University; JD, 2000, University of Puerto Rico. Professor. Administrative Law, Cyber Law, Constitutional Law, Seminars in Constitutional Law, Copyright, Theory of Law.

Oscar E. Miranda Miller, LLM, 2007, SUNY Buffalo Law School of Law; JD, 2005, University of Puerto Rico. Assistant Professor and Associate Dean. Substantive Criminal Law, Criminal Procedure Law, Legal Profession, Special Criminal Law.

**Vivian I. Neptune Rivera,** LLM, 1998 Columbia University; JD, 1995, University of Puerto Rico. Professor and Dean. Labor Law, Evidence and Evidence Law, Social Legislation.

**Alvin Padilla Babilonia,** LLM, 2018, Yale School of Law; JD, 2016, University of Puerto Rico. Assistant Professor. Theory of Obligations and Contracts; Real Rights; Seminars in Theory of Law; Tort Liability.

**Efrén Rivera Ramos,** Ph.D., 1994, University of London; LLM, 1981, Harvard University JD, 1976, University of Puerto Rico. Professor. Evidence and Evidence Law, Constitutional Law, Theory of Law, Sociology of Law, Seminars in Constitutional Law.

**Mayté N. Rodríguez Rivera,** LL.M. Columbia University, 2011, J.D. University of Puerto Rico 2006. Assistant Professor. Personal and Family Law; Gender Discrimination; Ethics and Professional Responsibility; Non-Traditional Families; Civil Procedure Law.

**Luis E. Rodríguez Rivera,** LLM, 1998, University of Cambridge, England; JD, 1987, Harvard University. Professor. International Environmental Law, Administrative Law, Natural Resources Law, Seminars in Environmental Law, Seminars in Administrative Law.

**Iris Y. Rosario Nieves,** Ph.D. in Law, 2022, Pompeu Fabra University; Master in Criminal Law, 2014, University of Palermo; JD, 2006, Univ. of Puerto Rico. Assistant Professor. Criminal Law; Criminal Procedure; Evidentiary Law; Post Judgment DNA.

William Vázquez Irizarry, LLM, 1997, London School of Economics; JD, 1994, University of Puerto Rico. Professor. Civil Procedure Law, Constitutional Law, Administrative Law, Governmental Law, Executive Process.

**Luis M. Villaronga Arostegui,** MA, 1973, University of Pennsylvania; JD, 1966, Harvard University. Distinguished Professor and Lecturer. Constitutional Law, Insurance Law, Federal Jurisdiction, Civil Rights Litigation.

**David Wexler,** JD, 1964, New York University. Professor. Theory of Law; Therapeutic Jurisprudence; Criminal Law.

# **ADMISSION REQUIREMENTS:**

## **General Requirements of Rio Piedras Campus:**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Degree Requirements**

Undergraduate or graduate law degree, or its equivalent, with a minimum "B" average at an ABA-accredited legal institution or a foreign institution of higher education that follows the highest academic standards and is fully accredited by the national authorities of the country where it is located.

Full proficiency in Spanish and adequate reading and comprehension skills in English, demonstrated by satisfactory results on the TOEFL, according to the applicant's primary language. Special attention will be given to scores achieved in the reading comprehension section. Alternatively, language proficiency can be evidenced through coursework completed in the relevant language.

## **Admission Documents**

Submission of the following documents is required:

- 1. Application for admission to the UPR School of Law.
- 2. Evidence of an undergraduate or graduate degree, or its equivalent, in law, as described above.
- 3. Two official copies of academic transcripts which include all credits taken at any educational institution.
- 4. TOEFL score, according to the applicant's primary language.
- 5. Letters of recommendation from two law professors who can thoroughly describe the academic aptitudes, professional experience, and character of the applicant.
- 6. Application fee as established by the School of Law.

# **GRADUATION REQUIREMENTS:**

Students must meet general graduation requirements for the Río Piedras Campus. Students must also meet the following degree-specific requirements:

- 1. A minimum of 24 credits in the School of Law, with a grade point average of 2.5 or higher.
- 2. Completion of requirements within one year for full-time students or two years for part-time students.
- 3. For students enrolled in one of the curricular areas of emphasis, at least 12 credits in courses pertaining to that curricular area.
- 4. A research project conducted at a research seminar under the supervision of a faculty member. This project will culminate in the writing of a research paper of publishable quality, to be defended before the faculty member conducting the seminar.
- 5. Residency at the University of Puerto Rico School of Law. In-person attendance is mandatory.

#### **PROGRAM OF STUDY:**

The Full-Time General LLM program requires 24 credit hours divided into two semesters, running from August to December and January to May.

Program Requirements	Credits
DERE 7103 Structures and Processes of Anglo-American Law and its Interaction with Civil Law	2
Research Seminar	2

DERE 7997 Legal Writing and Research for LL.M. students	2
Eighteen (18) Credits in the Juris Doctor Program of the School of Law Students will work closely with the graduate program director to develop a personal program of study. The program is structured so that students can take a substantial number of courses in a particular area of interest in order to deepen their understanding of the topic. Particular attention will be given to courses that enable foreign students to take the Bar Exam in several United States jurisdictions, including Constitutional Law, Civil Procedure, Evidence, and others.	
Total Credits	24

Students with a prior degree in Puerto Rico or the United States may enroll in one of three curricular sequences with specific thematic emphases: Judicial Formation, Mercantile Law, or Intellectual Property Law. These students must complete at least 12 credits in these areas and one research seminar and prepare a research paper of publishable quality to be defended before the faculty member conducting the seminar.

# **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **DERE 7006 Torts**

Credits: 3

Civil and common-law principles of liability for wrongs to persons, property, or other interests based on fault or negligence. Emphasis on the interaction of civil law and common law in Puerto Rico.

## **DERE 7007 Property Law**

Credits: 3

Rights over things vis-à-vis rights to credit. Classification of things. Possession and the right to possess. The right to property, its evolution, and modalities. Ways of acquiring property, usufruct, servitude, possession, and homestead rights, among others.

# **DERE 7008 Family Law**

Credits: 3

The family as a social and legal institution. Birth, death, and limitations on parental rights. The study of institutions, marriage, divorce, parenthood and custody, emancipation, and guardianship.

# **DERE 7015 Criminal Law**

Credits: 3

The course covers the origin, nature, sources, and concepts of criminal law, its evolution in Puerto Rico, Criminal Law Interpretation and its temporal and territorial application, the Legality principle, and crime general theory. It also analyzes general criminal law principles such as the act, intent, causation and result, justification and excuse, punishment rationale, crimes, and conspiracy and discusses security measures for the maintenance of peace and order. The course can be offered in hybrid, in-person, and online modalities.

# **DERE 7016 Obligations and Contract Law**

Credits: 4

Credit rights. Obligation. Types of obligations. Their effects. Extinguishment of obligations, especially payment and novation. Individual and collective actions by creditors. Evolution of contracts and their binding nature. Study of consent, object, and consideration in contracts. Perfection of a contract. Voiding of contracts by reason of non-existence, nullity, rescission, and cancellation. Special rescissions. The *rebus sic stantibus* clause.

## **DERE 7017 Civil Procedure**

Credits: 4

Study of the organization and jurisdiction of the courts and the current Civil Procedure Rules issued by our Supreme Court.

#### **DERE 7018 Constitutional Law**

Credits: 4

Study of the limits and extension of Constitutional authority in the federal and state jurisdiction with emphasis on the Commonwealth of Puerto Rico. Some of the topics to be discussed are: Federal power to regulate commerce and the limits it imposes on state regulation; the general powers of Congress and their interaction with local and state government; due process restrictions applicable to criminal procedure; limitations imposed by substantive due process on economic regulation and offer governments regulations; the right to freedom of expression; the equal protection choose and judicial review.

## **DERE 7019 Criminal Procedure**

Credits: 4

Criminal jurisdiction. Duties of the prosecuting attorney. Methods of prosecution. Arrest. Preliminary Hearing; post Judicial Appeals. Bail. Grand Jury Hearings; Assignment. Trial. Sentencing; Motions and procedures. Face-to-face, hybrid and online modalities.

# **DERE 7020 Criminal Law: Specific Crimes**

Credits: 3

The study of crimes contained in the Commonwealth Criminal Code and other related statutes.

#### **DERE 7021 Federal Jurisdiction**

Credits: 3

Prerequisites: DERE 7017 and 7018

Study, analysis, and reflection on Article III of the Constitution of the United States and on the principal federal statutes that govern the exercise of federal jurisdiction. Concept, nature, and extent of Federal judicial power and the basis for its execution. Distribution of judicial power between federal and state courts, principles of federation, conflicts between state and federal courts and the doctrines which have been used to address those conflicts.

# **DERE 7025 Law and Social Change**

Credits: 3

Legal aspects relating to the development and change of present legal institutions and their adequacy in the solution of contemporary social problems. Study of legislation on planning, urbanism, housing, civil rights and poverty, and the development of legal trends in these and other areas as cause and effect of economic and social change.

# **DERE 7026 Evidence**

Credits: 3

Study of the principles and current rules of evidence, in light of the rulings of the Supreme Court of Puerto Rico. Study of origins of said rules and analysis of the modern tendencies in evidence.

## **DERE 7027 Commercial Contracts**

Three credits.

Prerequisites: DERE 7016.

Study of modern commercial law theory and adoption of the new commercial regulations. The historical development and sources of commercial law, commercial contracts, and special commercial regulations. This course will be offered face-to-face, hybrid and online.

## **DERE 7028 Administrative Law**

Four credits

Prerequisites: DERE 7018

Analysis of the birth and development of modern administrative processes. Study of the function of administrative agencies and of administrative procedures. Examination of the investigative, interpretative, quasi-legislative, and quasi-judicial functions of administrative agencies.

#### **DERE 7029 Trusts and Estates**

Three credits

Prerequisites: DERE 7008 and DERE 7016

Intestacy sucession; testacy sucession; donations; trusts. This course will be offered face-to-face, hybrid and online.

## **DERE 7035 Mortgage Law**

Three credits.

Nature and functioning of the registries of property. The registrar, recording of instruments. Form and effects of records. cautionary notices. Mortages. Mortage law of Puerto Rico and regulations for its execution. This course is offered face-to-face, hybrid and online modalities.

# **DERE 7036 Business Associations and Corporations**

Credits: 3

General principles of law relating to private corporations, including the principles relating to their organization. Promoters and contractors. The distribution of corporate powers among shareholders, directors, and officers. Responsibility of directors. Shareholders' rights to inspect corporate books and derivative shareholder suits. Special problems of closed corporations.

# **DERE 7039 Theory of Law**

Three credits

Survey of the basic topics and problems in legal theory, such as different conceptions of law, validity or legitimacy of legal norms, problems of legal methodology, key concepts of the prevailing legal order, and the relationship between law, power, social structure and ideology. The contributions of the various schools and currents of legal thought, with particular emphasis on the most recent developments in the discipline. This course will be offered face-to-face, hybrid and online.

# **DERE 7041 Legal Aid Clinic. (First Part)**

Credits: 3

Prerequisites: 60 Credits approved, including DERE 7017 and 7026. DERE 7019 is required only for clinics dealing with criminal law cases.

Professional practice in the handling of actual cases, under the supervision of a clinical law professor. Students learn the basic skills in interviewing clients, understanding the legal problem presented, determining which course of action to follow for a solution, and the preparation of the necessary judicial and extra-judicial documents.

# **DERE 7042 Legal Aid Clinic. (Second Part)**

Credits: 3

Prerequisite: DERE 7041

Continuation of DERE 7041.

# **DERE 7066 The Legal Profession and Professional Responsibility**

Credits: 3

Study of the legal profession. Examination of its history, organization, commitments, values, and guiding principles, and the regulation of the professional responsibilities of its members. Analysis of the legal profession's interaction with other social groups and its relationship to processes of social transformation. Study of the effects of contemporary political, social, and cultural tendencies over the legal profession.

# **DERE 7068 Legal Research and Writing I**

Credits: 2

Study of the sources, methods, techniques, and practices of legal analysis and research. Development, by means of practical and theoretical exercises, of the analytical and research skills needed for the study and practice of law. Introduction to contemporary electronic means and resources for conducting legal research. Development, by means of practical exercises, of the ability to use legal forms and prepare legal memoranda to communicate the results of legal research.

# **DERE 7069 Research and Writing II**

Credits: 2

Prerequisite: DERE 7068

In-depth study of complex legal controversies and sources of law. Legal reasoning techniques and oral and written argumentation will be developed. Students will apply the knowledge acquired in the Legal Research and Writing I course and analyze complex legal problems in persuasive legal texts addressed to judicial or administrative fora. They will apply search skills in traditional media and electronic investigation resources to conduct complex legal research. They will also draft, through practical exercises, legal memoranda resulting from legal research investigations. This course will be offered in-person, hybrid, and online modalities.

## **DERE 7075** Constitutional Law and Gender-Based Discrimination Law

Credits: 3

Prerequisite: Constitutional Law (DERE 7018)

Study of gender-based discrimination and its Constitutional, statutes, administrative, and judicial implications. The course pays special attention to particular constitutional concepts, the development of feminist juridical theory, the relation between theory and practice, and the development of juridical remedies.

# **DERE 7076 Securities Laws**

Credits: 3

Prerequisite: DERE 7036

Study of the Securities Act of 1933 and the Securities Exchange Act 1934. Analysis of the implementation of securities regulation by regulatory agencies (Securities and Exchange Commission and Office of the Commissioner of Financial Institutions) and an examination of the relationship between issuer and shareholders. Discussion of State participation in the regulation of securities offerings, particularly the scope and content of Puerto Rico Uniform Securities Act. This course will be offered in-person, hybrid and online modalities.

# **DERE 7556 Notary Law**

Credits: 3

Prerequisite: 31 approved credits and course DERE 7035.

This introductory course on Notary Law includes not only the theoretical foundations of this branch of law, but also the way in which such matter is regulated in the current legal system. The role of the notary as a legal professional will be studied. The requirements and characteristics of all notarial documents will be studied, with special emphasis on the public instrument, both from its theoretical perspective and the way in which it should be prepared, without going into the details of the legal business of each instrument. The professional ethics of the lawyer will be studied from the perspective of the notary. This course will be offered in-person, hybrid, and online modalities.

#### **DERE 7558 Notarial Practice**

Credits: 3

Prerequisite: 31 approved credits, and course DERE 7077 or DERE 7556.

This course studies the notarial form of public instruments and testimonies and their content in civil contracts. The course covers non-contentious matters before a notary where they will be analyzed and drafted. The main businesses and contracts of a civil nature will be discussed, with special emphasis on the notarial form and the notarial obligations that arise from them. Each student will form and bind their protocol in accordance with the notarial law and its regulations. In the course, problems of a civil nature that a notary may face in the exercise of the profession will be discussed and analyzed, and such problems will serve as a tool for the learning process of business and civil contracts, deepening the knowledge acquired in an introductory way in the course of notarial law. This course will be offered in-person, hybrid, and online modalities.

# **DERE 7560 Tax Aspects of Notary Practice**

Credits: 2

Prerequisite: DERE 7556

The course provides an introduction to the tax events that affect notarial practice. The tax doctrine applicable to a legal business is studied with the aim of advising grantors, drafting clauses, expressly consigning warnings in public instruments, and disclosing transaction data to tax agencies, as required by tax regulations. In particular, the provisions of the Internal Revenue Code of Puerto Rico, the Federal Internal Revenue Code, the Municipal Code of Puerto Rico, laws to stimulate the real estate market, among other primary sources, for legal transactions transferring ownership are identified. and others common in Puerto Rico. The jurisprudence of the Supreme Court of Puerto Rico on the notary's duty to inform in the real estate tax and registry context is discussed. This course will be offered in-person, hybrid, and online modalities.

# **DERE 7561 Notary-inheritance practice**

Credits 2

Prerequisite: DERE 7556

The course focuses on the writing and content of public deeds that are related to Law of Inheritance. Emphasizes the application of the principles of Notarial Law within the inheritance context with the objective of advising parties, and drafting deeds and those special clauses in which the warnings that must be contained in said documents are expressly stated. This course will be offered in in-person, hybrid, and online modalities.

# **DERE 7085 Legal Aspects of International Commercial Transactions**

Credits: 3

The course studies international legal aspects affecting commercial transactions between private entities domiciled in different countries. It provides an overview of the aspects of private international law common to all business transactions, such as dispute resolution, arbitration of international disputes, and the framework of the World Trade Organization. Studies specific business transactions that involve both domestic law and international law such as the international sale of goods, business incorporation in another country, the creation of a joint venture investment in China, technology transfer with companies domiciled in the European Union, and distribution contracts between companies based in the Europe and United States. This course will be offered in in-person, hybrid, and online modalities.

# **DERE 7086 Legal Aspects of the European Union**

Three credits. Three hours of lecture per week.

This course discusses the development of the European Union (EU) since its inception as a project to promote peace in Europe after World War II. It studies the development of the internal market via the neo-functional integration of economic communities and overseas its evolution up to the present Lisbon Treaty with its emphasis on the constitutional development of the union through the concept of European citizenship. We will study the structure of the treaty on the European Union, the treaty on the functioning of the European Union, and the functioning of the more relevant European institutions such as the Council, the Commission, the Parliament, and the Court of Justice of the European Union and the European Union legislation process via regulations and directives. It will also study the EU's substantive law via the case law development of the four fundamental freedoms, namely the free movement of goods, capital, services, and people. This course will be offered in in-person, hybrid, and online modalities.

# **DERE 7087 Technology Transfer**

Credits: 2

Analysis and discussion of the basic concepts of technology and its importance in the legal and corporative world. Contractual relationships in reference to the several methods of technology transfer. Evaluation of the several forms and methods of technology transfer. Financial sources for technological innovation. The role of the lawyer in the processes of technology transfer, at the national and international levels. The function of government as regulator and facilitator of technological innovation. Study of the legal framework in reference to technology transfer.

# **DERE 7101 Legal Writing Workshop**

Credits: 2

With emphasis on research projects for the final work of the master's degree (LL.M.) and on seminary papers already completed, the workshop aims to guide the student in the preparation of a legal writing of publishable quality. The workshop is designed to use an investigation substantially completed by each student as a working basis and will be focused on its development into a more extensive and complete document based on a properly reasoned argument. Particular

emphasis will be placed on aspects such as the organization of writings, sketches, drafts, and strategies for clear and persuasive writing. This course will be offered in in-person, hybrid, and distance modalities.

# DERE 7103 Structures and Processes of Common Law and Interactions with Civil Law Two credits. One hour of lecture and one hour of discussion per week.

Analysis of the principal institutions, structures and processes of Anglo-American law. Its interaction with civil law in the context of Puerto Rican juridical culture. Panoramic discussion of Anglo-American institutions present in Puerto Rico, the historical process that introduced them in our legal culture, the natural tensions that their arrival produced and how they have envolved. This course will be offered face-to-face, and distance modalities.

# **DERE 7106 Copyright Law**

Credits: 3

Prerequisites: DERE 7007 and DERE 7016.

This course will cover the principal features of copyright law and the protection of moral rights in Puerto Rico, as well as some of its theoretical foundations. It examines what is copyrightable subject matter, requirements for copyright protection, ownership and transfer of rights, the scope of protection that copyright law affords to works of authorship, limiting principles, exceptions, and defenses to infringement, standards for judging infringement, and remedies available in copyright lawsuits. Comparative copyright law and international treaties affecting copyright law will also be given some attention.

## **DERE 7108 Introduction to Intellectual Property**

Credits: 3

Prerequisite: DERE 7007

A survey course designed to familiarize the student with the basic concepts and doctrines for protecting intellectual property, including patents, trademark copyright right of publicity, and trade secrets. This course is intended for students who desire general exposure to intellectual property law. The course analyzes the costs related to the protection of intellectual property and how it affects other rights such as free competition and freedom of expression.

## **DERE 7109 Patent Law**

Credits: 3

Prerequisite: DERE 7007

This course is designed for students without experience or previous knowledge of the patent system, including those students without a technical background. The course intends to equip students with a basic knowledge of the patent system of the United States. It analyzes the theory and public policy of the patent system as well as the requisites for eligible patentable subject matter, utility, novelty, non-obviousness and the disclosure requirement.

## **DERE 7115 Public International Law**

Credits: 3

Study of the historical evolution, basic concepts, institutions and structures, and principal processes of public international law. Its corporation into Puerto Rican and U.S. law. Its effects on legislation and case law in domestic law.

# **DERE 7116 Payment Systems**

Credits: 3

Prerequisite: Obligation and Contracts (DERE 7016).

Study of regulations of payment systems, including negotiable instruments, check cashing, deposits, money transfers, letters of credit, warehouse warrants, bills of lading, and other documents of title, the rights, and responsibilities of parties on a promissory note, check, and other negotiable instruments. Examination of regulation relating to the use of credit cards, electronic money transfers, and other payment systems.

## DERE 7121 Intersection Between Race, Gender and the Law in Puerto Rico

Two credits. One hour of lecture and one hour of discussion per week.

This course will study the intersection between race, gender, and law in Puerto Rico. The experience of black and afro-descendant women is very different in Puerto Rico due to the construction of racial and gender identities and the prevailing colorism in our society. By looking at these issues from a variety of different angles, focusing our attention on the legal understanding and conscience of black women, the course seeks to promote a deeper understanding of the complex interactions between law, race, and gender to formulate interdisciplinary anti-racists proposals. The course will study laws, jurisprudence and interdisciplinary readings with narratives and first-person readings of history, anthropology and cultural criticism. This course will be offered under the face-to-face, hybrid or online modalities.

# **DERE 7296 Judicial and Administrative Agencies Externship**

Three credits. 10 hours of field work for four weeks. Five classroom meetings.

Prerequisites: 31 credits approved.

The judicial and administrative agencies externship introduces students to the tasks performed by law clerks and to the handling of litigation by the tribunal de primera instancias. The tribunal de apelaciones, the federal district court for the distric of Puerto Rico and administrative agencies. Students will work with a judge or legal division, draft legal memoranda, orders and judgments and, depending on the court, they will observe trials, oral arguments and procedural hearings. The externship requires a commitment of 120 hours of practice during the semester and participation in five classroom meetings to discuss topics such as effective courtroom lawyering and writing judicial opinions. Students must have an academic point average of 3.0 or more at the time they apply for the course, the applications must be received by the program coordinator the semester prior to the externship and, if the student is accepted, the student will be permitted to pre-register for the course.

# **DERE 7297 Advanced Judicial and Government Externship**

Three credits. Two hours of practice and one workshop per week. Prerequisite:22 credits including DERE 7068. One of the courses DERE 7995 or DERE 7296. Students who have taken both are not eligible. GPA of 3.00

Students with a previous experience through one of the externship courses offered at the School of Law will be able to engage in a more sophisticated externship experience while developing skills necessary for the practice of law this subsequent experience will include activities such as judicial clerkships, both federal and local, and internships at administrative agencies-including legal research and memoranda, opinion drafts, among others. Students should not repeat practice centers from previous experience, but will be allowed to repeat a center if her or his supervisor has requested it and certifies that the subsequent experience will include more complex and advanced tasks. Students should have 3.0 GPA. The course will be graded and is not available for students that have taken both DERE 7995 and DERE 7296 but having taken one of these courses are a prerequisite.

#### **DERE 7301 Business Law Journal I**

One credit. One hour of research per week.

Prerequisite: 31 approved credits

Training and practice in the drafting and editing of law review notes and law review article subciting.

## **DERE 7302 Business Law Journal II**

One credit.

Prerequisite: DERE 7301 and 31 credits approved.

Training and practice in the drafting and editing of law review notes and law review article subciting.

# **DERE 7209 Immigration Law**

Credits: 2 Two hours of lecture per week.

Study of the law, policies, and procedures related to the immigration processes in the United States, including the exclusion and deportation rules.

## **DERE7309 Media Law**

Three credits. Two hours of discussion per week.

Study and analysis of mass media law. The principal subjects to be studied include the following: freedom of expression and the press and the limits on government regulation; legal problems

arising from communications, particularly defamation and protection of privacy; problems in news gathering, gathering, especially reporter's privilege and access to information. This course includes sections of variable format: in classroom, face-to-face, hybrid and online modalities.

#### **DERE 7488 Law Review Editorial Board**

Credits: 2 Two hours of lecture per week.

Prerequisite: DERE 7588

Training and practice in writing monographic and bibliographic notes. Establishment and implementation of the editorial policy of the University of Puerto Rico School of Law Law Review.

## **DERE 7505 Legal Medecine**

Three credits.

Survey of the present state of medical science and the scientific method of medicine. analysis of trauma, emphasizing its possible legal consequences. Preparation of the medical aspects of a case, including expert testimony. Government regulation of medicine. medical aid programs. Malpractice and civil rights problems in this area.

## **DERE 7508 Secured Transactions**

Three credits.

Prerequisite: DERE 7016.

The study of secured transactions: security interest, sales of accounts and chattel paper and consignment. The course examines secured transactions, attachment, perfection, foreclosure, and the rights, responsibilities, and remedies available to debtors and creditors. the rules related to priority conflicts are studied. an evaluation of the effectiveness of regulation and the possibilities of harmonization with other pertinent legal provisions. This course will be offered face-to-face, hybrid and online.

# **DERE 7509 Antitrust Legislation**

Three credits.

A study of federal anti-trust statutes and trade regulations policies and those of the Commonwealth of Puerto Rico, including problems of unfair trade practice policy.

#### **DERE 7516 Insurance**

Three credits. Three hours of lecture per week.

The theory of insurance with particular emphasis on the problems of Puerto Rico. The Puerto Rican insurance law will be studied as well as the Puerto Rican and United States jurisprudence in the field of insurance. This course will be offered face-to-face, hybrid and online.

#### **DERE 7517 Trusts**

Credits: 2

Study of Anglo-American trusts and their possibilities in civil law jurisdictions.

## **DERE 7518 Taxation**

Credits: 4

General principles of taxation. Jurisdiction and limitations under the Federal, state, and insular systems. Substantive and procedural aspects of property, inheritance and income tax laws, and exercises in Puerto Rico. This course will be offered face-to-face, hybrid and online.

# **DERE 7519 Accounting and the Law**

Two credits. Two hours of lecture per week.

Sources, nature, and presentation of financial data. Interpretation and use of accounting forms with special reference to the legal profession. The general principles of accounting are introduced as a general background for the proper interpretation of financial information.

## **DERE 7520 Corporate and Partnerships Taxation**

Credits: 3

Prerequisite: DERE 7518

Study of the principal aspects of the taxation of corporations and partnerships and their stockholders and partners in Puerto Rico. The various aspects are covered through a casebook, supplemented with the Puerto Rico Internal Revenue Code, judicial decisions, and practical problems.

# **DERE 7526 Legislative Process**

Credits: 3

Comparative study of the United States Congress and the Legislature of the Commonwealth of Puerto Rico as governmental institutions. An exhaustive analysis of the structure, composition, and functions of various divisions of the legislative branch. Modern legislative techniques and methods. Analysis of the methodology of the drafting of legislative bills with attention to particular issues concerning Puerto Rico.

## **DERE 7527 Social Legislation**

Three credits. Three lectures per week.

The study of federal legislation related to wages and hours and its interaction with other employment legislation from Puerto Rico and the United States. Includes an analysis of such topics as illegal dismissal, maternity leave, closing hours, and procedural issues related to the enforcement of social legislation in these areas, among others.

## **DERE 7530 Bankruptcy**

Three credits. One and a half hour of lecture and one and a half hour

of discussion per week. Prerequisite: DERE 7016.

Study of the basic principles contained in the Federal Bankruptcy Code and its application to business and individuals in Puerto Rico. The course examines the jurisdictional aspects, the creditor and debtor rights, the settlement under Chapter 7, and the commercial and individual reorganization under Chapters 11, 12, and 13. Study and analysis of the diverse processes in bankruptcy, including the initiation of voluntary and involuntary cases, automatic suspension of collection efforts, the use and alienation of estate property, the assumption or rejection of contracts, the annulment of estate property transfers, exempt property and other subjects of our community interest.

## **DERE 7535 Labor Law**

Credits: 4

Study of the historical development of the discipline as a way to understand its present problems. Comparative analysis of the intent of both the National Labor Relations Act and the Labor Relations Act of Puerto Rico. Special attention is given to problems related to collective bargaining, representation, and labor and management activities in labor disputes. Collective bargaining, statutory and contractual conflicts, and the relationship of unions to their members.

# **DERE 7538 Sociology of Law**

Credits: 2

A study of the law as an instrument of social control and as a social product. The legal system is analyzed in order to identify what is distinctively legal and to examine some of the reciprocal interrelationships of law and society. The course includes sociological research on particular sociological problems within the community, aimed at obtaig as g practical and concrete understanding of the impact of the law upon a community and of the effect of social circumstances upon the law.

## **DERE 7539 Research in Natural Resources**

Three credits. Three hours of lecture per week.

The study of the problems of natural resources; the existing administration and legal structure, and the conservation and use planning of these resources, the adequacy of these mechanisms, and recent legal tendencies in this field. This course will be offered face-to-face, hybrid and online.

#### **DERE 7540 International Environmental Law**

Three credits. Three hours of discussion and lecture per week.

Exploration, from an international perspective, of the emerging environmental and natural resource law, such as: the application of international and environmental law to the protection of the air and atmosphere, biodiversity, territorial and wildlife resources, marine and fresh waters, and the growing human population. Examination of

diverse legal doctrines, including interpretation of international treaties, and the implementation of recent laws and agreements affecting efforts to manage, preserve, restore and protect the environment. This course will be offered face-to-face, hybrid and online.

## **DERE 7545 History of Puerto Rican Law**

Three credits. Three hours of lecture per week. The beginnings of Puerto Rican law as back as Indian law structure, judicial institutions and the constitutional development in Puerto Rico during the nineteenth century, constitutional changes embodied in the Puerto Rican autonomic constitution of 1897, and the administration of justice and law during the military government phase between 1898-1900, ending with a detailed study of the historical origins for the provisional court of the United States in Puerto Rico. This course will be offered face-to-face, hybrid and online.

# **DERE 7546 Special Contracts**

Credits: 3

Contract typification. Pre-contracts, options and promises. Contracts of sale and barter. Leases and loans. Contracts of mandate and deposit. Aleatory contracts. Conducts over goods as a result of marriage. Arbitration agreements. Debt collection. Unjust enrichment.

#### **DERE 7547 International Private Law**

Credits: 3

Conflict of law: The selection of the law to be applied in cases involving more than one legal system. Puerto Rican doctrines. Conflicts in jurisdiction, competence, marriage and divorce law, tutorship, property law, estates, contracts, statutes of limitation, enforcing foreign judgments, torts, etc.

# **DERE 7566 Law and Poverty**

Credits: 3

Analysis of the principal obstacles most important problems faced by the poor which have or may have a legal remedy, as a basis for the discussion of the causes which impede the access of the poor to legal action those remedies. As consumers, tenants, citizens, and beneficiaries of social and welfare legislation, the poor face problems that have legal solutions but which, at present, are not solved through legal processes. A study will be made of the problems and applicable statutes as well as the system shortcomings in order to identify more effective solutions.

# **DERE 7570 Therapeutic Jurisprudence**

Three credits. Three hours of discussion per week.

Survey of the main tenets of therapeutic jurisprudence. A legal perspective that sees the law norms, legal procedures, and the roles of lawyers and judges as potential therapeutic agents. Study of the impact of the law on emotional life and psychological well-being. Law reform measures are discussed, as well as how lawyers, judges, and others may apply existing laws in a more therapeutic manner. This course will be offered face-to-face, hybrid and online.

DERE 7575 Moot Court Two credits.

Students prepare and present before court specific cases individually assigned to them. The course can be repeated for up to 10 credits. A maximum of 10 credits in this course can be repeated towards the 46 elective credits required for the juris doctor. No student is allowed to repeat the course if it has the same sub-topic, unless it is accordance with the university's policies.

# **DERE 7578 History of the Constitutional Law of Puerto Rico**

Three credits. Three hours of lecture per week.

Study the historical development of constitutional law and political law in Puerto Rico. Evaluate the development in Spain from 1808 to 1898, and in Puerto Rico from the same date. It examines the relations of the United States and Puerto Rico from the invasion of the island in 1898 to the decolonization efforts at the ONU and its impact on Puerto Rican constitutionalism. This course will be offered in face-to-face, hybrid, and online modalities.

# **DERE 7585 Legal Ethics and Professional Responsibility**

Three credits. Three hours of lecture per week.

Prerequisites: For second- or third-year Law students

Using methods devised from psychology, the course tries to explore the attitudes and problems generated in lawyers brought about by conflicts inherent to the practice of law. This course will be offered in face-to-face, hybrid, and online modalities.

#### **DERE 7588 Law Review I**

Credit: 1

Work on the Law Review.

## **DERE 7589 Law Review II (second semester)**

Credit: 1

Work on the Law Review.

# **DERE 7590 Seminar: Topics in Corporate Law**

Two credits. Two hours per week.

Prerequisites: 31 credits approved and a seminar at the School of Law

Directed legal research course with the purpose of converting a graded paper written for a seminar taken at the School of Law into a longer academic



paper of publishable quality (25,000 words or more including footnotes). Before registering this course, the professor and the student must agree in writing the following: the research topic, the bibliography, as well as the research methodology and the type of paper that will result from the research. A copy of the written agreement shall be deposited at the Dean's office, which agreement shall be executed by the student, the mentor and at least one additional professor who will be a reader of the paper.

# **DERE 7597 Seminar: Topics in Administrative Law**

Two credits. Two hours of seminar per week.

Study of complex topics in administrative law. The seminar will address the laws and procedures related to certain administrative agencies as well as their exercise of delegated power and judicial review; immigration problems; regulation of institutions; processes or products of the private sector; law, planning and urbanism; comparative administrative law; general problems in administrative law. The specific topic to be studied will be announced in advance. Students will be required to write at least one extensive paper. The seminar may be repeated a maximum of four times as long as a different topic is studied in the seminar.

# **DERE 7600 Seminar: Topics in Criminal Law**

Two credits. Two hours of seminar per week.

Study of complex topics in Criminal Law: a) the general part of criminal law; b) specific crimes; c) different penal systems in different legislation; d) administration of criminal law; e) comparative criminal law; f) criminal law in general, among other topics. The specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary.

## **DERE 7630 Seminar: Topics in Commercial Law**

Two credits. Two hours of seminar per week.

Study of complex topics in commercial law: commercial contracts, commercial financing, international business relations, insurance in general, property and contingency insurances, life insurance, negotiable bonds, comparative commercial law, regulation of financial markets, and commercial law in general. The specific theme to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time. This course will be offered in face-to-face, hybrid, and online modalities.

# **DERE 7640 Seminar: Topics in the History of Law**

Credits: 2

Study of relevant issues in the history of law: Roman-German law, history of constitutional law, history of common law, and general issues in the history of law. The specific theme to be studied

will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

# **DERE 7667 Seminar: Topics in Legal Theory**

Two credits. Two hours of seminar per week.

Study of relevant developments in the theory of law; Discussion of philosophical and juridical works; mayor schools of thought or legal currents; the judicial process, law and literature; ethics, morals, and justice in the legal profession; law and social theory; feminism; theory of law in general. The specific issue to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

## **DERE 7669 Law and Literature**

Credits: 3 Three hours of lecture per week.

Examines legal concepts or topics related to law, as they appear in important works of literature. also, it studies the differences between, on the one hand, the lawyer and, on the other hand, the artist in relation to their respective approaches to certain problems and human phenomena. This course will be offered face-to-face, hybrid and online modalities.

# **DERE 7676 Seminar: Topics in Environmental Law**

Two credits. Two hours of seminar per week.

Study of complex topics in environmental law: a) special legislation in environmental protection; b) environmental protection and economic development; c) methods, processes and remedies (substantive and procedural) for the protection of natural resources, ecology and the environment; d) comparative environmental law; e) international environmental law; f) environmental law in general, among other topics. the specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary. This course is offered face-to-face, hybrid and online.

# **DERE 7678 Seminar: Topics in Environmental Law**

Two credits. Two hours of seminar per week.

Study of complex topics in environmental law: a) special legislation in environmental protection; b) environmental protection and economic development; c) methods, processes and remedies (substantive and procedural) for the protection of natural resources, ecology and the environment; d) comparative environmental law; e) international environmental law; f) environmental law in general, among other topics. The specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary.

This course is offered face-to-face, hybrid and online.

# **DERE 7680 Seminar: Topics in Constitutional Law**

Two credits. Two hours of seminar per week.

Study of complex topics in constitutional law: a) the organization of powers of the state; b) freedom of expression; c) the church state relationship and religious freedom; d) the constitutional relationship between Puerto Rico and the United States; e) due process of law; f) freedom of press; g) equal protection of the law; h) constitutional theory; i) institutions and processes of the legislative branch; j) comparative constitutional law; k) federalism and constitutional structure; l) special civil rights and individual liberties legislation; m) problems of constitutional law litigation; n) constitutional processes, experiences, problems and solution; o) constitutional law in general, among other topics. the specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 crs) when topics vary.

This course will be face-to-face, hybrid and online modalities.

# **DERE 7686 Seminar: Topics of International Law**

Two credits. Two hours of seminar per week.

Study of complex topics in international law: a) customary and contractual rights between states; b) economic international transactions; c) international protection of human rights; d) rights between states and peoples of the Caribbean; e) economic and political communities; f) about the fundamental concepts of international law; g) international law in general, among other topics. The specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary. This course will be offered face-to-face, hybrid and online.

# **DERE 7688 Seminar: Topics in Criminal Procedure**

Two credits. Two hours of seminar per week.

Study of complex topics in criminal procedure: a) constitutional protection in criminal procedure; b) criminal procedure under Puerto Rican rules; c) criminal procedure under federal rules; d) execution of the penalties and rights of prisoners; e) comparative criminal procedure; f) criminal procedure in general, among other topics. The specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary.

# **DERE 7689 Seminar: Topics on Taxation**

Two credits. Two hours of seminar per week.

Study of issues regarding tax law: individual income tax, corporate and shareholder tax, estate and gift tax, fiscal policy, comparative tax law, and taxation in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7690 Seminar: Topics on Advanced Legal Research** 



# Two credits. Two hours of seminar per week.

Study and in-depth research of complex topics in law: a) research on the legal profession; b) empirical legal research; c) research on professional conduct regulation; d) research on comparative legal systems; e) research or world legal orders or traditions; f) advanced legal research in general, among other topics. The specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary.

# **DERE 7695 Seminar: Topics on Consumer Law**

Credits: 2

Study of issues in consumer law: procedural and substantive protection of consumer goods and services from private enterprise; price regulation; distribution of resources and availability of credit; specialized consumer protection legislation; consumer laws in general. The specific issues to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

# **DERE 7696 Seminar: Topics on Labor Law**

Credits: 2

Study of issues in labor law: organization of labor unions; collective bargaining; nonunion worker guarantees; unemployment; labor legislation in various legal systems; labor organization of the public sector; comparative labor law; employment: problems, legislation, public policy; Labor law in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

# **DERE 7697 Seminar: Topics in Civil Procedure**

Credits: 2

Study of issues regarding civil procedure: first instance proceedings; appeals; administration of justice; alternative methods of dispute resolution; comparative civil procedure; civil procedure in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

## **DERE 7698 Seminar: Topics in Law and Society**

Credits: 2

Study of issues addressed through the law and society perspectives: The effects of law on poverty, social security programs and the rights of the beneficiaries, housing, health, mental health, social change, the elderly, education, technology, and society in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

# **DERE 7730 Alternative Dispute Resolution Methods**

Two credits. Two hours of lecture per week.

Study of modern tendencies to develop and adopt methods other than judicial trial for resolving disputes. These methods, commonly called ADR (Alternative Dispute Resolution), include arbitration and mediation (in the areas of labor, commerce, international relations, and family disputes), negotiation and settlement, and others.

#### **DERE 7741 Conflict Mediation I**

Credits 3

Prerequisite: DERE 7017

Theoretical-practical course aimed at the development of the necessary skills for implementing effective mediation in a range of controversies. It considers, compares, and analyzes diverse methods for conflict management, negotiation mechanisms, psychosocial aspects relevant to mediation, historical background, legal base and stages of the facilitative model of mediation, management of domestic violence cases, and, finally, ethical and professional responsibility considerations. These subjects are developed by interactive and applied exercises. The students who approve satisfactorily the first and second parts of the course can be certified as mediators if they have previously achieved the requirements established by the pertinent regulation of the Supreme Court of Puerto Rico. This course will be offered under in-person, hybrid, and online modalities.

## **DERE 7742 Conflicts Mediation II**

Credits 3

Prerequisite: DERE 7741

The course develops the skills necessary to conduct effective mediation in multiples settings. It considers and compares diverse methods of dispute resolution mechanisms as well as their history psychosocial aspects. It also considers mediation in domestic violence settings and other ethical and professional responsibility concerns, these themes are considered through practical exercises and simulations. Students satisfactory fily fulfilling the requirements of conflicts Mediation I and II are eligible for certification as mediators by the Supreme Court of Puerto Ricoter complying with additional requirements imposed by the court. This course will be offered in in-person, hybrid, and online modalities.

# **DERE 7745 Independent Study**

Credits: 2 Two hours per week.

Prerequisites: 31 credits approved and a seminar at the School of Law

Directed legal research course with the purpose of converting a graded paper written for a seminar taken at the School of Law into a longer academic paper of publishable quality (25,000 words or more, including footnotes). Before registering for this course, the professor and the student must agree in writing the following: the research topic, the bibliography, as well as the research methodology and the type of paper that will result from the research. A copy of the written agreement shall be deposited at the Dean's Office, which agreement shall be executed by the

student, the mentor and at least one additional professor who will be a reader of the paper.

# DERE 6116/PLAN 6116 Planning Law

Credits: 3

The course examines the legal and administrative planning frameworks in Puerto Rico, and principal land-use control and regulation instruments. Some of these include zoning, lotification, flood control, historic sites, com and certifications. This course will be offered in in-person, hybrid and online modalities.

## **DERE 7991, 7992, 7993, 7994 Special Topics in Private Law.**

Credit: 1

Analysis of several aspects of private law of special or current interest.

# **DERE 7991 Special Topics in Private Law**

One to four credits.

Analysis of special areas and particularly current topics in the field of private law. Each course code can be repeated for to 15 credits. A maximum of 46 credits in the course can be recognized towards the elective credits required for the juris doctor. No student is allowed to repeat the course if it has the same sub-topic unless it is by the university's policies. This course will be offered face-to-face, hybrid and online modalities.

# **DERE 7995 Legal Practice Workshop.**

Two credits.

Prerequisites: 22 credits including DERE 7068.

Direct, practical working experience in a professional legal environment. for two month-periods during the summer, students are placed in the offices of judges, government agencies, the legislative reference service, and private law firms.

Face-to-face, hybrid and online modalities.

# **DERE 7996 Special Topics in Public Law**

One to four credits.

Analysis of special areas and particularly current topics in the field of public law. Each course code can be repeated for up to 15 credits. A maximum of 46 credits in the course can be recognized towards the elective credits required for the juris doctor. No student is allowed to repeat the course if it has the same sub-topic unless it is following the university's policies.

# DERE 7997 Special Topics in Public Law One to four credits.

Analysis of special areas and particularly current topics in the field of public law (each course code can be repeated for to 15 credits. A maximum of 46 credits in the course can be recognized towards the elective credits required for the juris doctor. no student is allowed to repeat the course if it has the same sub-topic, unless it is in accordance with the university's policies).

Theme: preparation for the bar exam for the practice of law. p. h. online.

Theme: writing of text in criminal cases. p. h. online.



Mailing Address: School of Law UPR, 7 University Ave., Ste. 701, San Juan PR 00925-2527

**Telephone:** (787) 999-9675, 999-9552 **Email:** llm-online.derecho@upr.edu

Website: https://derecho.uprrp.edu/llm-online

#### **DEGREE:**

# Master of Law in Oral Adversarial Criminal System (LL.M) Online

The School of Law offers the Master of Laws (LL.M.) in Orality in the Criminal System Online with the objective of developing jurists with the necessary skills for the administration of justice in the Judicial Branch and in the adversarial system. It consists of 24 credits that the student can complete in one (1) or two (2) years, depending on their study plan, on a full-time or part-time basis.

The experience developed in the Puerto Rican jurisdiction in the criminal adversarial system, the protection of the constitutional guarantees sheltering the process and the legal responses to the conflicts arising to maintain a balance between the presentation of evidence and the search for the truth, make our system an ideal setting to be studied by jurists from other jurisdictions. The developments, successes and failures are of interest from the reformist perspective aimed at orality that characterizes many jurisdictions in Latin America.

The program provides the opportunity to study in depth the evidentiary and criminal procedural law of the adversarial system. The curricular design maintains a balance between the study of the Puerto Rican legal and criminal system and the development of litigation skills. Likewise, through participation in legal research seminars, a structured approach to legal problems and solutions that arise in this context is encouraged, in addition to the development of the research and writing skills necessary for litigants and judges. Recurring themes in different jurisdictions are highlighted, such as the safeguarding of constitutional rights, the challenges of presenting evidence, and the search for the truth.

#### **ACCREDITATIONS:**

American Bar Association (1945) 321 Clark Street Chicago, IL 60611 www.abanet.org/legaled

Association of American School of Laws (1944) 1201 Connecticut Ave., N.W. Suite 800 Washington, D.C. 20036-2717 www.aals.org

## **FACULTY MEMBERS:**

**Yanis Blanco Santiago**, Adjunct Professor, UPR School of Law, PhD in Law, University Complutense of Madrid, Master in International Law and International Relations, University Complutense of Madrid, JD, University of Puerto Rico.



Marianne E. Cortina Aldebol, Bachelor in Communications, Sagrado Corazon University; J.D., University of Puerto Rico. Adjunct Professor UPR School of Law

**Félix Figueroa Cabán**, Judge of the Court of Appeals of Puerto Rico, Adjunct Professor UPR School of Law.

Nilda Navarro Cabrer, Adjunct Professor, UPR School of Law, LL.M. Harvard School of Law.

**Vivian I. Neptune Rivera**, Professor and Dean UPR School of Law, LL.M. Columbia University School of Law; JD, University of Puerto Rico. Labor Law, Evidence and Evidence Law, Social Legislation.

**José Nieto Mingo**, Adjunct Professor UPR School of Law, LL.M. Harvard School of Law, JD, University of Puerto Rico

**Ever Padilla Ruiz**, B.A. University of Puerto Rico; J.D. Pontifical Catholic University of Puerto Rico. Adjunct Professor UPR School of Law; Executive Director Puerto Rico Civil Rights Commission.

**Janet Perea López**, Judge of the Court of First Instance of Puerto Rico, Adjunct Professor, UPR School of Law.

**Berthaida Seijo Ortiz**, Judge of the Court of First Instance of Puerto Rico, Adjunct Professor, UPR School of Law.

**Javier O. Sepúlveda Rodríguez**, Clerk of the Supreme Court of Puerto Rico, Adjunct Professor UPR School of Law, LLM University of Puerto Rico, JD Interamerican University of Puerto Rico

**Jorge Toledo Reyna**, Judge of the Court of First Instance of Puerto Rico, Adjunct Professor UPR School of Law.

**Aleida Varona Méndez**, Former Judge of the Court of Appeals of Puerto Rico, Adjunct Professor UPR School of Law.

# **ADMISSION REQUIREMENTS:**

## **General Requirements of Rio Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Degree Requirements**

1. Having obtained a Juris Doctor from an institution accredited by the American Bar Association (ABA) or a bachelor's degree or equivalent degree in Law, with an average of B or higher, or its equivalent from a foreign university education institution with high academic standards and fully recognized by the State authorities of the country in which it

- is located. The time limit to complete all degree requirements is one year full-time and two years part-time.
- 2. Have a command of the Spanish language and the ability to read and understand the English language. Mastery of the Spanish or English language may be demonstrated if the student demonstrates having studied in any of these languages at a duly accredited university. Special attention will be paid to reading and comprehension skills in English and Spanish.
- 3. It is highly recommended that the applicant has at least two to three years of previous work experience in the field of law.
- 4. A computer with high-speed internet access or mobile device with data service and sufficient capacity to reproduce multimedia material and have the necessary skills to use it competently. It should also have built-in or external speakers and a webcam or mobile phone with a camera and microphone.

# **Documents Required for Admission**

All candidates must submit the following documents:

- 1. Complete the Admission Application through the Electronic Graduate Admissions System of the Río Piedras Campus.
- 2. Evidence of having obtained a Juris Doctor, a bachelor's degree, or equivalent degree in Law, as described in the specific requirements.
- 3. Two (2) official transcripts of all university credits approved or validated by the institution of origin. The applicant must request the university institution where they completed their degree in Law or Juris Doctor send sealed transcripts directly to the LL.M. Master's Program. In those cases in which the university institution of origin is not accredited by the ABA, the transcripts must be duly authenticated and apostilled by the competent authorities of the country of the issuing universities.
- 4. Two (2) letters of recommendation, at least one of which must be an academic recommendation, describing in detail the academic aptitudes, professional experience, and character of the applicant.
- 5. Curriculum Vitae.
- 6. Personal statement including background and personal profile, motivations for studying a Master's degree in Law, areas of interest, and professional plans.
- 7. Application payment.

Once the applicant meets these requirements, their admission will be conditional on an evaluation process.

# **GRADUATION REQUIREMENTS:**

All students must comply with the general graduation requirements at the Río Piedras Campus. In addition, students must meet the following specific requirements of the online Master of Laws (LL.M.) program.

1. Approved a minimum of 24 credit hours of the Program at the School of Law with a GPA of 3.0 points on a scale of 4.00.

- 2. The time limit to complete all degree requirements is one year for full-time students and two years for part-time students.
- 3. Take at least two seminars in which it is required to prepare a written work.
- 4. Comply with the attendance standards established by the School of Law.

## **PROGRAM OF STUDY:**

The Master of Laws (LL.M.) in Orality in the Criminal System Online is designed for one (1) year of full-course studies and twenty-four (24) credit hours. Considering that the Program is aimed at practicing professionals, it is foreseeable that students will be interested in studying part-time for two (2) years.

The curricular design provides a balance between courses, aimed at the study of the Puerto Rican accusatory and oral criminal system from a comparative perspective, and courses aimed at developing litigation skills.

Program Requirements	Credits
DERE 7101 Legal Writing Workshop	2
DERE 7102 Beginning, Development and Conclusion of the Criminal Process	3
in the Court of First Instance	3
DERE 7103 Structures and Processes of Common Law and Interactions with	2
Civil Law	
DERE 7123 Seminar Due Process of Law and its Jurisprudential	2
Development in the Accusatory System	2
DERE 7124 Electronic Evidence	2
DERE 7125 Opinions Writing	2
DERE 7126 Theory, Doctrine and Litigation Practice	3
DERE 7206 Forensic Litigation: Basic Criminal Litigation Skills I	2
Total	18
Elective Courses	Credits
DERE 7122 Seminar: Legal Aspects Human Trafficking	2
DERE 7201 Direct Examination and Cross Examination	2
DERE 7208 Litigation of gender violence cases: Civil and Penal Remedies	2
DERE 7210 Seminar: Human Rights and Criminal Procedure	2
DERE 7211 Theory of Adjudication	2
Total	10

## **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023 ,to be included in the 2023-2024 Graduate Catalog.

# **DERE 7101 Legal Writing Workshop**

Credits: 2

Prerequisite: For JD Program: Seminar.

Corequisite: For LLM Online Program: Seminar.

With emphasis on research projects for the final work of the master's degree (LL.M.) and on seminary papers already completed, the workshop aims to guide the student in the preparation of legal writing of publishable quality. The workshop is designed to use an investigation substantially completed by each student as working basis and will be focused towards its development into a more extensive and complete document based on a properly reasoned argument. Particular emphasis will be placed on aspects such as the organization of writings, sketches, drafts, and strategies for clear and persuasive writing.

# DERE 7102 Beginning, Development, and Conclusion of the Criminal Procedure in the Court of First Instance

Three credits. Three hours of lecture per week.

The course addresses the theory and practice of the criminal judicial process in the courts of First Instance Puerto Rico as a reference for the study of a criminal system based on oral procedures. The study of the procedural stages, the principles, norms, and elements that govern the criminal process will show how the rights of the accused have been incorporated and the search for truth in the admission of evidence. The conflicts around the criminal process and the responses of the Supreme Court will be studied through the Court's opinions. The course will be offered in face-to-face, hybrid, and online modalities.

# DERE 7103 Structure and Process of Anglo-American Law and its Interaction with Civil Law

Credits: 2

Analysis of the principal institutions, structures, and processes of Anglo-American Law and its interaction with Civil Law in the context of Puerto Rican juridical culture. A panoramic discussion of Anglo-American institutions presented in Puerto Rico, the historical process that introduced these institutions to our legal culture, the natural tensions that their arrival produced, and how they have evolved.

#### **DERE 7124 Electronic Evidence**

Two credits. One hour of lecture and one hour of discussion per week.

Prerequisites: for JD program and DERE 7026.

Corequisites: for LLM program online. DERE 7026 or validation of the procedural course at a

foreign university.

Technology has impacted how members of society communicate. For that reason, evidence is continuously created in electronic and digital devices without knowing the impact this evidence has on disputes that end up in court. This course studies the concept to electronic evidence, its impact on the presentation of evidence in the courts and the rules of evidence on authentication

that allows its presentation and admission in court in plenary trials. upon completing the course, the student will be able to identify the electronic evidence and apply the rules evidence on authentication for admission to the courts. This course will be offered under the classroom, hybrid, at distance and online modalities.

# **DERE 7125 Opinions Writings**

Two credits. One hour of lecture and one hour of discussion per week.

Prerequisites: for program JD. DERE 7017.

Corerquisites: for online LLM program, DERE 7068 or validation of procedural course at a

foreign university.

This course will analyze the process of drafting opinions and all its stages: the deliberative stage, the legal investigation, the process of interpretation of the legal norm and the precedent and its application, the legal argumentation, until reading and preparation of the final judgment brief. Students will analyze the opinions and their essential parts in the oral system and develop a model outline of the opinions in their jurisdiction, which meets all the essential requirements of opinions in the country, state, or jurisdiction that applies, participants will have the opportunity to go into the study of legal drafting, with emphasis on the wording of opinions. To do this, they will have the opportunity to reflect on the requirements of opinions in their jurisdiction, particularly as regards the duty to justify and motivate. This course will be offered under the face-to-face, hybrid, at distance and online modalities.

# **DERE 7126 Theory, Doctrine and Litigation Practice**

Credits: 3

Prerequisite: For JD Program, DERE 7026.

Corequisite: For LLM Online Program, Dere 7026 or validation of a procedural course at a

foreign university.

This is a course in which cognitive skills are developed in order for the student to "learn from experience." It gives special emphasis to the development of modern interrogation techniques, both in direct examination and in cross-examination. In addition, the course refreshes and strengthens the presentation of evidence, the challenge and rehabilitation of witnesses, and oral argumentation. This course is designed to help lawyers to link the theoretical aspect with the practical one. Although the function of "advocating" in the various forums entails an element of innate talent and art when exercised effectively, we firmly believe that as in the case of music, painting, sculpture and other arts, basic skills of litigation can be taught. It is up to the discretion, commitment, talent and ability of the lawyer and the lawyer - like the artist - to develop and practice them. This course will be offered under the face-to-face, hybrid, at distance and online modalities.

# **DERE 7201 Theory, Doctrine and Litigation Practice**

Three credits. One hour of lecture and one hour of discussion per week.

Prerequisites: DERE 7026, for JD program.

Corequisites: DERE 7026, or validation of procedural course at a foreign university.

This is a course in which cognitive skills are developed in order of the student to "learn from experience". Both is direct examination and cross-examination. In addition, the offer of evidence, the challenge and rehabilitation of witnesses, and oral argumentation are refreshed and perfected. This course is designed to help lawyers to link the theoretical aspect with the practical one. Although it is said that the function of "advocating" in the various forums entails an element of innate talent and art when exercised effectively, we firmly believe that as in the case of music, painting, sculpture and other arts, basic skills of litigation can be taught. it is up to the discretion, commitment, talent and ability of the lawyer-like the artist-to develop and practice them. This course will be offered on distance and online modalities.

# **DERE 7206 Forensic Litigation: Basic Criminal Litigation Skills**

Credits: 2

Prerequisite: For JD Program DERE 7026.

Corequisite: For LLM Online Program, DERE 7026 or validation of a procedural course at a

foreign university.

The course is aimed at developing and strengthening basic litigation skills in the criminal area. A balance will be established between the theoretical discussion of the rules of evidence applicable to the litigation process and the practical aspects of the development of skills. The issues will be analyzed from the perspective of the litigant and from the perspective of the adjudicator. The aspects of Evidentiary Law and those of Criminal Procedure will be based both in the legal system of Puerto Rico and in the jurisprudence of the Supreme Court of the United States of America as a frame of reference for the analysis of the course topics. The course may include procedural aspects of other jurisdictions as necessary. This course will be offered on distance and online modalities.

# DERE 7208 Litigation of gender violence cases: Civil and Penal Remedies

Credits: 2

Prerequisite: For JD Program DERE 7015 or equivalent validation, DERE 7008 or equivalent validation, and DERE 7068 or equivalent validation.

Corequisite: For LLM Online Program, DERE 7026 or validation of a procedural course at a foreign university.

This course will look into the social and legal aspects of gender violence and strengthen the development of litigation skills that start from the understanding of the problem and the ethical dilemmas that could be involved. Legislation approved to address the social problem and the context of its development will be studied: Law No. 54 of August 15, 1989, Law for the Prevention and Intervention with Domestic Violence, and the jurisprudence that has interpreted it. The Law will be analyzed from its civil and criminal dimensions, its application and interpretation. Innovative strategies that have distanced themselves from the traditional responses of the judicial system to address this serious social problem will be studied. Simulated litigation hearings of different kinds (civil and criminal) will be held, oral presentations will be made and a final writing will be worked on.

# **DERE 7211 Theory of Adjudication**

Credits: 2

Prerequisite: For JD Program: DERE 7039 or validation of a procedural course at a foreign

university.

Corequisite: For LLM Online Program: DERE 7039 or validation of a procedural course at a

foreign university.

The first part of the course will examine a selection of the main Western works on jurisprudence and the judicial function. The second part will discuss the theoretical issues discussed in the first part as they are present in Puerto Rican case law.

## **SEMINARS**

Seminars on specialized topics in each area of law constitute a fundamental component of legal education, since they provide the student with the opportunity to study and research in depth a topic of interest under the supervision of a faculty professor. In addition, they allow for careful research that leads to the writing of an extensive monograph.

Our seminars address various topics under each area of law in which they are developed, as indicated in their description. The professor in charge of the seminar will announce the topic to be studied in the class program of the semester in which it is offered. Enrollment for each seminar is limited to a maximum of 15 students to facilitate intense discussion of complex legal issues.

Every student must take a minimum of four (4) credits in seminars as a requirement for the degree. As a passing requirement, the student must complete extensive monographic writing in each seminar. Each seminar may be repeated up to a maximum of four times (a maximum of eight (8) credits), as long as the topics covered by the seminars are different.

The following provides an overview of the seminars offered for the online Master of Laws (LL.M.) program in Orality in the Criminal Accusatory System.

## **DERE 7122 Seminar: Human Trafficking**

Credits: 2

This seminar delves into the identification of human trafficking through a holistic, socio-economic perspective and its repercussions in some judicial cases of this overlapping and unidentified phenomenon. This crime implies a control that tries, through fear, manipulation, coercion, or deception, to reduce the forms of resistance and escape through the weakening of wills (TIP REPORT, 2018). This slavery to which women and minors are subjected is articulated with mercantile forms, where bodies are transformed into objects of merchandise of desire through exploitation and servitude (Palermo, 2000). Unfortunately, these cases are not identified in our courts due to a lack of information and adequate classification of this crime. Therefore, it is proposed to explore the different forms that this modern slavery assumes, deepen their causes, and visualize this market in the international, regional, and Puerto Rico context. Its causes, conditions, socioeconomic, and legal implications will be part of the discussion.

# DERE 7123 Seminar Due Process of Law and its Jurisprudential Development in the Accusatory System.

Credits: 2

Prerequisite: For JD Program: DERE 7019 and DERE 7018.

Corequisite: For LLM Online Program: DERE 7019 or validation of a procedural course at a

foreign university

This seminar aims to confront students with the paradigm that represents the conceptualization, implementation, and consolidation of the adversarial criminal justice system. The principles that govern the model will be studied from a constitutional perspective and the jurisprudential doctrines developed in the United States and Puerto Rico. Furthermore, the emphasis of the course will be framed in the concept of due legal process as the central axis of the other constitutional guarantees and from a perspective of the theoretical and practical knowledge necessary for the success of the reforms of the adversarial model in Latin America. Also, it is intended to address the standards of judicial review designed for the exercise of appellate practice in the guarantor criminal system.

# **DERE 7210 Seminar: Human Rights and Criminal Procedure**

Credits: 2

Prerequisite: For JD Program, DERE 7115. Corequisite: For LLM Online Program

This seminar is intended to provide a comprehensive view of international human rights standards applicable to criminal proceedings. Likewise, the control mechanisms of the international treaties available to claim such rights and their effectiveness will be studied. Cases will be analyzed at the international and national levels to assess compliance with international obligations regarding criminal proceedings. This course will be offered under the face-to-face, hybrid, at distance and online modalities.



Mailing Address: Law ShoolUPR, 7 University Ave., Ste. 701, San Juan PR 00925-2527

**Telephone:** (787) 999-9552, 999-9563 **Email:** admisiones.derecho@upr.edu **Website:** http://derecho.uprrp.edu

**DEGREE:** 

Juris Doctor (JD)

#### **ACCREDITATIONS:**

American Bar Association (1945) 321 Clark Street Chicago, IL 60611 www.abanet.org/legaled

Association of American School of Laws (1944) 1201 Connecticut Ave., N.W. Suite 800 Washington, D.C. 20036-2717 www.aals.org

#### JURIS DOCTOR

The Juris Doctor degree can be completed in three years by full-time students or in four years by part-time students. The degree is awarded to students who complete a minimum of 92 credits in the School of Law, with a minimum grade point average of 2.00, and who fulfill all other requirements and academic standards of the School of Law.

#### **Summer Session**

Each summer, the School of Law offers courses that aim to achieve three objectives: 1) to enable students who study part-time to finish their studies in four years, 2) to enrich the academic program with courses given by visiting professors in subjects that would not ordinarily be taught during the regular academic year, and 3) to establish close ties between the School of Law and the best young legal talent in the world.

#### **Winter Session**

The School of Law holds a winter session in January. Distinguished Law professors coming from faculties throughout the world offer mini-courses on specialized law topics that can be dealt with effectively within one week of intensive work.

#### PROGRAMS FOR OBTAINING OTHER DEGREES WHILE PURSUING THE JD



Five programs currently offer students the opportunity to earn an additional degree in conjunction with the Juris Doctor.

#### Concurrent Juris Doctor/Master of Business Administration

The School of Law and the College of Business Administration of the University of Puerto Rico offer a joint study program leading to a Juris Doctor (JD) and a Master of Business Administration (MBA), in the area of Finance. Students can complete this program in four years, instead of the five it would require if the degrees were to be earned separately. Students must be accepted by both schools to qualify for this program.

## Juris Doctor/Dual and Triple Title Degree Program, Universität de Barcelona

The University of Puerto Rico School of Law and the School of Law of the Universität de Barcelona have established a program that leads to the conferring of two degrees simultaneously (the Juris Doctor and the *Licentiate* in Law), or three degrees (Juris Doctor, *Licentiate* in Law and the Masters in Law from the UB). This program is open to students from both institutions.

### Juris Doctor and Doctor of Medicine, University of Puerto Rico School of Medicine

The School of Law and the School of Medicine of the University of Puerto Rico offer a program that allows students to earn a Juris Doctor (JD) and a Doctor of Medicine (MD) in six years instead of the seven that would be required if the degrees were pursued separately. Students may spend their first two years in either the School of Law or the School of Medicine, and eventually return to the School of Law to complete the program requirements in their last year of studies. They are exempt from one semester of Legal Clinic, which will be substituted by a medical clinic experience.

Students must be admitted in advance to both the School of Law and the School of Medicine, in accordance with the admissions policies and procedures of each school, to qualify for the program. In addition, students must complete a separate application for admission to the JD/MD Program. All students must complete 77 credits in the School of Law and 4,124 hours in the School of Medicine. The degree will be conferred upon the recommendation of a joint committee composed of the deans and one professor from each school. Each degree will be awarded separately.

#### Juris Doctor / Master of Architecture, School of Architecture

The School of Law and the University of Puerto Rico School of Architecture offer the opportunity to obtain, concurrently, the Juris Doctor (JD) and the degree of Master of Architecture (MA). This program allows students to reduce the time it would take to complete both degrees.

### Juris Doctor / Master of Public Administration, Graduate School of Public Administration

The School of Law and the University of Puerto Rico School of Graduate School of Public Administration offer, concurrently, the Juris Doctor (JD) and the degree of Master of Public

Administration (MAP). This program allows students to reduce the time it would take the to complete both degrees.

# **Juris Doctor / Master in Planning (MP)**

The School of Law and the Graduate School of Planning at the Río Piedras Campus have established an academic program leading to the concurrent award of a Juris Doctor (JD) and a Master in Planning (MP) degree. This unique program enables students to pursue both degrees simultaneously, thereby reducing the time required to obtain each independently, among other advantages.

## **Student Exchange Programs**

During their second year, School of Law students may choose to spend one or two semesters taking courses at several Universities with which the School of Law has student exchange agreements. These include the University of Connecticut School of Law in Hartford, the University of Palermo School of Law in Buenos Aires, Argentina, and the University of Chile School of Law in Santiago; or students may also choose to visit the University of Ottawa School of Law in Canada.

While abroad, tuition costs for students would remain the same as at the University of Puerto Rico School of Law. Courses will be credited toward their degree.

### Summer Program in Barcelona, Catalonia, Spain

The summer program offers students an opportunity to study law in Barcelona. Students receive up to six credits for courses completed during the six-week program. The focus of the program is comparative and international law. Because the classes are offered in English, the program is also open to law students from the United States.

### Summer Program in Santiago, Chile

The summer program offered by the University of Puerto Rico in Santiago, Chile, focuses on comparative and international law. Classes could be offered in English to include School of Law students from the United States, which contributes to the diversity of the student body.

#### **FACULTY:**

José Julián Álvarez González, LLM, 1978, Yale University; JD, 1977, University of Puerto Rico, Professor. Constitutional Law, Tort Liability, Federal Jurisdiction; Comparative Law. Luis A. Avilés Pagán, BS, 1984, University of Puerto Rico; MA, 1986, JD, 1992, Harvard University; LLM, 2011, Université de Paris II (Panthéon-Assas). Professor. Corporate Law, Energy and Law, European Union Law, Legal Aspects of International Business Transactions, The Legal Profession, Administrative Law Seminar, Corporate Law Seminar.

**Rubén Berríos Martínez,** Diploma in Law, 1966, LLM, 1965, LLB, 1964, Yale University; Oxford University. Professor. Public International Law, Seminars in International Law, Seminars

in Constitutional Law.

**Ernesto Chiesa Aponte,** JD, 1974, MA, 1967, University of Puerto Rico. Professor and Distinguished Professor. Criminal Law, Criminal Procedure Law, Evidence and Evidence Law, Seminar on Criminal Procedure Law.

**Carmelo Delgado Cintrón,** MA, 1977, New York University; Juris Doctor, 1974 University Complutense of Madrid; LLB, 1966, University of Puerto Rico. Professor. History of Puerto Rican Law, History of Constitutional Law of Puerto Rico, Law and Literature, Seminars in Advanced Legal Research.

**Carlos Díaz Olivo,** LLM, 1985, Harvard University; JD, 1983, University of Puerto Rico. Professor. Partnerships and Corporations, Civil Procedure Law, Antitrust Law, Seminars in Partnerships and Corporations.

**Guillermo Figueroa Prieto,** LLB, 1969, University of Puerto Rico. Professor. Ethics and Professional Responsibility, The Legal Profession, Law and Sports, Seminar on Ethics and Professional Responsibility.

**Erika Fontánez Torres,** LLM, 2002, London School of Economics and Political Sciences; JD, 1999, University of Puerto Rico; Ph.D., 2017, Autonomus University of Barcelona. Professor. Natural Resources Law, Theory of Obligations and Contracts, Seminars in Environmental Law, Seminar in Theory of Law.

**Antonio García Padilla,** LLM, 1981, Yale University; JD, 1978, University of Puerto Rico. Professor and Dean Emeritus. Civil Procedure Law, Commercial Law.

Chloé S. Georas Santos, BA, 1987, University of Puerto Rico; M.A. 1997, State University of New York; JD, 2004, New York University; LLM, University of Ottawa. Professor. Legal Aid Clinic.

**Ana C. Gómez Pérez,** JD 2004 University of Puerto Rico; LLM 2007 Carlos III University, Madrid; 2010 Doctorate in Law, University Complutense of Madrid. Professor. Real Estate Registry Law, Inheritance Law, Family Law, Trust Law.

**Hiram A. Meléndez Juarbe,** JSD, 2013, New York University (NYU); LLM, 2002, Harvard University; JD, 2000, University of Puerto Rico. Professor. Administrative Law, Cyber Law, Constitutional Law, Seminars in Constitutional Law, Copyright, Theory of Law.

**Oscar E. Miranda Miller**, LLM, 2007, SUNY Buffalo Law School of Law; JD, 2005, University of Puerto Rico. Assistant Professor and Associate Dean. Substantive Criminal Law, Criminal Procedure Law, Legal Profession, Special Criminal Law.

**Vivian I. Neptune Rivera**, LLM, 1998 Columbia University; JD, 1995, University of Puerto Rico. Professor and Dean. Labor Law, Evidence and Evidence Law, Social Legislation.

Alvin Padilla Babilonia, LLM, 2018, Yale School of Law; JD, 2016, University of Puerto Rico.

Assistant Professor. Theory of Obligations and Contracts; Real Rights; Seminars in Theory of Law; Tort Liability.

**Efrén Rivera Ramos,** Ph.D., 1994, University of London; LLM, 1981, Harvard University JD, 1976, University of Puerto Rico. Professor. Evidence and Evidence Law, Constitutional Law, Theory of Law, Sociology of Law, Seminars in Constitutional Law.

**Mayté N. Rodríguez Rivera,** LL.M. Columbia University, 2011, J.D. University of Puerto Rico 2006. Assistant Professor. Personal and Family Law; Gender Discrimination; Ethics and Professional Responsibility; Non-Traditional Families; Civil Procedure Law.

**Luis E. Rodríguez Rivera,** LLM, 1998, University of Cambridge, England; JD, 1987, Harvard University. Professor. International Environmental Law, Administrative Law, Natural Resources Law, Seminars in Environmental Law, Seminars in Administrative Law.

**Iris Y. Rosario Nieves,** Ph.D. in Law, 2022, Pompeu Fabra University; Master in Criminal Law, 2014, University of Palermo; JD, 2006, Univ. of Puerto Rico. Assistant Professor. Criminal Law; Criminal Procedure; Evidentiary Law; Post Judgment DNA.

William Vázquez Irizarry, LLM, 1997, London School of Economics; JD, 1994, University of Puerto Rico. Professor. Civil Procedure Law, Constitutional Law, Administrative Law, Governmental Law, Executive Process.

**Luis M. Villaronga Arostegui,** MA, 1973, University of Pennsylvania; JD, 1966, Harvard University. Distinguished Professor and Lecturer. Constitutional Law, Insurance Law, Federal Jurisdiction, Civil Rights Litigation.

**David Wexler,** JD, 1964, New York University. Professor. Theory of Law; Therapeutic Jurisprudence; Criminal Law.

### **ADMISSION REQUIREMENTS:**

### **General Requirements of Rio Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Degree Requirements**

https://derecho.uprrp.edu/futuros-estudiantes/admision/juris-doctor/

The School of Law admits students once a year in accordance with the requirements and procedures approved by the School of Law and the Admissions Committee. To be admitted, all applicants must comply with the following:

1. Have a bachelor's degree from an accredited college or university.

- 2. Take the School of Law Admission Test (LSAT) offered by the School of Law Admission Council (LSAC). The School of Law accepts LSAT scores for the English and Spanish versions of the test. Scores on tests taken after the month of April in the year for which application is submitted will not be considered. The School of Law will consider the highest LSAT score for students taking the exam more than once.
- 3. Register with the School of Law Data Assembly Service (LSDAS), offered by the School of Law Admissions Council,. This service compiles all information required for admission to the School of Law, including academic transcripts and LSAT results. This service must be requested simultaneously with the LSAT. All applicants are responsible for making sure that every university where they have taken courses sends official copies of their undergraduate academic transcripts to the LSDAS. If the applicant does not register with the LSDAS, the School of Law will not consider the application.
- 4. Write a personal statement as described in the School of Law application form.
- 5. Submit an essay, paper, or article written during undergraduate studies.
- 6. Include a \$20.00 fee to be paid directly to the School of Law.
- 7. Submit official evidence of having earned an undergraduate degree.

# **GRADUATION REQUIREMENTS:**

- 1. A minimum of 92 credits taken at the School of Law, with a grade point average of at least 2.00. These include 49 credits of required courses and a minimum of 43 credits in elective courses. As part of the required courses, 6 credits must be completed in the Legal Aid Clinic. As part of the 46 credits in electives, two seminars must be completed each of which the student writes at least one rigorous research paper.
- 2. At least 62 of the 92 credits, including the last 24 credits before graduation, must be completed at the University of Puerto Rico School of Law.
- 3. Degree studies must be completed in a maximum of 6 years for full-time students or 7 years for part-time students.
- 4. Elective courses shall not be validated to replace required courses unless extraordinary circumstances justify otherwise.
- 5. If students obtain an "F," the grade will count towards their degree and grade point average, although they will not receive credit unless the course is repeated with a passing grade. Elective courses may not substitute required courses. Students will not be allowed to retake any test on which they have already earned an "F." In such a case, the student must reregister the following semester.

#### **PROGRAM OF STUDY:**

Requirements Program	Credits
Medular Courses	49
DERE 7006 Responsabilidad Extracontractual	3
DERE 7007 Derechos Reales	3
DERE 7008 Personal and Family Law	3

Requirements Program	Credits
DERE 7015 Criminal Law	3
DERE 7016 Obligations and Theory Contracts	4
DERE 7017 Civil Procedure Law	4
DERE 7018 Constitutional Law	4
DERE 7026 Evidence	3
DERE 7036 Business Associations and Corporations	3
DERE 7039 Theory of Law	3
DERE 7041-7042 Legal Aid Clinic	6
DERE 7066 The Legal Profession and Professional Responsibility	3
DERE 7068 Legal Research and Writing I	2
DERE 7069 Research and Writing II	2
DERE 7115 Public International Law	3
Electives (including 4 credits in seminars)	43
Total credits	92

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **DERE 7006 Torts**

Three credits.

Civil and common-law principles of liability for wrongs to persons, property, or other interests based on fault or negligence. Emphasis on the interaction of civil law and common law in Puerto Rico.

## **DERE 7007 Property Law**

Three credits.

Study of rights over things vis-a-vis rights to credit. Classification. Possession and the right to possess. The right of property, its evolution and forms. Methods of acquiring property. Usufruct, servitude, security and warranty, and homestead rights.

## **DERE 7008 Family Law**

Three credits.



The family as a social and legal institution. Distinction of persons, absence, marriage, divorce, filiation, patria potestas, tutorship, emancipation, registry of civil status.

#### **DERE 7015 Criminal Law**

Three credits.

Study of the nature, characteristics, genesis, sources, and concepts of criminal law. its historical evolution in Puerto Rico. The interpretation of criminal law and its temporal and territorial applications. The legality principle. the general theory of criminal offense. Analysis of the principles of criminal law, such as the act, culpability, illegality, imputability, aiding and abetting, attempt, joinder in criminal acts, statutory limitations, punishment, and security measures. This course will be offered face-to-face, hybrid and online.

### **DERE 7016 Obligation and Contract Law.**

Four credits.

Rights in personam. Classes of obligations. Their effects. Extinction of obligations, especially payment and novation. Individual and collective actions by the creditor. Evolution of the contract and its binding nature. Analysis of consent, the object, and consideration in contracts. Contract inefficiency by reason of inexistence, nullity, rescission, and cancellation. Special rescissions. The clause rebus sic stantibus. This course will be offered face-to-face, hybrid and online.

#### **DERE 7017 Civil Procedure**

Four credits.

The course will integrate the code of civil procedure and the rules of civil procedure promulgated by the supreme court of Puerto Rico. Each student will study and comment on the procedural papers in actual litigation, from summons and complaints to judgement. (c) This course will be offered face-to-face, hybrid and online

# **DERE 7018 Constitutional Law**

#### Four credits.

A study of state, federal, commonwealth of Puerto Rico relations. Comparative analysis of all problems discussed in the light of the decisions of the United States supreme court and the constitution of the United States and of the commonwealth of Puerto Rico. The federal government's power to regulate commerce and the limitations on state economic regulation. general powers of congress and their relationship to state and local government. Study of the principal political and civil rights. (c) This course will be offered face-to-face, hybrid and online. effective August 2020.

#### **DERE 7019 Criminal Procedure**

Credits: 4

Criminal jurisdiction. Duties of the prosecuting attorney. Methods of prosecution. Arrest. Preliminary Hearing; post Judicial Appeals. Bail. Grand Jury Hearings; Assignment. Trial.

Sentencing; Motions and procedures.

# **DERE 7020 Criminal Law: Specific Crimes**

Three credits. Three hours of lecture.

Prerequisite: DERE 7015

The study of crimes contained in the Commonwealth Criminal Code and other related statutes.

#### **DERE 7021 Criminal Law (specific crimes)**

Three credits. Three hours of lecture per week.

Prerequisite: Law 7015

Study of each of the specific crimes in the criminal law and other related statutes.

#### **DERE 7025 Law and Social Change**

Three credits.

Legal aspects of development and social change. analysis of present legal institutions and their adequacy in the solution of contemporary social problems. Study of legislation on planning, urbanism, housing, civil rights and poverty, and the development of legal trends in these and other areas as this course will be offered face-to-face, hybrid and online.

#### **DERE 7026 Evidence**

Three credits.

Prerequisite: DERE 7017

The rules of evidence as applied to both civil and criminal cases. Evidence, definitions and general principles, kinds and degrees, production, effect. This course will be offered face-to-face, hybrid and online.

#### **DERE 7027 Commercial Contracts**

Three credits.

Prerequisites: DERE 7016.

Study of modern commercial law theory and adoption of the new commercial regulations. The historical development and sources of commercial law, commercial contracts, and special commercial regulations. This course will be offered face-to-face, hybrid and online.

#### **DERE 7028 Administrative Law**

Four credits.

Prerequisite: DERE 7018

Analysis of the development of the administrative process. Study of the function of administrative agencies and of the administrative procedure. Examination of the investigative, interpretative, quasi-legislative, and quasi-judicial functions of administrative agencies.





Credits: 3

Intestacy; testacy; donations; trusts.

### **DERE 7035 Mortgage Law**

Credits: 3

The historical evolution of mortgage legislation. Mortgages and mortgage proceedings in Puerto Rican law, specifically positive law. Property Registry elements. Property Registry, estates, deed and rights that can be inscribed in the Property Registry, title holders, Property Registry files, and Property Registry transactions. Study of mortgage law and summary execution.

## **DERE 7036 Business Associations and Corporations**

Credits: 3

General principles of law relating to private corporations, including the principles relating to their organization. Promoters and contractors. The distribution of corporate powers among shareholders, directors, and officers. Responsibility of directors. Shareholders' rights to inspect corporate books and derivative shareholder suits. Special problems of closed corporations. This course will be offered face-to-face, hybrid and online.

## **DERE 7039 Theory of Law**

Three credits

Survey of the basic topics and problems in legal theory, such as different conceptions of law, validity or legitimacy of legal norms, problems of legal methodology, key concepts of the prevailing legal order, and the relationship between law, power, social structure and ideology. The contributions of the various schools and currents of legal thought, with particular emphasis on the most recent developments in the discipline. This course will be offered face-to-face, hybrid and online.

#### **DERE 7041 Legal Aid Clinic**

Three credits.

Prerequisites: to have approved satisfactorily 60 credits, including DERE 7017, and DERE 7026. Students interested in taking this course in sections concerning criminal law cases, must have approved DERE 7019.

An attempt to give the students practical experience in the handling of actual cases for legal aid clients, under the supervision of the director and the full-time attorneys employed by the clinic. Besides the regular class sessions, students will meet with professors as needed to discuss individual work. This course will be offered face-to-face, hybrid and online.

### **DERE 7042 Legal Aid Clinic**

Credits: 3

Prerequisite: DERE 7041

Continuation of DERE 7041.

**Dere 7056 Energy and Law** 



Three credits. Three hours of lecture per week.

Prerequisite: authorization of the dean.

Federal and Puerto Rican legislation regulations and decisional law applicable to the importation, production, transformation, allocation, cost, and conservation of energy. Policy framework, institutional structure and practice. Case studies illustrating typical legal problems. This course will be offered face-to-face, hybrid and online.

#### **DERE 7059 Trademark Law**

Two credits. Two hours of lecture per week.

Prerequisite: DERE 7007.

The course is designed for students without prior experience or knowledge related to trademarks. The trademark law course is designed to familiarize students with the trademark law of Puerto Rico. Known as trademark act of the government of Puerto Rico. Law 169 of December 16, 2009, as amended and the federal trademark law known as the Lanham act, 15 usc sec. 1051 et seq. And related doctrines. The course will focus on trademarks. "Trade dress", unfair competition, among others. for each one we will discuss the reasons why protection is granted eligibility requirements, causes of action, affirmative defenses and remedies. The course also proposes to introduce the students to the process of filing trademark applications both in the Puerto Rico trademark office and in the United States trademark office and the process of issuing or granting trademark licenses.

## **DERE 7066 The Legal Profession and Professional Responsibility**

Credits: 3

Study of the legal profession. Examination of its history, organization, commitments, values, and guiding principles, and the regulation of the professional responsibilities of its members. Analysis of the legal profession's interaction with other social groups and its relationship to processes of social transformation. Study of the effects of contemporary political, social, and cultural tendencies over the legal profession. This course will be offered face-to-face, hybrid and online.

### **DERE 7068 Legal Research and Writing**

Credits: 2

One hour of lecture and one hour of discussion per week.

Study of the sources, methods, techniques, and practices of legal analysis and research. Development, by means of practical and theoretical exercises, of the analytical and research skills needed for the study and practice of law. Introduction to contemporary electronic means and resources for conducting legal research. Development, by means of practical exercises, of the ability to use legal forms and prepare legal memoranda to communicate the results of legal research. This course will be offered face-to-face, hybrid and online.

#### **DERE 7069 Research and Writing II**

Credits: 2 One hour of discussion and one hour of investigation

Prerequisite: DERE 7068

In this course, the identification of complex legal controversies, the sources of law, with emphasis on specialized sources will continue to be studied in greater depth. Legal reasoning techniques and oral and written argumentation will be developed. The student body will apply the knowledge acquired in the legal research and writing course and will analyze complex

legal problems by preparing objective and persuasive writings addressed to a judicial or administrative forum. they will apply search skills in traditional media and electronic investigation resources to conduct complex legal research. They will also develop, through practical exercises, the drafting of legal documents to communicate the results of the investigation. This course will be offered under the face-to-face, hybrid and online modalities.

#### **DERE 7075 Constitutional Law and Gender-Based Discrimination Law**

Three credits. Three hours of lecture per week.

Study of gender-based discrimination in family relationships, in employment, education, and criminality. Examination of the support the law has provided gender-based discrimination and the different means through which the law may contribute toward equal opportunities to members of both sexes.

#### **DERE 7076 Securities Laws**

Three credits. One and a half hour of lecture and one and a half hour of discussion per week.

Prerequisite: DERE 7036

Study of the federal securities laws: securities act of 1933 and securities exchange act 1934. Analysis of the implementation of the securities regulation by the regulators (securities and exchange commission and "oficina del comisionado de instituciones financieras"). Examination of the relationship between the issuer and its shareholders. Discussion of the state participation in the regulation of securities offerings, particularly the scope and content of Puerto Rico uniform securities act. This course will be offered face-to-face, hybrid and online.

### **DERE 7556 Notary Law**

Three credits. Three hours of lecture per week.

Prerequisite: 31 approved credits and course DERE 7035.

This introductory course on Notary Law includes not only the theoretical foundations of this branch of law but also the way in which such matters are regulated in the current legal system. The role of the notary as a legal professional will be studied. The requirements and characteristics of all notarial documents will be studied, with special emphasis on the public instrument, both from its theoretical perspective and the way in which it should be prepared, without going into the details of the legal business of each instrument. The professional ethics of the lawyer will be studied from the perspective of the notary. This course will be offered in-person, hybrid, and online modalities.

#### **DERE 7558 Notarial Practice**

Three credits. Three hours of lecture per week.



Prerequisites: 31 credits approved, DERE 7077 or DERE 7556.

This course studies the notarial form of public instruments and testimonies and their content in civil contracts. The course covers non-contentious matters before a notary where they will be analyzed and drafted. The main businesses and contracts of a civil nature will be discussed, with special emphasis on the notarial form and the notarial obligations that arise from them. Each students will form and bind their protocol by the notarial law and its regulations. In the course, problems of a civil nature that a notary may face in the exercise of the profession will be discussed and analyzed, and such problems will serve as a tool for the learning process of business and civil contracts, deepening the knowledge acquired in an introductory way during notarial law. This course will be offered in face-to-face, hybrid, and online modalities.

### **DERE 7560 Tax Aspects of Notary Practice**

Credits: 2

Prerequisite: DERE 7556

The course provides an introduction to the tax events that affect notarial practice. The tax doctrine applicable to a legal business is studied with the aim of advising grantors, drafting clauses, expressly consigning warnings in public instruments, and disclosing transaction data to tax agencies, as required by tax regulations. In particular, the provisions of the Internal Revenue Code of Puerto Rico, the Federal Internal Revenue Code, the Municipal Code of Puerto Rico, and laws to stimulate the real estate market, among other primary sources, for legal transactions transferring ownership are identified, and others common in Puerto Rico. The jurisprudence of the Supreme Court of Puerto Rico on the notary's duty to inform in the real estate tax and registry context is discussed. This course will be offered in-person, hybrid, and online modalities.

### **DERE 7561 Notary-inheritance Practice**

Credits 2

Prerequisite: DERE 7556

The course focuses on the writing and content of public deeds related to Law of Inheritance. It emphasizes on the application of the principles of Notarial Law within the inheritance context with the objective of advising parties, and drafting deeds and those special clauses in which the warnings that must be contained in said documents are expressly stated. This course will be offered as in-person, hybrid and online modalities.

### **DERE 7085 Legal aspects of international business transactions**

Three credits. Three hours of lecture per week.

Studies on the international legal aspects affecting commercial transactions between private entities domiciled in different countries. It provides an overview of the aspects of private international law common to all business transactions, such as dispute resolution, arbitration of international disputes and the framework of the world trade organization. Then it studies a number of specific business transactions that involve both domestic law and international law such as, by way of example, the international sale of goods, incorporating a business in another country, the creation of a joint venture investment in China, technology transfer with companies domiciled in the European union and the distribution contracts between companies based in the

United States and USA. This course will be offered face-to-face, hybrid and online.

### **DERE 7086 Legal Aspects of the European Economic Community**

Three credits. Three hours of lecture per week.

Prerequisites: Law 7027 and 7018.

A study of the institutional and constitutional mechanisms of the European economic community as it approaches the single European market and investigates the future.

### **DERE 7087 Technology Transfer**

Two credits. One hour of lecture and one hour of discussion per week.

Analysis and discussion of the basic concepts of technology and its importance in the legal and corporative world. Contractual relationships in reference to several methods of technology transfer. Evaluation of the several forms and methods of technology transfer. Financial sources for technological innovation. the role of the lawyer in the process of technology transfer, at the national and international levels. The function of government as regulator and as facilitator of technological innovation. Study of the legal framework in reference to technology transfer.

### **DERE 7101 Legal Writing Workshop**

Two credits. One hour of lecture and one hour of discussion per week.

Prerequisite: for program of JD: seminar. Corerequisite: for program of LLM: seminar.

With emphasis on research projects for the final work of the master's degree (LLM) and seminar papers already completed, the workshop aims to guide the student in the preparation of a legal writing of publishable quality. The workshop is designed to use an investigation substantially completed by each student as working basis and will be focused on its development into a more extensive and complete document based on a properly reasoned argument. Particular emphasis will be placed on aspects such as the organization of writings, sketches, drafts and strategies for clear and persuasive writing. This course will be offered under the classroom, face-to-face, hybrid, distance and online modalities.

# DERE 7103 Structures and Processes of Common Law and Interactions with Civil Law.

Credits: 2

Study of the main institutions, structures, and processes of common law interactions with civil law. Discussion of converging tendencies in economic and political interactions.

### **DERE 7106 Copyright Law**

Credits: 3

Prerequisite: DERE 7007 and DERE 7016.

This course will cover the principal features of copyright law and the protection of moral rights in Puerto Rico, as well as some of its theoretical foundations. It examines what is copyrightable subject matter, requirements for copyright protection, ownership and transfer of rights, the scope of protection that copyright law affords to works of authorship, limiting principles, exceptions, and defenses to infringement, standards for judging infringement, and remedies available in copyright lawsuits. Comparative copyright law and international treaties affecting copyright law will also be given some attention.

### **DERE 7108 Introduction to Intellectual Property**

Credits: 3

Prerequisite: DERE 7007

A survey course designed to familiarize the student with the basic concepts and doctrines for protecting intellectual property, including patents, trademark copyright right of publicity, and trade secrets. This course is intended for students who desire general exposure to intellectual property law. The course analyzes the costs related to the protection of intellectual property and how it affects other rights such as free competition and freedom of expression. This course will be offered under the classroom, face-to-face, hybrid, distance and online modalities.

#### **DERE 7109 Patent Law**

Three credits. Three hours of lecture per week.

Prerequisite: DERE 7007

This course is designed for students without experience or previous knowledge of the patent system including those students without a technical background. The course intends to equip students with a basic knowledge of the patent system of the United States. It analyzes the theory and public policy of the patent system as well as the requisites for eligible patentable subject matter, utility, novelty, non-obviousness and the disclosure requirement.

#### **DERE 7115 Public International Law**

Three credits. One hour and a half of lecture and one hour and a half of discussion per week.

Study of the historical evolution, basic concepts, institutions and structures, and principal processes of public international law. Its incorporation into the law of Puerto Rico and the United States. Its effects on legislation and case law of domestic law. This course will be offered face-to-face, hybrid and online. This course will be offered face-to-face, hybrid and online.

#### **DERE 7116 Payment Systems**

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: Obligation and Contracts (DERE 7016).

Study of regulations of payment systems, including negotiable instruments, check cashing, deposits, money transfers, letters of credit, warehouse warrants, bills of lading, and other documents of title, the rights and responsibilities of parties on a promissory note, check, and other negotiable instruments. Examination of regulation relating to the use of credit cards, electronic money transfers, and other payment systems. This course will be offered face-to-face, hybrid and online.

## DERE 7121 Intersection between race, gender and the Law in Puerto Rico

Two credits. One hour of lecture and one hour of discussion per week.

This course will study the intersection between race, gender, and law in Puerto Rico. The experience of black and Afro-descendant women is unique in Puerto Rico due to the construction of racial and gender identities and the prevailing colorism in our society. By looking at these issues from a variety of different angles, focusing our attention on the legal understanding and conscience of black women, the course seeks to promote a deeper understanding of the complex interactions between law, race, and gender to formulate interdisciplinary anti-racist proposals. The course will study laws, jurisprudence, and interdisciplinary readings with narratives and first-person readings of history, anthropology, and cultural criticism. This course will be offered under the in-person, hybrid or online modalities.

## **DERE 7296 Judicial and Administrative Agencies Externship**

Credits: 3

Prerequisites: Approved 22 credits, including DERE 7068.

The judicial and administrative agencies externship course introduces students to law clerk practice and practice in the Court of First Instance, as well as in the Puerto Rico Appeals Court, the Federal District Court for the District of Puerto Rico, and administrative agencies. Students will work with a judge or in a legal division and draft legal memoranda, orders, and judgments. The externship requires a commitment of 120 hours of practice during the semester and participation in five classroom meetings to discuss topics such as effective courtroom lawyering and drafting of judicial opinions.

## **DERE 7297 Advance Judicial and Administrative Agencies internship**

Credits: 3

Prerequisite: 22 credits, including DERE 7068. One of the courses is DERE 7995 or DERE 7296. Students who have taken both are not eligible.

Students with previous externship experience through one of the externship courses offered at the School of Law will be able to engage in a more sophisticated externship experience while developing skills necessary for the practice of law. This subsequent experience will include activities such as judicial clerkships, both federal and local, and internships at administrative agencies.

#### **DERE 7301 Business Law Journal I**

Credit: 1

Prerequisite: 31 approved credits

Training and practice in the drafting and editing of law review notes and law review article subciting.

#### **DERE 7302 Business Law Journal II**

Credit: 1

Prerequisite: 31 approved credits

Training and practice in the drafting and editing of law review notes and law review article subciting.

### **DERE 7209 Immigration Law**

Credits: 2

Study of the law, policies, and procedures related to the immigration processes in the United States, including the exclusion and deportation rules.

### **DERE 7309 Communication Law**

Credits: 3

Study and analysis of mass media law. The principal subjects to be studied include the following: freedom of expression of the press and the limits on government regulation; legal problems arising from communications, particularly defamation and protection of privacy; problems in news gathering, especially reporter's privilege and access to information.

#### **DERE 7488 Law Review Editorial Board**

Credits: 2

Prerequisite: DERE 7588

Training and practice in writing monographic and bibliographic notes. Establishment and implementation of the editorial policy of the University of Puerto Rico School of Law Law Review.

#### **DERE 7505 Legal Medicine**

Credits: 3

Survey of the present state of medical science and the scientific method of medicine. Analysis of trauma, emphasizing its possible legal consequences. Psychiatric and legal considerations. Preparation of the medical aspects of a case, including expert testimony. Government regulation of medicine. Medical aid programs. Malpractice and civil rights problems in this area.

## **DERE 7508 Personal Property Guarantees**

Credits: 3

Prerequisite: Obligation and Contract Law (DERE 7016).

Study of personal property guarantees liens, buying and selling of accounts, financial documents, and consignments. Examination of laws governing the rights, responsibilities, and remedies available to debtors and creditors. Analysis of rules relating to priority conflict problems.

Evaluation of the effectiveness of the rules; prospects for making rules more consistent with other pertinent laws.

### **DERE 7509 Legislation on Restrictive Practices in Competition**

Credits: 3

Federal antitrust laws are studied two-folded: 1) their general structure, content, and general interpretation, as well as their direct application to Puerto Rican trade and trade between the United States and Puerto Rico; 2) their significance as precedents in Puerto Rican legislation which is examined simultaneously by studying the different forbidden practices. Analysis of the problems of unlawful competition from the point of view of private law (used as a basis for studying the unfair competitive methods) and public law (analyzed in light of Federal Trade Commission laws and state legislation).

## **DERE 7516 Insurance Law**

Credits: 3

Prerequisite: Obligation and Contract Law (DERE 7016).

The theory of insurance, with particular emphasis on the problems of Puerto Rico. The Puerto Rican Insurance Law will be studied, as well as Puerto Rican and United States jurisprudence in the field of insurance.

#### **DERE 7517 Trusts**

Credits: 2

Study of Anglo-American trusts and their possibilities in civil law jurisdictions.

#### **DERE 7518 Taxation**

Credits: 4

General principles of taxation. Jurisdiction and limitations under the Federal, state, and insular systems. Substantive and procedural aspects of property, inheritance, and income tax laws, and excises in Puerto Rico.

#### **DERE 7519 Accounting and the Law**

Credits: 2

The course covers the sources, nature, and presentation of financial data, as well as the interpretation and use of accounting forms with special reference to the legal profession. The general principles of accounting are introduced as a general background for the proper interpretation of financial information.

#### **DERE 7520 Corporate and Partnerships Taxation**

Credits: 3

Prerequisite: Constitutional Law (DERE 7018).

Study of the principal aspects of the taxation of corporations and partnerships and their stockholders and partners in Puerto Rico. The various aspects are covered through a casebook, supplemented with the Puerto Rico Internal Revenue Code, judicial decisions, and practical problems.

### **DERE 7526 Legislative Process**

Credits: 3

Comparative study of the United States Congress and the Legislature of the Commonwealth of Puerto Rico as a governmental institution. An exhaustive analysis of the structure, composition, and functions of various divisions of the legislative branch. Modern techniques and methods of legislation. Analysis of the methodology of the drafting of legislative bills with attention to particular issues concerning Puerto Rico.

## **DERE 7527 Social Legislation**

Credits: 3

The study of federal legislation related to wages and hours and its interaction with other employment legislation from Puerto Rico and the United States. Includes an analysis of such topics as illegal dismissal, maternity leave, closing hours, and procedural issues related to the enforcement of social legislation in these areas, among others.

#### **DERE 7530 Bankruptcy**

Credits: 3

Prerequisite: Obligation and Contract Law (DERE 7016).

Study of the basic principles contained in the Federal Bankruptcy Code and its application to businesses and individuals in Puerto Rico. The course examines the jurisdictional aspects, the creditor and debtor rights, the settlement under Chapter 7, and the commercial and individual reorganization under Chapters 11, 12, and 13. Study and analysis of the diverse processes in bankruptcy, including the initiation of voluntary and involuntary cases, automatic suspension of collection efforts, the use and alienation of estate property, the assumption or rejection of contracts, the annulment of estate property transfers, exempt property and other subjects of our community interest.

#### **DERE 7535 Labor Law**

Credits: 4

Study of the historical development of the discipline as a way to understand its present problems. Comparative analysis of the intent of both the National Labor Relations Act and the Labor Relations Act of Puerto Rico. Special attention is given to problems related to collective bargaining, representation, and labor and management activities in labor disputes. Collective bargaining, statutory and contractual conflicts, and the relationship of unions to their members.

## **DERE 7538 Sociology of Law**

Credits: 2

A study of the law as an instrument of social control and as a social product. The legal system is analyzed in order to identify what is distinctively legal and to examine some of the reciprocal interrelationships of law and society. The course includes sociological research on particular sociological problems within the community, aimed at obtainia ng practical and concrete understanding of the impact of the law upon a community and of the effect of social circumstances upon the law.

## **DERE 7539 Natural Resources Legislation**

Credits: 3

A study of problems regarding natural resources, the existing administrative and legal structure in existence for the conservation and use planning of these resources, the adequacy of these mechanisms, and recent legal tendencies in this field.

#### **DERE 7540 International Environmental Law**

Credits: 3

Exploration, from an international perspective, of emerging environmental and natural resources law, such as the application of international and environmental law for the protection of the air and the atmosphere, bio-diversity, territorial and wildlife resources, marine and fresh waters, and the growing human population. Examination of diverse legal doctrines, including interpretation of international treaties and the implementation of recent laws and agreements affecting efforts to manage, preserve, restore, and protect the environment.

### **DERE 7546 Special Contracts**

Credits: 3

Contract typification. Pre-contracts, options and promises. Contracts of sale and barter. Leases and loans. Contracts of mandate and deposit. Aleatory contracts. Conducts over goods as a result of marriage. Arbitration agreements. Debt collection. Unjust enrichment.

#### **DERE 7547 International Private Law**

Credits: 3

Conflict of law. The selection of the law to be applied in cases that involve more than one legal system. Puerto Rican doctrines. Conflicts in jurisdiction, competence, marriage and divorce law, tutorship, property law, estates, contracts, statutes of limitation, enforcing foreign judgments, torts, etc.

#### **DERE 7566 Law and Poverty**

Credits: 3

Analysis of the principal obstacles, the most important problems faced by the disadvantaged population, which have or may have a legal remedy, as a basis for the discussion of the causes that impede the access of this population to legal action those remedies. As consumers, tenants, citizens, and beneficiaries of social and welfare legislation, the poor face problems that have legal solutions but which, at present, are not solved through legal processes. A study will be made of the problems and applicable statutes as well as the system shortcomings to identify more effective solutions.

### **DERE 7570 Therapeutic Jurisprudence**

Credits: 3

Survey of the main tenets of therapeutic jurisprudence. A legal perspective that sees the law norms, legal procedures, and the roles of lawyers and judges as a potential therapeutic agent. Study of the impact of the law on emotional life and on psychological well-being. Law reform measures are discussed, as well as how lawyers, judges, and others may apply existing laws in a more therapeutic manner.

## **DERE 7575/7579 Forensic and Appellate and Practice**

Credits: 2

Preparation and presentation in Mock Court of individually assigned cases.

## **DERE 7578 The History of Puerto Rican Constitutional Law**

Credits: 3

A historical and legal study of the constitutional and political development of Puerto Rico. Constitutional historical development in Spain and Puerto Rico from 1808 to 1818. The US-Puerto Rico relations from 1898 to the decolonization process at the UN and its impact in Puerto Rican constitutional law. Exhaustive study of literature and bibliography.

## **DERE 7585 Legal Ethics and Professional Responsibility**

Credits: 3

Using methods devised from psychology, the course tries to explore the attitudes and problems generated in lawyers brought about by conflicts inherent to the practice of law.

#### **DERE 7588 Law Review I (first semester)**

Credit: 1

Writing and research for the Law Review.

## **DERE 7589 Law Review II (second semester)**

Credit: 1

Writing and research for the Law Review.

**DERE 7590 Seminar: Topics in Corporate Law** 

Credits: 2

Complex topics in corporate law: corporate financing; organization of the corporation; responsibilities of shareholders and directors; mergers, restructurings and dissolutions; comparative corporate law; corporate law in general. The specific topic to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7597 Seminar: Topics in Administrative Law** 

Credits: 2

Study of complex topics in administrative law. The seminar will address the laws and procedures related to certain administrative agencies as well as their exercise of delegated power and judicial review; immigration problems; regulation of institutions; processes or products of the private sector; law, planning and urbanism; comparative administrative law; general problems in administrative law. The specific topic to be studied will be announced in advance. Students will be required to write at least one extensive paper. The seminar may be repeated a maximum of four times as long as a different topic is studied in the seminar.

**DERE 7600 Seminar: Topics in Criminal Law** 

Credits: 2

Complex topics in criminal law: General Theory of Criminal Law: misdemeanors and felonies, penal systems, administration of criminal law, comparative criminal law, and Criminal Law in general. The specific topic to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7630 Seminar: Topics in Commercial Law** 

Credits: 2

Study of complex topics in commercial law: commercial contracts, commercial financing, international business relations, insurance in general, property and contingency insurances, life insurance, negotiable bonds, comparative commercial law, regulation of financial markets, and commercial law in general. The specific theme to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7640 Seminar: Topics in the History of Law** 

Credits: 2

Study of relevant issues in the history of law: Roman-German law, history of constitutional law, history of common law, and general issues in the history of law. The specific theme to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar

may be repeated a maximum of four times with a different topic each time.

**DERE 7667 Seminar: Topics in the Theory of Law** 

Credits: 2

Study of relevant developments in the theory of law; Discussion of philosophical and juridical works; mayor schools of thought or legal currents; the judicial process, law and literature; ethics, morals, and justice in the legal profession; law and social theory; feminism; theory of law in general. The specific issue to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

#### **DERE 7669 Law and Literature**

Three credits. Three hours of lecture per week.

Examines legal concepts or topics related to law, as they appear in important works of literature. Also, it studies the differences between, on the one hand, the lawyer and, on the other hand, the artist in relation to their respective approaches to certain problems and human phenomena. This course will be offered face-to-face, hybrid and online modalities.

**DERE 7676 Seminar: Topics in Environmental Law** 

Credits: 2

Study of relevant issues in environmental law: specialized legislation for environmental protection; economic development and environmental protection; methods, processes, and remedies in the protection of natural resources, ecology, and the environments comparative environmental law; international environmental law; environmental law in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7678 Seminar: Topics in Civil Law** 

Credits: 2

Study of relevant issues in civil law: family and personal law; laws for minors; domestic violence; property law; contracts; successions; torts; private international law; the preliminary title of the civil code; comparative civil law; mortgage law; intellectual property; civil law in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7680 Seminar: Topics in Constitutional Law** 

Credits: 2

Study of issues in constitutional law: the organization of state powers; freedom of expression, religion, press, and other individual liberties; the separation of church and state; comparison and



contrasting of the constitutions of Puerto Rico and the United States; due process of law; First Amendment equal protection under law; constitutional theory; institutions and processes of legislative power; comparative constitutional law; federalism and constitutional structure; selected problems in constitutional law; constitutional law in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

### **DERE 7686 Seminar: Topics in International Law**

Credits: 2

Study of issues in international law: customary law and treaty laws between states; international economic transactions; international protection of human rights; states, and Caribbean nations and peoples; political and economic community; fundamental concepts of international law; international law in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

#### **DERE 7688 Seminar: Topics in Criminal Procedure**

Credits: 2

Study of issues regarding criminal procedure: constitutional protections during the criminal procedure, criminal procedure under Puerto Rican and U.S. rules; observance of sentences and prisoner rights; comparative criminal procedure; criminal procedure in general. The specific issues to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

#### **DERE 7689 Seminar: Topics on Taxation**

Two credits. Two hours of seminar per week.

Study of issues regarding tax law: individual income tax; corporate and shareholder tax; estate and gift tax; fiscal policy, comparative tax law; taxation in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

### **DERE 7690 Seminar: Topics on Advanced Legal Research**

Two credits. Two hours of seminar per week.

Study of issues regarding law: empirical legal research; regulations of professional conduct; comparative legal systems; world legal traditions and legal system; advanced legal research in general. The specific topic to be studied will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

**DERE 7695 Seminar: Topics on Consumer Law** 

Credits: 2

Study of issues in consumer law: procedural and substantive protection of consumer goods and services from private enterprise; price regulation; distribution of resources and availability of credit; specialized consumer protection legislation; consumer laws in general. The specific issues to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

## **DERE 7696 Seminar: Topics on Labor Law**

Two credits. Two hours of seminar per week.

Study of complex topics in labor law: a) the organization of labor unions; b) collective bargaining; c) protection for the non-union laborer; d) unemployment; e) labor legislation and public policy; i) labor law in general, among other topics. The specific subject of the seminar will be announced prior to the semester in which it will be offered. The seminar will require the writing of a long paper. May be taken up to four times (8 credits) when topics vary.

### **DERE 7697 Seminar: Topics in Civil Procedure**

Credits: 2

Study of issues regarding civil procedure: first instance proceedings; appeals; administration of justice; alternative methods of dispute resolution; comparative civil procedure; civil procedure in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time.

### **DERE 7698 Seminar: Topics in Law and Society**

Two credits. Two hours of seminar per week.

Study of issues addressed through the law and society perspectives: The effects of law on poverty, social security programs and the rights of the beneficiaries, housing, health, mental health, social change, the elderly, education, technology, and society in general. The specific issue to be addressed will be announced in advance. Students will be required to write an extensive paper. The seminar may be repeated a maximum of four times with a different topic each time. This course will be offered face-to-face, hybrid and online modalities.

### **DERE 7730 Alternative Dispute Resolution Methods**

Credits: 2

Study of modern tendencies to develop and adopt methods other than the judicial trial for the resolution of disputes. These methods, commonly called ADR (Alternative Dispute Resolution), include arbitration and mediation (in the areas of labor, commerce, international relations and family disputes), negotiation and settlement, and others.

#### **DERE 7741 Conflict Mediation I**

Three credits. Two hours of lecture and one workshop per week.

Prerequisite: DERE 7017

The course develops the skills necessary to conduct effective mediation in multiple settings. It considers and compares diverse methods of dispute resolution mechanisms as well as their history and psychological aspects. It also considers mediation in domestic violence settings and other ethical and professional responsibility concerns. These themes are considered through practical exercises and simulations. Students satisfactorily fulfilling the requirements of conflicts mediation I and II are eligible for certifications by the Supreme Court of Puerto Rico, after complying with additional requirements imposed by the court.

#### **DERE 7742 Conflicts Mediation II**

Three credits. Two hours of lecture and one of workshop per week.

Prerequisite: DERE 7741

The course develops the skills necessary to conduct effective mediation in multiple settings. It considers and compares diverse methods of dispute resolution mechanisms as well as their history and psychosocial aspects. It also considers mediation in domestic violence settings and other ethical and professional responsibility concerns. These themes are considered through practical exercises and simulations. Students satisfactorily fulfilling the requirements of Conflicts Mediation I and II are eligible for certification as mediators by the Supreme Court of Puerto Rico after complying with additional requirements imposed by the court. This course will be offered in in-person, hybrid, and online modalities.

### **DERE 7745 Independent Study**

Credits: 2

Prerequisites: 31 credits approved and a seminar at the School of Law.

Directed legal research course with the purpose of converting a graded paper written for a seminar taken at the School of Law into a longer academic paper of publishable quality (25,000 words or more including footnotes). Before registering this course, the professor and the student must agree in writing the following: the research topic, the bibliography, as well as the research methodology and the type of paper that will result from the research. A copy of the written agreement shall be deposited at the Dean's Office. The agreement shall be executed by the student, the mentor and at least one additional professor who will be a reader of the paper.

### DERE 6116/PLAN 6116 Planning Law

Three credits. Three hours of lecture per week.

The course examines the legal and administrative planning frameworks in Puerto Rico, and principal land-use control and regulation instruments. Some of these include zoning, lotification, flood control, historic sites, community facilities and certifications. This course will be offered in in-person, hybrid and online modalities.

**DERE 7991, 7992, 7993, 7994 Special Topics in Private Law.** 

Credit: 1

Analysis of several aspects of private law of special or current interest.

# **DERE 7995 Legal Practice Workshop.**

Credits: 2-4

Provides students with the practical legal environment to experience the dynamics of the legal profession. During the summer, students are assigned to judges, government agencies, legislative committees, private lawyers, or the Legal Aid Clinic.

# **DERE 7996, 7997, 7998, 7999 Special Topics in Public Law.**

Credit: 1

Analysis of several aspects of private law of special or current interest.

**Graduate School of Business Administration** 

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Email: egae.rp@upr.edu

Website: <a href="https://fae.uprrp.edu/egae/">https://fae.uprrp.edu/egae/</a>

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alex.ruiztorres@upr.edu, ext. 87125, Coordinator iMBA

#### **DEGREE:**

#### **Master of Business Administration (MBA)**

The Master of Business Administration (MBA) Program at the University of Puerto Rico, Río Piedras Campus responds to the need to train entrepreneurial, innovative and ethical leaders who have a systemic, global and sustainable vision of the companies. It prepares students for a career in leadership as they develop the competencies essential for success in today's challenging business environments. It also meets the needs of professionals seeking a dynamic environment to expand their academic horizons. The MBA is one of the few programs of its kind accredited by the Association to Advance Collegiate Schools of Business (AACSB), the main and most prestigious accreditation body for Business Schools worldwide.

#### **FACULTY**:

**Maribel Aponte,** Ph.D., University of Massachusetts, 1990, Professor. International Business and Development in Latin America and the Caribbean; Comparative Business Models; The Bolivarian Alliance for Our America; New Strategic Regionalism; Production and Trade Chains and Networks; Food Sovereignty; Visual Research.

**Jorge Ayala Cruz,** Ph.D., Rensselaer Polytechnic Institute, 1993, Professor. Systems Dynamics; Strategic Operational Management; Supply Chain Management and Logistics; Quantitative Numerical Methods.

**José Caraballo Cueto,** Ph.D., The New School for Social Research, 2013, Associate Professor. X Goals, Economic Development, Human Development, Entrepreneurship.

**Pedro González Cerrud,** Ph.D., Lehigh University, 1992, Professor. Advanced Corporate Finance, Advanced Financial Accounting, Financial Statement Analysis, International Investments, Options, Futures and Other Derivatives, Quantitative Methods in Marketing.

**Justin Paul,** Ph.D., Indian Institute of Technology Bombay, 2003, Professor. International Marketing, Business in Asia and Emerging Markets, Strategic Management, Services Marketing.

**Javier Rodríguez Ramírez,** Ph.D., Houston University, 2003, Professor. Quantitative Methods in Finance; Behavioral Finance; Mutual Funds.

**Alex Ruiz-Torres,** Ph.D., Pennsylvania State University, 1997, Professor. Operations and Supply Chain Management, Reverse Logistics, Production Planning.

María de los M. Santos Corrada, Ph.D., Complutense University of Madrid Marketing, 2002, Assistant Professor. Marketing, Consumer Behavior, Retail Management, Development of New Producers, Sustainable Development.

**Jimmy Torrez,** Ph.D., University of California, 1998, Assistant Professor. Externalities of Free Trade; The Effect of Bureaucracy on Goods and Capital Markets; Market Inefficiencies; International Capital Markets.

### **ADMISSION REQUIREMENTS:**

### **General Requirements of Rio Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific Requirements of the Master's Program**

In addition to the requirements established by the University of Puerto Rico, Río Piedras Campus, every applicant must possess:

- 1. Baccalaureate (or equivalent) from a recognized university.
- 2. Verbal and written proficiency in the Spanish and English languages.
- 3. Capacity for critical analysis.
- 4. Potential to successfully complete the degree program at the graduate level. The following criteria will be taken into consideration:
- 5. General high school academic index of at least 3.00 points on a scale of 4.00.
- 6. At least one course in mathematics equivalent to algebra with a passing grade of at least "B."
- 7. Interview with members of the Admissions Committee, if necessary.

### **Documents Required for the Admission Application**

- 1. Two transcriptions from each institution where you studied.
- 2. Two letters of recommendation from professors with whom you have taken courses.
- 3. Written essay explaining the reasons why the applicant selected this Program.

#### **GRADUATION REQUIREMENTS:**

In addition to the graduation requirements applicable to the graduate programs of the Río Piedras Campus, the student must:

1. Complete all the courses required for the degree with an academic index of no less than 3.00 point on a 4.00 scale.

#### STUDY PROGRAM:

Program Requirements	Credits
CORE COURSES	30
ADMI 6510 Decision Making	3
ADMI 6637 Philosophy of Business	3
ADMI 6531 Fundamental Factors in Managerial Activity I	3
CONT 6501 Accounting for Analysis and Control	3
ECOG 6567 Economics for Managers I	3
FING 6501 Finance for Managers	3
GEOP 6539 Operations Management	3
MECU 6551 Fundamental Aspects of Statistics	3
MERC 6541 Market Management	3
ADMI 6595 Strategic Management	3
Elective or Directed Selection Courses	12
Total credits	42

### **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

### **ADMI 6510 Decision Making**

Three credits. Three hours of lecture per week.

Prerequisite: ECOG 6567

Examination of cognitive, quantitative, and interpersonal skills required for analyzing events and situations, information management, and decision-making processes in organizations, in both individual and group settings. Discussion of systemic thinking and other thought models as essential tools in the analysis and solution of complex business issues from a holistic perspective. The course is offered face-to-face, hybrid and online modalities.

#### **ADMI 6637 Business Ethics**

Three credits. Three hours of lecture per week. Prerequisite: Authorization of the Director.

Integrated study of humanities and behavioral sciences information as apply to economic activity to provide future managers a philosophy perspective. Analysis of the development of a philosophy for free market the image of individuals according to humanistic studies and behavioral sciences. Examination of the equal needs and unequal capacities inherently present in the capitalist-worker conflict as well as an analysis of its dynamics and the schools of thought that attempt to find areas of common ground. Explores the impact of the different ethics' philosophies to produce a society that progessively approaches the equal distribution of economic goods.

The course is offered face-to-face and hybrid modalities.

### **ADMI 6531 Management and Leadership**

Three credits. Three hours of lecture per week. Prerequisite: Authorization from the Director.

Foundations of the managerial process in organizations. Integration of contemporary approaches to the study of organizational behavior, the human aspect in organizations, leadership in administration and corporate management. This course is offered online and onsite interaction.

### **CONT 6501 Accounting for Analysis and Control**

Three credits. Three hours of lecture perweek.

Introduction to concepts, terminologies, processes, problems, and metdologies of managerial and financial accounting (including tax accounting). This course emphasizes the management's needs for information to make sound analysis and select optimal decisions for planning and control of the operations with the ultimate objective of increasing the value of the firm efficiently and effectively, in dynamic business environments. This course could be offered face-to-face, hybrid and online modalities.

### **ECOG 6567 Managerial Economics**

Three credits. Three hours of lecture per week. Prerequisite: Authorization of the Director.

Examination of the basic principles of economics specifically those related to the neoclassic theory of the firm. It covers the integration of fundamental theories of microeconomics with applications in finance and economics, among other topics, with an emphasis on the application of these theories. The managerial decision-making process in a business context. This course allows for online and onsite interaction. This course is offered face-to-face, hybrid and online.

### **FING 6501 Managerial Finance**

Three credits. Three hours of lecture per week.

Introduction to the theory and practice of finance from the perspective of companies operating in competitive markets. Discusses basic analytical processes needed to make financial decisions that create value. Some topics that are examined are capital asset investments, valuation, financing, dividend poli, governance, risk management, international finance, working capital manage, and financial planning. This course is offered in face-to-face, hybrid and online modalities.

## **GEOP 6539 Operations and Supply Chaing Management**

Three credits. Three hours of lecture per week. Prerequisite: MECU 6551 & ADMI 6552

Study of the planning, management and control of the operations and supply chains in the organizations. The course introduces several qualitative and quantitative techniques and methodologies of the discipline. It also explores the tactical and strategic considerations needed to sustain the organization's competitiveness from a systemic perspective. The course discusses contemporary global and technological factors influencing decision-making in operations and supply chain. This course is offered in face-to-face, hybrid and online modalities.

#### MECU 6551 Statistical thinking and data analysis

Three credits. Three hours of lecture per week.

Study of the fundamentals of the descriptive statistic, probability distributions and classical and Bayesian inference. The course introduces using statistical thinking in modeling business problems. The course is offered in face-to-face, hybrid or online modalities.

### **MERC 6541 Marketing Management**

Three credits. Three hours of lecture per week. Prerequisite: ADMI 6531 y MECU 6551

Study of the strategic process used by organizations, both for profit and for non-profit, in their goal of satisfying the needs and desires of their external and internal customers (employees and management). The goal of the marketing

process is to achieve the promises that stimulate the exchanges of the different products, that is, purchases, uses, and payments, between supplies and clients, achieved in a satisfactory way for all the ones involved. This course is offered face-to-face, hybrid and online modalities.

### **ADMI 6595 Strategic Management**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6531, ADMI 6637, CONT 6501, FING 6501 GEOP 6539,

MECU 6552 & MERC 6541.

Study of approaches, practices and trends used in the formulation, execution, evaluation, and control of the actions necessary to develop and sustain the firm's competitive advantage. Emphasis on integrating knowledge from the different functional areas of the firm, interdisciplinary analysis, holistic and systemic reasoning, and teamwork. It will use the knowledge acquired in various courses of the master's program to analyze complex situations. The course is offered in face-to-face, hybrid and online modalities.

#### OTHER COURSE DESCRIPTIONS:

#### ADMINISTRATION

## **ADMI 6631 Human Behavior in Organizations**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6531

This course is fundamental to understanding the context. It is designed organization because of the exchange of individual diversity, culture, values, as well as polices and power structures that impact individual behavior. It is based on the accumulation of transdisciplinary research on behavior. It includes an important cluster of topics: leadership, culture, ethics, sustainability, attitudes, emotions, motivation, group behavior, conflict, organizational change, among others. The course critically examines the assumption that people exhibit rational behavior in all situations. The

learning of organizational behavior occurs from an experiential perspective,

emphasizing active learning with a highly engaged student at the center of learning process.

This course will be offered in face-to-face, hybrid, distance and online modalities.

### **ADMI 6632 Organizational Theory and Change**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6531

Study of the theory and change in business firms from various perspectives. Emphasis on the development of analytical skills to better understand organizational complexity and to produce creative actions leading to change and improvement.

### **ADMI 6633 Personnel and Industrial Relations Management**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6531 - 6532

The problem of human resources in business and society. Personnel administration policy and practices, the nature of industrial relations, the role and processes of collective bargaining; management and labor unions in handling of industrial relations, personnel policy, labor relations and the public interest.

## ADMI 6635 Business, Government, and Society

Three credits. Three hours of lecture per week.

Prerequisite: Admission to Graduate School or Authorization from Professor.

The relationship between the business enterprise, government, and society. The government's role as an essential element in the business environment is examined in areas such as antitrust, minimum wages, taxation, and environmental improvement. Management's public responsibility is analyzed, and attention is given to its participation in legislative, and judicial processes.

### **ADMI 6650 Planning and Organization of New Enterprises**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6532, MECU 6551 & CONT 6501.

This course will explore opportunities for starting up a business and will offer the student a variety of situational problems by means of which the student will be able to develop an understanding of the wide range of opportunities available. It will explore the need to gather data in order to determine the feasibility of taking a perceived opportunity. It will make the student aware of risks and rewards, the difficulties that may be encountered, and the resourcefulness necessary for overcoming them. Specific topics will include ways of developing estimates of market potential; plans for reaching the market; types of production or operating processes and the facilities needed for them; personnel specifications and sources; financial requirements; time schedules and similar considerations involved in determining whether to start a business and if so, how to meet the problems of carrying the business through the early growth into a sound, established position.

# ADMI 6715 Research Methodology for The Management and Administrative Sciences

Three credits. Three hours of discussion per week.

Study of the management and administrative research. Emphasis on the applicability of the research to solve problems and formulate theoretical managerial studies. Discussion of lectures and cases related to the procedures used in the management theory construction by the leaders in the management and administrative sciences. Also, it will discuss how paradigms emerge and how the established paradigms have been transformed. This course is offered face-to-face, hybrid, and online.

### **ADMI 6728 Research Seminar in Organizational Behavior**

Three credits. Three hours of lecture per week. Can be repeated up to a maximum of nine credits. Prerequisite: ADMI 6531

In-depth exploration of important current topics in the behavioral sciences and their implications for today's managers. Areas such as consumer behavior, changing employee behavior, the implementation of MS/OR models, the maps method of organizational design, behavioral implications of accounting, and other current topics are potential material for study and discussion. The particular topics treated will be selected on the basis of students' interests and needs. Both the theoretical underpinnings and the operational, applied aspects of each topic will be discussed.

### **ADMI 6735 Labor Law and Jurisprudence**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6531-6532

Study of federal and state labor legislation, including jurisprudence concerning working hours, wages, strikes, boycotts, pickets, union representation and legality of labor contracts.

### ADMI 6736 Leadership and Interpersonal Relationships in Organizations

Three credits. Three hours of lecture per week.

Study and analysis of leadership with emphasis on interpersonal dynamics and effective leadership. The course highlights the development of interpersonal skills for the exertion of effective influence. It will focus on information-producing interventions that may allow conflict resolution, learning, and commitment.

### **ADMI 6995 Cooperative Education Experience**

Two to four credits. Regular academic semester: Students must work 20-30 hours per week for three credits. 31-40 hours per week for four credits. Summer session: Students must work at least 20 hours per week for two credits and more than a total of 300 hours for three credits. Prerequisites: Completion of one semester of graduate studies and a minimum grade point average of 3.00.

Experience in applying theoretical knowledge of business fields to a full-time paid work situation with academic supervision. Course available face-to-face, hybrid and online modalities.

#### **ADMI 8005 Doctoral Seminar**

Credit. Five three-hour seminar sessions during the semester.

Prerequisite: Be a student from the Doctoral Program.

Discussion of contemporaneous investigative and empirical character topics relevant to business administration. Study of the ethical, environmental and social dilemmas, and implications of management decisions, the entrepreneurship theory and activities, and the educational methodology. Development of skills for electronic information search and preparation of publishable articles. Topics will vary each time the seminar is offered. This course will be repeated at least four times.

#### **ADMI 8105 Doctoral Dissertation**

Four credits. Four hours of doctoral dissertation per week.

Prerequisite: Having passed the comprehensive exam of the specialty.

The doctoral dissertation course is the space created for the student to demonstrate that he/she possesses the capability for the creation and defense of a proposal and conclusion of a doctoral thesis. This process is made with the assistance of the counseling committee which has the main function of helping the student in the development of a product with the highest quality. The student must complete at least twelve credits of doctoral dissertation.

#### INTERNATIONAL TRADE

## **COIN 6700 Management Strategy in A Global Environment**

Three credits. Three hours of lecture per week.

Prerequisite: ADMI 6531

Analysis of practical theories of international managerial systems within the social environment including anthropological and cultural considerations, the environment strengths and weaknesses of available resources, organizational structures, organizations, and values with a global content.

## **COIN 6702 International Business Theory and Research**

Three credits. Three hours of lecture per week.

The introductory course focuses on the environment, opportunities and threats faced by businesses operating in an uncertain and changing environment. The course presents a critical analysis of international business theories, form the ones that explain the development of export/import sole operation of the firm that expands using foreign direct investment strategies. The uniform analysis of this course is the firm.

#### COIN 6703 International Business and Market Research

Three credits. Three hours of lecture per week. Prerequisite: MECU 6552 or its equivalent.

This course explains the international market and business research process from a practical, legal, and ethical stand. The course combines theory and practice with a focus on the problems

international researchers face. The international business research process will cover design, method, instrument development, sampling, data collection, data analysis, and presentation of results.

#### **COIN 6705 International Economics Seminar**

Three credits. Three hours of discussion per week.

Prerequisite: FING 6501 & ECOG 6567.

This course provides the student with the basic reference framework of the effect of the economic environment in international business. It will analyzed and will discuss the international economic environment in which it operates the corporate business.

#### COIN 6706 International Business in Latin America and The Caribbean

Three credits. Three hours of lecture per week.

Prerequisite: COIN 6702 or authorization from the director.

This course explores conceptual approaches to study international business in Latin America and the Caribbean. The thematic content is divided into four components: a typology of international business in the region; international business and regional integration agreements; international companies, natural resources and environmental conflicts; and sustainable investment and trade. This course will be offered in face-to-face, hybrid or online modalities.

## **COIN 6707 Logistics and International Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6539, MERC 6541.

Study of topics related to the use of global operations to improve supply chain performances and global competitiveness. Discussion of topics related to the creation of global operations projects to leverage customer-supplier and subsidiary relations. Analysis on streamlining value chains, improving coordination, and improving distribution channel performance.

#### **COIN 6708 Legal Aspects of Global Business**

Three credits. Three hours of lecture per week.

Study of the major legal aspects in global business operations. Introduction to public international law and those concepts that directly or indirectly have an impact on trade and commercial disputes. Emphasis is given to current issues and controversies occuring in commerce between nations. Some of the topics discussed are nations so' sovereignty, international treaties (e.g., GATT, NAFTA), the united nations and its structure, the European Union, international business dispute resolution mechanisms, intellectual property global issues, and international taxation issues.

# **COIN 8005 International Business Theory I**

Three credits. Three hours of seminar per week.

Prerequisite: managerial micro-economics: theory of values (ecog 6701); managerial macro-economic: theory of income and money (ecog 6703); integrated probabilistic and statistical analysis (mecu 8005).

Discussion of concepts and theories of international business, advantage and disadvantages of the economic and political agreements between countries, and international managerial policy alternatives used by the firm, including those used in Latin America, study of the institutions and processes that affect the international business behavior, the interrelation between national and international firms.

This course will be offered in face-to-face, hybrid and online modalities.

## **COIN 8006 Legal and Regulatory Aspects of International Business**

Three credits. Three hours of lecture per week.

Study and analysis of the current and emergent national laws and regulations for decision-making related to international business and the institutions regulating international transactions. Includes the legal, governmental, and political background and aspects affecting the commercial transaction of the multinational enterprises in Latin America and the Caribbean.

## **COIN 8015 International Organizational Design, Structure and Culture**

Three credits. Three hours of discussion per week.

Prerequisite: COIN 8005

Study of most recent organizational design, structure, and culture theories and their effects on the performance, efficiency, effectiveness, and adaptability of the international enterprise. Emphasis in the study of cultural manifestations in the enterprise performance and ways to manage them.

#### **COIN 8016 Comparative Business Systems**

Three credits. Three hours of discussion per week.

Prerequisite: COIN 8005

Study and analysis of differences in process, structure, and power, among others, within the organization in different countries. The course will provide emphasis on the comparison of the business processes and practices in United States, Europe, Japan, Latin America, and the Caribbean using as reference the emergent literature on organizational culture, organizational sciences, and classic contingency theory. This course will be offered in the following modalities: in-person, hybrid, and online.

#### **COIN 8025 International Finance and Economics**

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6701 or its equivalent, 6703 or its equivalent...

Study of the international monetary system and its role in determining currency exchange rates. The factors that influence international investments, the characteristics of the international financial institutions and its relation to domestic markets will be analyzed.

## **COIN 8026 International Business Strategy**

Three credits. Three hours of discussion per week.

Prerequisite: COIN 8005

Study of different frameworks for evaluating competitive positions in an uncertain environment and descriptive models of the future performance of enterprises that compete in international industries. Comparisons between multidomestic and transnational strategies and global alliances, including Latin American enterprises.

# **COIN 8027 Contemporary Issues in International Business and Trade**

Three credits. Three hours of lecture per week.

Prerequisite: COIN 8005

Study of theories and research methodologies of contemporary topics in the fields of international commerce and business. The course can be repeated up to a maximum of four times, as long as the topic does not repeat itself.

## **COIN 8028 International Marketing Strategies**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Critical analysis and the development of marketing strategies and tactics used by multinational corporations in international markets. This course can be offered in-person, hybrid and online.

#### **ACCOUNTING**

## **CONT 6701 Theory and Problems of Financial Accounting I**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6501

Critical survey of the concepts and standards upon which periodic financial statements are based. Analysis of the problems underlying the classification and quantification of data for the preparation of general corporate reports and special reports used by management in decision-making. Also, to be discussed: review of basic concepts and standards, income determination, determination and allocation of costs, asset valuation, income statements, and price-level changes.

## **CONT 6702 Theory and Problems of Financial Accounting II**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6701

Corporate financial accounting is stressed, although equity in non-corporate institutions is also analyzed. Some subjects reviewed are sources of capital, bonds, profit, pension-fund credit,

convertible bonds and profit equity, cash flow, inter-corporate and other investments, mergers through purchase and fusion, and specific problems of partnerships.

# **CONT 6705 Cost Control and Cost Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6701

Study of the basic methods and procedures used in determining and controlling the cost of materials and labor and in determining and controlling the indirect costs associated with the manufacturing process. The course places particular attention to the usefulness of cost accounting for management decisions and the development of historical statistics and projections for the company; cost control through accountability; standard costs; budgeting analysis of variables; and the effective communication of reasons leading to the success or failure of diverse programs of action.

## **CONT 6707 Puerto Rican Taxes**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6501 or authorization from the instructor.

Discussion of the various tax laws of Puerto Rico and their effect upon the country's fiscal policy and the policies adopted by private concerns. Study of laws related to property, inheritance, and excise taxes, and other revenue sources for the state and municipal governments. Study of relevant aspects of federal and state laws in their relationship to accounting.

# **CONT 6709 Auditing Theory and Philosophy**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6501

Emphasis will be given the social role of the auditor, acquainting the student with the standards, goals, and procedures of auditing. Includes the ethics and legal responsibilities of the auditor, the goals, nature, procedures, and modern techniques of auditing, the management of an audit, and the areas to be included in an audit. The course will include modern auditing techniques such as statistical sampling and the use of electronic systems. The role of the auditor as management consultant on taxes and other business problems is also discussed. Cases and problems will complement readings.

#### **CONT 6719 Accounting Seminar**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6701-6702.

This course will focus on contemporary topics relevant to the field of accounting. Elements will be taught in a theoretical and practical setting.

# **CONT 6725 Budgeting, Planning and Control: Concepts and Practices**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6501

A comprehensive and integrated approach to the topic of budgeting, leading to a thorough understanding of the profit planning and control process including familiarity with all aspects of the goals, technical procedures, and effects of budgeting. Divisional performance measurement and control is also discussed.

#### **CONT 6735 International Accounting**

Three credits. Three hours of lecture per week. Prerequisite: CONT 6701 y CONT 6702.

Study of accounting aspects of operations in multinationals, such as foreign exchange transactions, transfer prices, and international taxes.

#### MANAGERIAL ECONOMICS

## ECOG 6701 Managerial Micro-Economics: Theory of Values

Three credits. Three hours of lecture per week.

In this course we will study pluralist approaches to microeconomics and its components: markets (supply and demand); production theory; markets and costs according to various market structures (perfect competition, monopoly, and imperfect competition). This analysis will integrate a perspective of the history of economic thought and will establish relations with the study of international business and trade. The course will be offered in a research-based learning format. This course will be offered under face-to-face, hybrid and online modalities.

## ECOG 6703 Managerial Macro-Economics: Theory of Income and Money

Three credits. Three hours of lecture per week.

Prerequisites: ECOG 6611

A course in aggregate economic theory. It includes the analysis involved in the determination of national income production, employment, and price levels. It examines the effects of consumption, investment, cash flows, interest rates, monetary policy, fiscal policy, and public debt policy. It also establishes a relationship between theoretical analysis and present economic problems and how these affect the enterprise.

#### **ECOG 6735 Caribbean Economic Development**

Three credits. Three hours of discussion a week.

Prerequisites: ECOG 6567 or authorization from the Director.

Analyzes economic development patterns and characteristics of the greater Caribbean. Discusses the contributions of Caribbean authors to the history of thought of economic development theory. Analyzes industrialization strategies



that have been implemented in the area, as well as alternative development models and industrial policies. Contemporary issues are incorporated into the course each semester. This course will be offered face-to-face, hybrid or online.

## **ECOG 8005 Managerial Macroeconomics**

Three credits. Three hours of lecture per week.

Prerequisites: ECOG 6567 or equivalent to Calculus I.

This doctoral level course involves analysis of national income, employment, and price levels. We analyze monetary and fiscal policy and how these policies affect the three measurements of the aggregate economy. We explore different theories and their predicted relationship of government policy to national welfare.

#### **FINANCE**

## FING 6621 Banking and Financial Institutions

Three credits. Three hours of lecture per week.

Prerequisite: ECOG 6611 or authorization from t he instructor.

Review of banking institutions and non-financial institutions. The problems and principles of monetary units of central banking systems and international finance. Emphasis on the implementation and evaluation of monetary policy.

## FING 6703 Advanced Business Finance

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6501, FING 6501 y MECU 6551.

Theory and practice of corporate finance, asset management, capital budgeting, problems of optimization, and socio-economic aspects of financial management. The use of quantitative tools in the analysis of real cases is stressed.

#### FING 6707 Investments

Three credits. Three hours of lecture per week.

Prerequisite: FING 6501, MECU 6551.

Principles and practice of investments, stressing the analysis of investments, the elements of the process of investing money, and the establishment of criteria in the selection of various investment choices. Simulation and mathematical programming techniques are used.

## FING 6709 Real Estate Financing

Three credits. Three hours of lecture per week.

Prerequisite: FING 6621 & MECU 6551

Analysis of the mortgage market, the development and impact of private and public units engaged



in real estate financing, typical investment and real estate financing problems, the relationship between real estate investment and the capital market, and the role of credit in the real estate market.

# FING 6710 Options, Futures and Other Derivatives.

Three credits. Three hours of discussion per week.

Prerequisite: CONT 6501, FING 6501.

Intensive and extensive discussion of the theory and applications of derivatives and future investment vehicles to the process of portfolio management and corporate financial risk control. Applications in the investment trading fields. Detailed evaluation of the global market for synthetic and derivates products, particularly the role played by European investors. Legal, technological, and accounting issues will be discussed to the extent they affect the activities being carried out in the derivate markets.

## FING 6711 Theory and Structure of Financial Markets

Three credits. Three hours of lecture per week.

Prerequisite: FING 6501

Analysis of the structure of financial markets and the application of current monetary and economic theories to the markets. The role of financial theory and policy; the influence of a structure on the functions of financial markets; interdependence of real and financial variables in economic activity.

## FING 6713 Management of Banks and Other Financial Institutions

Three credits. Three hours of lecture per week.

Prerequisite: FING 6621 or professor's authorization. .

Analysis of the legal and economic principles involved in the determination of a managerial policy for various types of financial institutions. The following topics will be included: handling of assets and capital sources and the uses of funds, financial institutions competition and debts, sources of capital and the uses of funds, competition between financial institutions, and structural problems of industries (including branch stores, chain stores, and consolidations).

## FING 6717 International Commerce and Finance

Three credits. Three hours of lecture per week.

Prerequisite: FING 6621

Analysis of trade theory and policy and the theory of international monetary policy. The following topics will also be discussed: capital flows, balance of payments, monetary market exchange, and adjustments in economic activity within flexible monetary exchange systems.

#### **FING 6719 Public Finance**

Three credits. Three hours of lecture per week.

Prerequisite: FING 6501

The sources and use of government funds. The impact of government expenditures and taxes on the level of national income. The influence of taxes and government spending on local goals.

#### **FING 6721 Research Seminar in Finance**

Three credits. Three hours of lecture per week.

Prerequisite: for students at the graduate level working toward a major in finance.

This course will familiarize the student with the logic and methods of research in the field of corporate finance. Participants will undertake research in microfinance, covering the structure and organization of financial market determination of interest rate and financial asset prices, as well as the internal and external aspects of cash flows, the relation of money and development, public finance, and any other topic concerning aggregate finance usually denoted as money and banking. The faculty in charge will supervise the methodology of the research, providing close assistance and becoming involved with the student's work. Meetings and contents will depend on student interest.

#### **FING 6725 International Investments**

Three credits. Three hours of discussion per week.

Prerequisite: FING 6501, CONT 6501, or BBA with specialization in Finance or

Accounting.

Study of diverse macroeconomic, political, and social aspects that have helped to encourage individual and institutional investors to look at the international capital markets and a viable investment alternative. The mechanism used to minimize the risks caused by the volatility in the exchange rates and the tactical moves used to take advantage of these fluctuations will be examined.

#### FING 8005 Theory of Finance I

Three credits. Three hours of lecture per week.

Prerequisite: ECOG 6701, 6703 and MECU 8005.

Discussion of the most recent research trends in the finance discipline. Emphasis on the impact of the theory on the financial research conceptual frameworks in Latin America and the Caribbean. Critical analysis of recent legal, social, and ethical issues in the financial and economic environment.

#### FING 8006 Theory of Finance II

Three credits. Three hours of lecture per week.

Prerequisite: FING 8005

The application of the financial theory will be discussed in the broader context of the corporation. The corporate sectors of manufacturing and services will be examined. Studies of the revision of the empirical evidence from the perspective of economic positivism. The application of the financial theory in Latin America, the Caribbean and United States will be emphasized.

#### **FING 8017 Quantitative Methods for Finance**

Three credits. Three hours of discussion per week.

Prerequisite: FING 8005

Study of the advanced methodological tools required to do research in finance and investment analysis. The modern portfolio theory will be emphasized. Software programs of optimization and statistical analysis will be used to evaluate and to exam the corporations and the investment markets of Latin America and the Caribbean.

## FING 8019 Independent Studies in Finance

Three Credits. Three hours Independent Studies per week.

Prerequisite: FING 8006

Independent research in a specialized finance topic in an area of interest whose content is partially or not offered in other courses of the doctoral program. It is fulfilled with the help of a professor who is an expert in the topic. This course can be repeated up to two times (6 credits).

#### **FING 8025 Investment Markets**

Three credits. Three hours of discussion per week.

Prerequisite: FING 8005

The most recent research of diverse lines of thoughts on the investment area and the interrelation of those lines with the impact of the investment methods in the domestic, Latin American, and Caribbean financial markets will be analyzed. Also, the theoretical views for analyzing the topic of investment markets under uncertainty within the scope of other disciplines, such as microeconomics, macroeconomics, and accounting, will be discussed.

#### **FING 8027 Corporate Finance**

Three credits. Three hours of lecture per week.

Prerequisite: FING 8005

The research results of the most recent and controversial developments in corporate finance will be studied. The modern corporation's financial problems and possible research solutions to these problems will be discussed. The results of research projects regarding the finance of modern Latin American corporations will be critically analyzed.

## FING 8029 Contemporary Topics in Financial Markets

Three credits. Three hours of discussion per week.

Prerequisite: FING 8005

Integrative study of the structure and dynamics of international financial markets and their linkages to domestic markets. Emphasis on the recent studies on the optimization of international financial assets portfolios.

#### **OPERATIONS MANAGEMENT**

**GEOP 6703 Project and Process Management** 

Three credits. Three hours of lecture per week.

Prerequisite: GEOP 6551

The course considers methods and techniques required to analyze, design, implement and manage processes and projects in organizations. Topics related to process management students include process identification modeling, evaluation, and efficiency improvement of processes in the organization and its components in project management. The course examines the theory and best practices adopted by successful organizations, in particular the methods and techniques related to planning, implementation and monitoring of activities. Students participate in structured workshops to examine processes and projects

## **GEOP 6706 Contemporary Themes in Operations Management**

Three credits. Three hours of lecture per week.

Prerequisite: GEOP 6539, MECU 6551

Study of transcendental and contemporary themes in the management of study of transcendental and contemporary themes in the management of operations. Discussion of studies, technical, methodologies and diverse visions, and its implications in different business sectors. Each time the course is offered, different topics will be covered. The student will be able to register in the course a maximum of three times.

## **GEOP 6707 Advanced Production Management**

Three credits. Three hours of lecture per week.

Prerequisite: GEOP 6639

Readings and cases are surveyed to cover the following areas: effective equipment location, purchasing of a physical facility, equipment selection, physical disposition inside the plan, quality and production standards, material purchasing, supply operations, inventory control, and worker's incentives.

#### **GEOP 6708 Operations Management for Service Business**

Three credits. Three hours of lecture per week.

Prerequisite: GEOP 6639

Discussion of concepts and issues that help understand the aspects in the operations of business that provide services. Study of the latest tendencies and characteristics of various industries of the service sector as well as methodologies designed for improving the productivity of private public service organizations.

#### **GEOP 6723 Statistical Methods for Quality Control**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6551

The use of statistical techniques (control graphs), in the detection of special causes and location of the responsibility for the reduction of the variability of quantity. The statistical techniques for

standardization and specification of performance. Consideration of the costs involved in the control of quality. Design of procedures for the acceptance, rejection, or repairs of lots of units of production and the impact of such decisions on inventory policy. Statistical controls in supervision and their management of a personnel policy application is business. Elementary theory of the reliability of parts and complex equipment. Maintenance and replacement of equipment.

## **GEOP 6726 Quality Management**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: MECU 6551

Study of the managerial activities related to quality assurance in manufacturing and service organizations.

## **GEOP 6735 Supply Chain Management**

Three credits. Three hours of lecture per week.

Prerequisite: GEOP 6639

Study of the management of material flow and information through the different stages of the organization. The activities are more important in a supply chain and the interactions between these are considered to form an efficient organizational collective. This course will provide the student with the knowledge and tools necessary to develop, implement, and maintain strategies for the management of related subjects of the supply chains.

## **QUANTITATIVE METHODS**

#### **MECU 6703 Statistical Inference**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6701 or permission from the director

Estimation theory, tests of hypotheses, confidence intervals, subjective probability, prior and posterior distribution, the Likelihood principles, and the Bayes theorem, as well as Bayesian inference and non-parametric free distribution techniques.

#### **MECU 6709 Decision Theory**

Three credits. Three hours of lecture per week. Prerequisite: MECU 6551 or its equivalent.

Methods of analysis under conditions of uncertainty. Includes the application of subjective probability and the use of utility theory. Comparison of classical and contemporary methods.

#### **MECU 6715 Econometrics I**

Three credits.

Prerequisite: MECU 6551, MECU 6651, ECOG 6567.

Specification, estimation, and testing of economic models of demand and production. Emphasis is given to the application of statistical methods in economics and business problems.

#### **MECU 6717 Econometrics II**

Three credits.

Prerequisite: MECU 6715

Autoregressive and distributed lag models. Consideration of techniques of long and short run forecasts of business activity both for the economy and for firms and industries.

## **MECU 6725 Quantitative Methods for Management Decisions**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6551

This course introduces the use of quantitative models in the decision-making process in managerial and administrative science. Models of deterministic and stochastic nature, such as descriptive and normative models, are discussed. The main center of this course is the formulation and use of mathematical models and software and the analysis and interpretation of the results. The course provides a comprehensive foundation in analytical tools for other courses.

## **MECU 6739 Multivariate Analysis**

Three credits. Three hours of discussion per week.

Prerequisite: MECU 6551

This course introduces the most utilized techniques in the multivariate analysis. The course will discuss the theory of each technique, the most common problems in its application, and the correct way to interpret and to present results. The course will be complemented with the use of statistic software. The course will discuss examples of the different specializations of the administrative and managerial sciences.

## **MECU 8005 Integrated Probabilistic and Statistical Analysis**

Three credits. Three hours of discussion per week.

Prerequisites:

- 1. At least one statistics course of master's degree level.
- 2. Mathematic courses that include differential and integral calculus.
- 3. Course of matrix algebra or its equivalent.
- 4. Knowledge of a statistics program (for example, sas, spss, ncss or minitab).

Comprehensive study of the principles of probabilistic and statistical analysis. Includes the fundamentals of stochastic and deterministic models necessary to understand the modeling used in the field of business.

#### MARKETING

#### **MERC 6701 Advanced Market Management**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541

A continuation of the basic course in marketing. Topics covered include product planning and development, price determination, advertising and selling, distribution policies, the logistics of physical supply, and international marketing. Attention will be given to the development of a research project, and cases and problems.

## **MERC 6705 Marketing Research**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541, MECU 6551.

Market research methods as critical tools for problem solving and for maximizing marketing efficiency. All modern techniques, including the most recent developments in the field, are discussed. Cases and group projects are employed.

#### **MERC 6708 Consumer Motivation and Behavior**

Three credits.

Designed for second-year students specializing in marketing. The economics and psychology of consumer behavior and applications.

## **MERC 6714 Product Strategy and Management**

Three credits. Eight hours of lecture per week.

Prerequisite: MERC 6541

Emphasis on the process of new product development, the development and management of the product mix in the multi-product firm. Topics include identification and screening of new product opportunities, evaluation of product performance, segmenting the products market, development of a multi-product information system, diversification and simplification of the product line, management of innovation, and role of the brand manager. Aids to decision-making such as Bayesian analysis, product concepts and use tests, product screening methods, financial analysis, and quantitative applications are considered from the standpoint of the manager. Selected cases and projects will be discussed.

#### **MERC 6715 International Marketing**

Prerequisite: MERC 6541

Three credits. Three hours of lecture per week.

The theory and practice of international and interregional marketing are discussed. The world environments, comparative marketing, and multinational market groups are also addressed. International business is integrated with trade theory, and special attention is given to Latin American problems.

# **MERC 6717 Services Marketing**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541

Competitive challenges occur within the service sector of the economy because of the decline in

government regulation, technological innovations, changes in professional association standards, and the alteration of the ways services are marketed.

# **MERC 6719 Graduate Seminar in Marketing**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541, 6701. Could be repeat up to nine credits.

Discussion of strategic issues that affect the management of the marketing process both in terms of efficiency and effectiveness. The expected result of such discussions is the development of a new paradigm. The content related to the subject matter at the time of offering the seminar is variable. The student could repeat the course if the topics presented are different.

#### **HUMAN RESOURCES**

## **REHU 6705 Human Resources Management**

Three credits. Three hours of lecture per week.

A comprehensive introduction to core issues in the management of human resources in various types of organizations. The course will examine important elements of the discipline, enabling the student to recognize critical issues, understand the relationship of the function to the success of the organization, and address the various issues involved. Special emphasis is given to human resources planning, job analysis, job design, recruitment and selection, performance and career management, training and development, compensation and benefits, and employee relations to the job.

## REHU 6706 Administration of Compensation and Rewards Systems.

Three credits.

Prerequisite: REHU 6705

Discussion of compensation and rewards theories in the organizations. Emphasizes the process of design and the implementation of the compensation systems. Also, different topics, such as the evaluation for the appointment, the design of wage polls and wage structures, the programs of wage increments, benefit programs, the compensation to the managerial group, payment for workmanship, and the laws that affect the system of compensation, will be studied, among others.

## **REHU 6715 Contemporary Topics Seminars in Human Resources Management.**

Three credits. Three hours of lecture per week.

Study of contemporary themes of greater significance in human resources management. Discussion of themes such as the force of multicultural work, compensation by dexterities, corporate politics on the use of controlled substances in the work, and the design of the work in new organizations as virtual organizations.

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Jorge Ayala, jorge.ayalacruz@upr.edu ext. 87149, Coordinator iMBA

Víctor Quiñones, victor.quinones1@upr.edu, ext. 87101, Coordinator MBA

#### **DEGREE:**

## Master of Business Administration (iMBA) Online – Accelerated program

The program is designed to be offered online and in twelve-week (trimester) periods. The graduate student will possess knowledge, attitudes and skills that will allow them to contribute to the search for alternatives and possible solutions that make business and organizational development viable in their environment.

**ACCREDITATIONS:** Advance Collegiate Schools of Business International (AACSB)

#### **FACULTY:**

**Maribel Aponte,** Ph.D., University of Massachusetts, 1990, Professor. International Business and Development in Latin America and the Caribbean; Comparative Business Models; The Bolivarian Alliance for Our America; New Strategic Regionalism; Production and Trade Chains and Networks; Food Sovereignty; Visual Research.

**Jorge Ayala Cruz,** Ph.D., Rensselaer Polytechnic Institute, 1993, Professor. Systems Dynamics; Strategic Operational Management; Supply Chain Management and Logistics; Quantitative Numerical Methods.

**José Caraballo Cueto,** Ph.D., The New School for Social Research, 2013, Associate Professor. X Goals, Economic Development, Human Development, Entrepreneurship.

**Pedro González Cerrud,** Ph.D., Lehigh University, 1992, Professor. Advanced Corporate Finance, Advanced Financial Accounting, Financial Statement Analysis, International Investments, Options, Futures and Other Derivatives, Quantitative Methods in Marketing.

**Justin Paul,** Ph.D., Indian Institute of Technology Bombay, 2003, Professor. International Marketing, Business in Asia and Emerging Markets, Strategic Management, Services Marketing.

**Javier Rodríguez Ramírez,** Ph.D., Houston University, 2003, Professor. Quantitative Methods in Finance; Behavioral Finance; Mutual Funds.



**Alex Ruiz-Torres,** Ph.D., Pennsylvania State University, 1997, Professor. Operations and Supply Chain Management, Reverse Logistics, Production Planning.

María de los M. Santos Corrada, Ph.D., Complutense University of Madrid Marketing, 2002, Assistant Professor. Marketing, Consumer Behavior, Retail Management, Development of New Producers, Sustainable Development.

**Jimmy Torrez,** Ph.D., University of California, 1998, Assistant Professor. Externalities of Free Trade; The Effect of Bureaucracy on Goods and Capital Markets; Market Inefficiencies; International Capital Markets.

## **ADMISSION REQUIREMENTS:**

## **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Admission Requirements**

In addition to the requirements established by the Río Piedras Campus, every applicant must possess:

- 1. Baccalaureate or its equivalent from a recognized university.
- 2. General academic index of 3.00 points on a scale of 4.00.
- 3. Capacity for critical analysis.
- 4. Verbal and written proficiency in Spanish and English languages.
- 5. At least one mathematics course equivalent to algebra passed with a B or higher.
- 6. Ability to develop and understand quantitative and conceptual models.
- 7. Two years of professional experience

## **Documents Required for the Admission Application**

- 1. Application for Admission to Graduate Studies through the "Next" platform.
- 2. Transcript of credits (official-not the student's copy) with the degree conferred.
- 3. Two letters of recommendation for graduate studies in electronic format.
- 4. Essay (500-900 words) with the statement of intent to pursue graduate studies in electronic format.
- 5. If necessary, interview with the admissions committee.

#### **GRADUATION REQUIREMENTS:**

In addition to the graduation requirements applicable to the graduate programs of the Río Piedras

## Campus, the student must:

1. Complete all required courses (33 credits) for the degree with an academic index of at least 3.00 points on a 4.00 scale.

#### STUDY PROGRAM:

Program Requirements	Credits
Core courses	27
ADMI 6540 Leadership and Business Ethics	3
ADMI 6590 Entrepreneurship Fundamentals	3
ADMI 6595 Strategic Management	3
CONT 6501 Accounting for Analysis and Control	3
FING 6501 Finance for Managers	3
GEOP 6539 Operations Management	3
MECU 6551 Fundamental Aspects of Statistics	3
MECU 6552 Analytics for Decision Making	3
MERC 6541 Market Management	3
Electives/Contemporary Topics	6
Total credits	33

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **ADMI 6540 Leadership and Business Ethics**

Three credits. Three hours of conference per week.

Integrated study of a leader's nature and responsibilities, as applied to management. The course examines the fundamental factors of effective leadership in organizations and their ethical integration into the management process through four basic themes: human conduct in the organization, leadership, the social environment of the company, and the relationship of company management. It examines concepts and theories key to human resources management and diversity management in organizations. This course could be offered in-person, hybrid and online.

#### **ADMI 6590 Entrepreneurship Fundamentals**

Three credits. Three hours of conference per week.

Prerequisite: ADMI 6531, FING 6501, GEOP 6539 and MERC 6541.

Integrated study of a leader's nature and responsibilities, as applied to management. The course examines the fundamental factors of effective leadership in organizations and their ethical integration into the management process through four basic themes: human conduct in the organization, leadership, the social environment of the company, and the relationship of company management. It examines concepts and theories key to human resources management and diversity management in organizations. This course can be offered in-person, hybrid, and online modalities.

#### **ADMI 6595 Strategic Management**

Three credits.

Prerequisite: ADMI 6541, ADMI 6590, MECU 6551, FING 6501, GEOP 6539, MERC 6541, CONT 6501, MECU 6552.

Analysis of the decision-making techniques through evaluating the managerial responsibility assumed by the administrative hierarchy. Provides insight into problems, objectives, and managerial and administrative strategies.

## **CONT 6501 Accounting for Analysis and Control**

Three credits. Three hours of conference a week.

Critical study of the concepts, methods, and types of information management useful to investors, financial analysts, business managers, and others engaged in financial accounting, cost analysis, and control. Budget preparation and implementation. Emphasis on the use of computers for handling mass data.

#### **FING 6501 Finance for Managers**

Three credits. Three hours of conference a week.

Analysis of the firm's short- and long-term sources and uses of funds; liquidity, cost, and financial goals; modern analytical tools, financial models, decision programs, linear programming, funds; liquidity, cost, and financial goals; modern analytical tools, financial models, decision programs, linear programming, and business games. Principles and techniques through problems and short cases.

#### **GEOP 6539 Operations Management**

Three credits. Three hours of conference a week.

Prerequisite: MECU 6551 y ADMI 6552.

Comprehensive introduction to the concepts, paradigms, and techniques of operations management necessary to understand, diagnose, and manage the operational activities in service, governmental, and manufacturing organizations. It discusses the operational concepts that affect the productivity, effectiveness, and efficiency of the organization's resources, as well as the relation of the discipline with others of the managerial and administrative sciences. (c)

## **MECU 6551 Fundamental Aspects of Statistics**

Three credits. Three hours of conference a week.

Descriptive statistics, probability and probability distributions, principles of classic and Bayesian inference; emphasis on interpretation and statistics; learning computer language.

# **MECU 6552 Analytics for Decision-Making**

Three credits.

Prerequisite: MECU 6551

Study of the use of business analytics in formulating, analyzing, and solving quantitative models to solve business problems that support the management decision-management decision-making process. Through the application of various tools, students will examine data, develop models, recommend actions, and evaluate the impact of each action on specific objectives. It provides practical experience working with various quantitative models, emphasizing applications in various companies' functions and contexts. This course can be offered face-to-face, hybrid or online modalities.

## **MERC 6541 Marketing Management**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531 and MECU 6551.

Analysis of the distributive process and its relationship to the marketing process; available channels and means of distribution, and pertinent legislation. Integration of qualitative factors with auxiliary quantitative methods.

#### OTHER COURSE DESCRIPTIONS:

#### **ADMINISTRATION**

#### ADMI 6531 Fundamental Factors in Managerial Activity I

Three credits. Three hours of conference a week.

Prerequisite: Authorization from the director.

Survey of the basic elements of administrative activity and their integration into the managerial process, human behavior in an organization, the social environment within the organization, and the relationship between the company and the government.

#### **ADMI 6595 Strategic Management**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531, ADMI 6637, CONT 6501, FING 6501 GEOP 6539, MECU 6552 and MERC 6541.

Analysis of the decision-making techniques through evaluating the managerial responsibility

assumed by the administrative hierarchy. Provides insight into problems, objectives, and managerial and administrative strategies.

# **ADMI 6631 Human Behavior in Organizations**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531-

Discussion of the systematic analysis of problems and situations involving the human element in business. The consistency and inconsistency of outside pressures upon the business organization and their effect on the feelings and behavior of the organization's members. A comparison is made between the authoritarian management style versus a participatory style of leadership, the emotional problems involved in dynamic vs. static environments, and optimum ways of motivation for productivity.

# **ADMI 6632 Organizational Theory and Change**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531

Study of the theory and change in business firms from various perspectives. The course emphasizes on the development of analytical skills for a better understanding of organizational complexity and to produce creative actions leading to change and improvement.

## **ADMI 6633 Personnel and Industrial Relations Management**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531 - 6532

Studies issues related to human resources in business and society, personnel administration policy and practices, the nature of industrial relations, the role and processes of collective bargaining, and the role of management and labor unions in handling industrial relations, personnel policy, labor relations, and the public interest.

## ADMI 6635 Business, Government, and Society

Three credits. Three hours of conference a week.

Prerequisite: Admission to Graduate School or Professor's authorization.

The relationship between the business enterprise, government, and society. The government's role as an essential element in the business environment is examined in areas such as antitrust, minimum wages, taxation, and environmental improvement. Management's public responsibility is analyzed, and attention is given to its participation in legislative and judicial processes.

#### **ADMI 6637 Philosophy of Business**

Three credits. Three hours of conference a week. Prerequisites: Admission to graduate program.

The course focuses on the relationship of business to other fields of knowledge. The humanities and behavioral sciences as they influence economic activity and decision-making and give managers the necessary philosophical perspective analysis of the development of the philosophy underlying free enterprise through a study of man as seen from current humanistic and behavioral science perspectives; equal needs and unequal capabilities as dramatized by the labor conflicts of capitalism; the dynamics of this conflict and the schools of thought which seek grounds for reconciliation; political and economic formulas for a solution to the problem of equal needs versus unequal capabilities; the impact of social and moral engineers in the attempt to move society toward a more just and equitable distribution of wealth; and the alternative forms that may be taken by current systems of production and distribution in an effort to reconcile the goals of political freedom and economic justice.

# **ADMI 6650 Planning and Organization of New Enterprises**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6532, MECU 6551 and CONT 6501.

This course will explore opportunities for starting up a business and will offer the student a variety of situational problems by means of which the student will be able to develop an understanding of the wide range of opportunities available. It will explore the need to gather data to determine the feasibility of opportunities. It will make the student aware of risks and rewards, difficulties that may be encountered, and the resourcefulness necessary for overcoming them. Specific topics will include forms of developing estimates of market potential; plans for reaching the market; types of production or operating processes and the facilities needed for them; personnel specifications and sources; financial requirements; time schedules and similar considerations involved in determining whether to start a business and if so, how to meet the problems of carrying the business through the early growth into a sound, established position.

# ADMI 6715 Research Methodology for the Management and Administrative Sciences Three credits. Three hours of conference a week.

Study of management and administrative research. Emphasis on the applicability of research to solve problems and formulate theoretical managerial studies. Discussion of lectures and cases related to the procedures used in the management theory construction by the leaders in the management and administrative sciences. Also, it will discuss how paradigms emerge and how the established paradigms have been transformed. This course is offered in-person, hybrid, and online.

## **ADMI 6728 Research Seminar in Organizational Behavior**

Three credits. Three hours of conference a week.

This course can be repeated up to a maximum of three times (nine credits).

Prerequisite: ADMI 6531

In-depth exploration of important current topics in the behavioral sciences and their implications for today's managers. Areas such as consumer behavior, changing employee behavior, the implementation of MS/OR models, the maps method of organizational design, behavioral implications of accounting, and other current topics are potential material for study and discussion. The topics covered will be chosen based on students' interests and needs. Both the theoretical

underpinnings and the operational, applied aspects of each topic will be discussed.

## **ADMI 6735 Labor Law and Jurisprudence**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531-6532

Study of federal and state labor legislation, including jurisprudence concerning working hours, wages, strikes, boycotts, pickets, union representation, and legality of labor contracts.

## ADMI 6736 Leadership and Interpersonal Relationships in Organizations

Three credits. Three hours of conference a week.

Study and analysis of leadership with emphasis on interpersonal dynamics and effective leadership. The course highlights the development of interpersonal skills for the exertion of effective influence. It will focus on information-producing interventions that may allow conflict resolution, learning, and commitment.

# **ADMI 6995 Cooperative Education Experience**

Two to four credits.

Regular academic semester: Students must work 20-30 hours per week for three credits. 31-40 hours per week for four credits.

Summer session: Students must work at least 20 hours per week for two credits and more than 300 hours for three credits.

Prerequisites: The students must have completed one semester in graduate studies and obtain a minimum grade point average of 3.0 a scale of 4.00.

Experience in applying theoretical knowledge of business fields to a full-time paid work situation with academic supervision. Course in-person, hybrid, and online modalities.

## **ADMI 8005 Doctoral Seminar**

Credit. Five three-hour seminar sessions during the semester.

Prerequisite: Be a student of the Doctoral Program.

Discussion of contemporaneous topics of investigative and empirical character relevant to the business administration field. Study of the ethical, environmental, and social dilemmas and implications of management decisions, the entrepreneurship theory and activities, and the educational methodology. Development of skills for electronic information search and preparation of publishable articles. Topics will vary each time the seminar is offered. This course will be repeated at least four times.

#### **ADMI 8105 Doctoral Dissertation**

Four credits. Four hours of doctoral dissertation per week.

Prerequisite: The students must have passed the comprehensive specialty exam.

The doctoral dissertation course is the space created for the student to demonstrate that he/she possesses the capability for the creation and defense of a proposal and conclusion of a doctoral

thesis. This process is done with the assistance of a counseling committee which has the main function of helping the student in the development of a product of the highest quality. The student must complete at least twelve doctoral dissertation credits.

#### INTERNATIONAL TRADE

## **COIN 6700 Management Strategy in A Global Environment**

Three credits. Three hours of discussion a week.

Prerequisite: ADMI 6531

Analysis of theories and practices of international managerial systems within the social environment, including anthropological and cultural considerations, the environment strengths and weaknesses of available resources, organizational structures, organizations, and values with global content.

## **COIN 6702 International Business Theory and Research**

Three credits. Three hours of discussion a week.

Critical assessment of international business theory, research, and development. Analysis of classical theories of international production, the neoclassical conceptualization of foreign investment, strategic approaches to international business, the tendencies and effects of international production, and the socio-economic considerations concerning international business. The course discusses ethic-ethnic dilemmas. Analysis of topics related to research methodologies such as research designs, development of research instruments, sampling, and data collection problems.

#### **COIN 6703 International Business and Market Research**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6552 or its equivalent.

This course explains the international market and business research process from a practical, legal, and ethical standpoint. The course combines theory and practice with a focus on the problems international researchers face. International business research process will cover design, method, instrument development, sampling, data collection, data analysis and presentation of results.

#### **COIN 6705 International Finance and Economics**

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501, ECOG 6567.

Analysis and discussion of the international economic environment in which the corporate enterprise operates. The global financial environment is analyzed.

#### COIN 6706 International Business in Latin America and The Caribbean

Three credits. Three hours of discussion a week.

Prerequisite: COIN 6702 or the director's authorization.

Analysis of international business system and the process of internationalization of production, environmental and managerial factors of conducting business in Latin America and the Caribbean, the historical development and contemporary condition's structure and policies of those economies. Technology transfer and managerial know-how socioeconomic and cultural factors affecting business strategies in Latin America and the Caribbean. Examines the implications for business of regional trade agreements - NAFTA, Mercosur, the group of three, among others.

# **COIN 6707 Logistics and International Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6539, MERC 6541.

Study of topics related to the use of global operations to improve supply chain performances and global competitiveness. Discussion of topics related to the creation of global operations projects to leverage customer-supplier and subsidiary relations. Analysis on streamlining value chains, improving coordination, and improving distribution channel performance.

## **COIN 6708 Legal Aspects of Global Business**

Three credits. Three hours of discussion a week.

Study of the major legal aspects in global business operations. Introduction to public international law and those concepts that directly or indirectly impact trade and commercial disputes. Emphasis is given to current issues and controversies occurring in commerce between nations. Some of the topics discussed are national sovereignty, international treaties (e.g., Gatt, NAFTA), United Nations and its structure, European Union, international business dispute resolutions mechanisms, intellectual property global issues, and international taxation issues.

#### **COIN 8005 International Business Seminar**

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6701, ECOG 6703, MECU 8005.

Discussion of concepts and theories of international business, advantages, and disadvantages of the economic and political agreements between countries, and international managerial policy alternatives used by the firm, including those used in Latin America. Study of the institutions and processes affecting international business behavior, the interrelation between nations, and international firms.

# **COIN 8006 Legal and Regulatory Aspects of International Business**

Three credits. Three hours of discussion a week.

Study and analysis of the current and emergent national laws and regulations for decision-making processes related to international business and the institutions that regulate international transactions. Includes the legal, governmental, and political background and aspects affecting the commercial transaction of the multinational enterprises in Latin America and the Caribbean.

#### COIN 8015 International Organizational Design, Structure and Culture

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study of most recent organizational design, structure, and culture theories and their effects on the performance, efficiency, effectiveness, and adaptability of the international enterprise. Emphasis on the study of cultural manifestations in enterprise performance and ways to manage them.

## **COIN 8016 Comparative Business Systems**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study and analysis of differences in process, structure, and power, among others, within the organization in different countries. With emphasis on the comparison of the business processes and practices in the United States, Europe, Japan, Latin America, and the Caribbean using as reference the emergent literature on organizational culture, organizational sciences, and classic contingency theory. This course will be offered in the following modalities: in-person, hybrid, and online.

## **COIN 8025 International Finance and Economics**

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6701 or its equivalent, 6703 or its equivalent.

Study of the international monetary system and its role in determining currency exchange rates. The factors influencing international investments, the characteristics of the international financial institutions, and their relation to domestic markets will be analyzed.

#### **COIN 8026 International Business Strategy**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study of different frameworks for evaluating competitive positions in an uncertain environment and descriptive models of the future performance of enterprises competing in international industries. Comparisons between multi-domestic and transnational strategies and global alliances, including Latin American enterprises.

#### COIN 8027 Contemporary Issues in International Business and Trade.

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study of theories and research methodologies of contemporary topics in international commerce and business. The course can be repeated up to a maximum of four times, whenever the topic does not repeat itself.

## **COIN 8028 International Marketing Strategies**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Critical analysis and the development of marketing strategies and tactics used by multinational corporations in international markets. This course can be offered in-person, hybrid and online.

#### ACCOUNTING

## **CONT 6501 Accounting for Analysis and Control**

Three credits. Three hours of discussion a week.

Critical study of the concepts, methods, and types of information management useful to investors, financial analysts, business managers, and others engaged in financial accounting, cost analysis, and control. Budget preparation and implementation. Emphasis on the use of computers for handling mass data.

## **CONT 6701 Theory and Problems of Financial Accounting I**

Three credits. Three hours of lecture per week.

Prerequisite: CONT 6501

Critical survey of the concepts and standards upon which periodic financial statements are based. Analysis of the problems underlying the classification and quantification of data for the preparation of general corporate reports and special reports used by management in decision-making processes. Review of basic concepts and standards, income determination, determination and allocation of costs, asset valuation, income statements, and price-level changes.

# **CONT 6702 Theory and Problems of Financial Accounting II**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6701

Corporate financial accounting is stressed although equity in non-corporate institutions is also analyzed. Some subjects reviewed are sources of capital, bonds, profit, pension-fund credit, convertible bonds and profit equity, cash flow, inter-corporate and other investments, mergers through purchase and fusion, and partnerships specific problems.

#### **CONT 6705 Cost Control and Cost Analysis**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6701

Study of the basic methods and procedures used in determining and controlling the cost of materials and labor and in determining and controlling the indirect costs associated with the manufacturing process. Aspects stressed are the usefulness of cost accounting for management decisions and the development of historical statistics and projections for the company; cost control through accountability; standard costs; budgeting analysis of variables and the effective communication of reasons leading to the success or failure of diverse programs of action.

#### **CONT 6707 Contribution for Managers (Tax Laws in Puerto Rico)**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501 or professor's authorization.

Discussion of Puerto Rico's various tax laws and their effect upon the country's fiscal policy and the policies adopted by private concerns. Study of laws related to property, inheritance, and excise taxes, and other sources of revenue for the state and municipal governments. Study of relevant aspects of federal and state laws in their relationship to accounting.

## **CONT 6709 Auditing Theory and Philosophy**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501

Emphasis will be given to the social role of the auditor, acquainting the student with the standards, goals, and procedures of auditing. Includes the ethics and legal responsibilities of the auditor, the goals, nature, procedures, and modern techniques of auditing, the management of an audit, and the areas to be included in an audit. Included among the modern auditing techniques are statistical sampling and the use of electronic systems. The role of the auditor as a management consultant on taxes and other business problems is also discussed. Cases and problems complement readings.

## **CONT 6719 Accounting Seminar**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6701-6702.

This course will focus on contemporary topics relevant to the field of accounting. Elements will be taught in a theoretical and practical setting.

## **CONT 6725 Budgeting, Planning and Control: Concepts and Practices**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501

A comprehensive and integrated approach to the topic of budgeting, leading to a thorough understanding of the profit planning and control process, including familiarity with all aspects of the goals, technical procedures, and effects of budgeting. Divisional performance measurement and control are also discussed.

#### **CONT 6735 International Accounting**

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6701 y CONT 6702.

Study of accounting aspects of operations in multinationals, such as foreign exchange transactions, transfer prices, and international taxes.

#### MANAGERIAL ECONOMICS

## ECOG 6567 Economics for Managers I

Three credits. Three hours of discussion a week.

Prerequisites: Authorization from the director

Basic principles of economics are formulated by the neoclassical theory of the firm, the theory of supply and demand in perfect and imperfect markets, and equilibrium analysis and its relevance. Notions of satisfactory profits, standard mark-up pricing, monopoly, and other closely related aspects of the measurement and determination of national income.

## **ECOG 6701 Managerial Micro-Economics: Theory of Values**

Three credits. Three hours of discussion a week.

The logic of micro-economic analysis. A detailed analysis of the mathematical relationship of supply and demand in a theoretical purely competitive market, an imperfect competition market and a monopoly condition. This course's purpose is to train the manager in the strict application of the tools and techniques of economic analysis.

## ECOG 6703 Managerial Macro-Economics: Theory of Income and Money

Three credits. Three hours of discussion a week.

Prerequisites: ECOG 6611

A course in aggregate economic theory. It includes the analysis involved in the determination of national income production, employment, and price levels. It examines the effects of consumption, investment, cash flows, interest rates, monetary policy, fiscal policy, and public debt policy. It also establishes a relationship between theoretical analysis and present economic problems and how these affect the enterprise.

#### **ECOG 6735 Caribbean Economic Development**

Three credits. Three hours of discussion a week.

Prerequisites: ECOG 6567 or Director's authorization.

An analysis of Caribbean economic development patterns and characteristics. The course will integrate the history of thought in economic development theory with an analysis of the industrialization strategies implemented in the area. Alternative development models and industrial policies.

#### **ECOG 8005 Managerial Macroeconomics**

Three credits. Three hours of discussion a week.

Prerequisites: ECOG 6567 or equivalent to Calculus I.

This doctoral level course involves analysis of national income, employment, and price levels. We analyze monetary and fiscal policy and how these policies affect the three measurements of the aggregate economy where we explore different theories and their predicted relationship of government policy to national welfare.

#### **FINANCE**

## FING 6621 Banking and Financial Institutions

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6611 or authorization from the instructor.

Review of banking institutions and non-financial institutions. The problems and principles of monetary units of central banking systems and international finance. Emphasis on the implementation and evaluation of monetary policy.

#### FING 6703 Advanced Business Finance

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501, FING 6501 y MECU 6551.

Theory and practice of corporate finance, asset management, capital budgeting, problems of optimization, and socio-economic aspects of financial management. The use of quantitative tools in the analysis of real cases is stressed.

#### **FING 6707 Investments**

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501, MECU 6551.

Principles and practice of investments, stressing the analysis of investments, the elements of the process of investing money, and the establishment of criteria in the selection of various investment choices. Simulation and mathematical programming techniques are used.

#### FING 6709 Real Estate Financing

Three credits. Three hours of discussion a week.

Prerequisite: FING 6621 & MECU 6551.

Analysis of the mortgage market, the development and impact of private and public units engaged in real estate financing, typical investment and real estate financing problems, the relationship between real estate investment and the capital market, and the role of credit in the real estate market.

#### FING 6710 Options, Futures and Other Derivatives.

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501, FING 6501.

Intensive and extensive discussion of the theory and applications of derivatives and future investment vehicles to the process of portfolio management and corporate financial risk control. Applications in the investment trading fields. Detailed evaluation of the global market for synthetic and derivates products, particularly the role played by European investors. Legal, technological, and accounting issues will be discussed to the extent they affect the activities being carried out in the derivate markets.

## FING 6711 Theory and Structure of Financial Markets

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501

Analysis of the structure of financial markets and the application of current monetary and economic theories to the markets. The role of financial theory and policy; the influence of a structure on the functions of financial markets; interdependence of real and financial variables in economic activity.

## FING 6713 Management of Banks and Other Financial Institutions

Three credits. Three hours of discussion a week.

Prerequisite: FING 6621 or authorization from the instructor.

Analysis of the legal and economic principles involved in determining a managerial policy for various financial institutions. The following topics will be included: handling of assets and capital sources and the uses of funds, financial institutions' competition and debt sources of capital and the uses of funds, competition between financial institutions, and structural problems of industries (including branch stores, chain stores, and consolidations).

#### FING 6717 International Commerce and Finance

Three credits. Three hours of discussion a week.

Prerequisite: FING 6621

Analysis of trade theory and policy and the theory of international monetary policy. The following topics will also be discussed: capital flows, balance of payments, monetary market exchange, and adjustments in economic activity within flexible monetary exchange systems.

#### **FING 6719 Public Finance**

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501

The sources and use of government funds. The impact of government expenditures and taxes on the level of national income. The influence of taxes and government spending on local goals.

## **FING 6721 Research Seminar in Finance**

Three credits. Three hours of discussion a week.

Prerequisite: for students in the graduate level working toward a major in finance.

This course will familiarize the student with the logic and methods of research in corporate finance. Participants will undertake research in microfinance, covering the structure and organization of financial market determination of interest rate and financial asset prices, as well as the internal and external aspects of cash flows, the relation of money and development, public finance, and any other topic concerning aggregate finance usually denoted as money and banking. The faculty in

charge will supervise the methodology of the research providing close assistance and becoming involved with the student's work. Meetings and contents will depend on student's interest.

#### FING 6725 International Investments

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501, CONT 6501 or BBA with a concentration in Finance or

Accounting.

Study of diverse macroeconomic, political, and social aspects that have helped to encourage individual and institutional investors to look at the international capital markets and a viable investment alternative. The mechanism used to minimize the risks caused by the volatility in the exchange rates and the tactical moves used to take advantage of these fluctuations will be examined.

#### FING 8005 Theory of Finance I

Three credits. Three hours of discussion a week. Prerequisite: ECOG 6701, 6703 & MECU 8005

Discussion of the most recent research trends in the finance discipline. Emphasis on the impact of the theory on the financial research conceptual frameworks in Latin America and the Caribbean. Critical analysis of recent legal, social, and ethical issues in the financial and economic environment.

## FING 8006 Theory of Finance II

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

The financial theory application will be discussed in the broader context of the corporation. The corporate sectors of manufacturing and services will be examined. Studies of the revision of the empirical evidence from the perspective of economic positivism. The application of the financial theory in Latin America, the Caribbean and the United States will be emphasized.

#### **FING 8017 Quantitative Methods for Finance**

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

Study of the advanced methodological tools required to do research in finance and investment analysis. The modern portfolio theory will be emphasized. Software programs of optimization and statistical analysis will be used to evaluate and examine the corporations and investment markets of Latin America and the Caribbean.

## FING 8019 Independent Studies in Finance

Three Credits. Three Hours Independent Studies per week.

Prerequisite: FING 8006

Independent research in a specialized finance topic in an area of interest whose content is partially or not offered in other courses of the doctoral program. It is fulfilled with the help of a professor who is an expert in the topic. This course can be repeated twice (6 credits).

#### **FING 8025 Investment Markets**

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

The most recent research of diverse lines of thought in the investment area and the interrelation of those lines with the impact of investment methods in domestic, Latin American, and Caribbean financial markets will be analyzed. Also, the theoretical views for analyzing the topic of investment markets under uncertainty within the scope of other disciplines, such as microeconomics, macroeconomics, and accounting, will be discussed.

## **FING 8027 Corporate Finance**

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

The research results of the most recent and controversial developments in corporate finance will be studied. The modern corporation's financial problems and possible research solutions to these problems will be discussed. The results of research projects regarding the finance of modern Latin American corporations will be critically analyzed.

## FING 8029 Contemporary Topics in Financial Markets

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

Integrative study of the structure and dynamics of international financial markets and their linkages to domestic markets. Emphasis on the recent studies on the optimization of international financial assets portfolios.

#### **OPERATIONS MANAGEMENT**

#### **GEOP 6539 Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551 & ADMI 6552

Comprehensive introduction to the concepts, paradigms, and techniques of operations management necessary to understand, diagnose, and manage the operational activities in service, governmental, and manufacturing organizations. It discusses the operational concepts that affect the productivity, effectiveness, and efficiency of the organization's resources, as well as the relation of the discipline with others of the managerial and administrative sciences. (c)

#### **GEOP 6703 Production Resources Planning**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6551

A thorough study of the management of physical production resources. Selection and replacement of equipment, plant location, size of operation, efficient location of equipment in a plant, and line balancing are discussed. Some quantitative methods are applied in the analysis of problems. Linear programming and queuing theory are considered.

# **GEOP 6706 Contemporary Themes in Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6539, MECU 6551.

Study of transcendental and contemporary themes in operations management. Discussion of studies, technical methodologies, diverse visions, and their implications in different business sectors. Different topics will be covered each time the course is offered. The student will be able to register for the course a maximum of three times.

## **GEOP 6707 Advanced Production Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6639

Readings and cases are surveyed to cover the following areas: effective equipment location, purchasing of a physical facility, equipment selection, physical disposition inside the plan, quality and production standards, material purchasing, upply operations, inventory control, and worker's incentives.

#### **GEOP 6708 Operations Management for Service Business**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6639

Discussion of concepts and issues that help understand aspects of service-provider businesses' operations. Study of the latest tendencies and characteristics of various service sector industries as well as methodologies designed for improving the productivity of private public service organizations.

# **GEOP 6723 Statistical Methods for Quality Control**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551

The use of statistical techniques (control graphs), in the detection of special causes and location of the responsibility for the reduction of the variability of quantity. The statistical techniques for standardization and specification of performance. Consideration of the costs involved in the control of quality. Design of procedures for the acceptance, rejection, or repairs of lots of units of production and the impact of such decisions on inventory policy. Statistical controls in supervision and their management of a personnel policy application are business. Elementary theory of the reliability of parts and of complex equipment. Maintenance and replacement of equipment.

## **GEOP 6726 Quality Management**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551

Study of the managerial activities related to quality assurance in manufacturing and service organizations.

## **GEOP 6735 Supply Chain Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6639

Study of the management of material flow and information through the organization's different stages. The most important activities of a supply chain and the interactions between these are considered to form an efficient organizational collective. This course will provide the student with the knowledge and tools necessary to develop, implement, and maintain strategies for the management of related subjects of the supply chains.

## **QUANTITATIVE METHODS**

## **MECU 6551 Fundamental Aspects of Statistics**

Three credits. Three hours of discussion a week.

Descriptive statistics, probability, and probability distributions; principles of classic and Bayesian inference; emphasis on interpretation and statistics; learning computer language.

## **MECU 6703 Statistical Inference**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6701 or authorization from the director.

Estimation theory, hypothees tests, confidence intervals, subjective probability, prior and posterior distribution, the Likelihood principles, and the Bayes theorem, and Bayesian inference and non-parametric free distribution techniques.

#### **MECU 6709 Decision Theory**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551 or its equivalent.

Methods of analysis under conditions of uncertainty. Includes the application of subjective probability and the use of utility theory. Comparison of classical and contemporary methods.

#### **MECU 6715 Econometrics I**

Three credits.

Prerequisite: MECU 6551, MECU 6651, ECOG 6567.

Specification, estimation, and testing of economic models of demand and production. Emphasis is given to the application of statistical methods in economics and business problems.

#### **MECU 6717 Econometrics II**

Three credits.

Prerequisite: MECU 6715

Autoregressive and distributed lag models. Consideration of techniques of long and short run forecasts of business activity both for the economy and for firms and industries.

## **MECU 6725 Quantitative Methods for Management Decisions**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6551

This course introduces the use of quantitative models in the decision-making process in managerial and administrative science. Models of deterministic and stochastic nature are discussed, like descriptive and normative models. The focus of this course is on the formulation and use of mathematical models and software and the analysis and interpretation of the results. The course provides a comprehensive foundation in analytical tools for other courses.

## **MECU 6739 Multivariate Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6551

This course introduces the most utilized techniques in multivariate analysis. The course will discuss the theory of each technique, the most common problems in its application, and the correct way to interpret and present results. The course will be complemented with the use of statistic software. During the courses examples of the different specializations of the administrative and managerial sciences will be discussed.

## **MECU 8005 Integrated Probabilistic and Statistical Analysis**

Three credits. Three hours of lecture per week.

Prerequisites:

- 1. At least one statistics course of master's degree level.
- 2. Mathematic courses, including differential and integral calculus.
- 3. Course of matrix algebra or its equivalent.
- 4. Knowledge of a statistics program (for example, SAS, SPSS, NCSS, or Minitab).

Comprehensive study of the principles of probabilistic and statistical analysis. Includes the fundamentals of stochastic and deterministic models necessary to understand the modeling used in the field of business.

#### MARKETING

### **MERC 6541 Market Management**

Three credits. Three hours of lecture per week. Prerequisites: ADMI 6531 & MECU 6551.

Analysis of the distributive process and its relationship to the marketing process; available channels and means of distribution and pertinent legislation. Integration of qualitative factors with auxiliary quantitative methods.

### **MERC 6701 Advanced Market Management**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541

A continuation of the basic course in marketing. Topics covered include product planning and development, price determination, advertising and selling, distribution policies, the logistics of physical supply, and international marketing. Attention will be given to the development of a research project and cases and problems.

### **MERC 6705 Marketing Research**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541, MECU 6551

Market research methods as critical tools for problem solving and for maximizing marketing efficiency. All modern techniques, including the most recent developments in the field, are discussed. Cases and group projects are employed.

#### **MERC 6708 Consumer Motivation and Behavior**

Three credits.

Designed for second-year students specializing in marketing. The economics and psychology of consumer behavior and applications.

### **MERC 6714 Product Strategy and Management**

Three credits. Eight hours of lecture per week.

Prerequisite: MERC 6541

Emphasis on the process of new product development, the development and management of the product mix in the multi-product firm. Topics include identifying and screening new product opportunities, evaluating product performance, segmenting the product market, developing a multi-product information system, diversifying and simplifying the product line, managing role of the brand manager. Aids to decision-making such as Bayesian analysis, pert, product concepts and use tests, product screening methods, financial analysis, and quantitative applications are considered from the standpoint of the manager. Selected cases and projects.

### **MERC 6715 International Marketing**

Prerequisite: MERC 6541

Three credits. Three hours of lecture per week.

The theory and practice of international and interregional marketing. The world environments, comparative marketing, and multinational market groups receive attention. International business is integrated with trade theory. Special attention is given to Latin American problems.

# **MERC 6717 Services Marketing**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541

The competitive challenges occurring and to occur within the service sector of the economy because of the decline in government regulation, technological innovations, changes in professional association standards and the like, which alter the ways services are marketed.

### **MERC 6719 Graduate Seminar in Marketing**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541, 6701

Discussion of strategic issues affecting the management of the marketing process both in terms of efficiency and effectiveness. The development of new paradigms is the expected result of such discussions. Variable content related to the subject matter at the time of offering the seminar. The student could repeat the course if the topics presented are different.

### **HUMAN RESOURCES**

### **REHU 6705 Human Resources Management**

Three credits. Three hours of lecture per week.

Comprehensive introduction to core issues in the management of human resources in various types of organizations. The course will examine important elements of discipline, enabling the student to recognize critical issues, understand the relationship of the function to the success of the organization, and address the various issues involved. Special emphasis is given to human resources planning, job analysis, job design, recruitment and selection, performance and career management, training and development, compensation and benefits, and employee relations to the job.

# REHU 6706 Administration of Compensation and Rewards Systems.

Three credits.

Prerequisite: REHU 6705

Discussion of compensation and rewards theories in the organizations. Emphasizes the process of design, and the implementation of the compensation systems. Also, different topics, such as the evaluation for the appointment, the design of wage polls and wage structures, the programs of

wage increments, benefit programs, the compensation to the managerial group, payment for workmanship, and the laws affecting the system of compensation, among others, will be studied.

# **REHU 6715 Contemporary Topics Seminars in Human Resources Management.**

Three credits. Three hours of lecture per week.

Study of contemporary themes of human resources management of greater significance. Discussion of themes such as the force of multicultural work, compensation by dexterities, corporate politics on the use of controlled substances in the work, and design of the work in the new organizations as the virtual organization.

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Víctor Quiñones, victor.quinones1@upr.edu, ext. 87101, Coordinator MBA

#### **DEGREE:**

#### Master of Business Administration /Juris Doctor (MBA/JD)

The Graduate School of Business Administration and the School of Law offer a joint program of study leading to the degree of Master of Business Administration (MBA) and the Juris Doctor (JD). Each school will award the degree separately. The complementary aspects of these two programs provide future professionals with a unique and highly marketable educational experience. The design of the study plan allows the requirements of each area (Law and MBA), and the corresponding electives to be completed in a shorter time than that required to complete each program separately.

#### **FACULTY:**

**Maribel Aponte,** Ph.D., University of Massachusetts, 1990, Professor. International Business and Development in Latin America and the Caribbean; Comparative Business Models; The Bolivarian Alliance for Our America; New Strategic Regionalism; Production and Trade Chains and Networks; Food Sovereignty; Visual Research.

**Jorge Ayala Cruz,** Ph.D., Rensselaer Polytechnic Institute, 1993, Professor. Systems Dynamics; Strategic Operational Management; Supply Chain Management and Logistics; Quantitative Numerical Methods.

**José Caraballo Cueto,** Ph.D., The New School for Social Research, 2013, Associate Professor. X Goals, Economic Development, Human Development, Entrepreneurship.

**Pedro González Cerrud,** Ph.D., Lehigh University, 1992, Professor. Advanced Corporate Finance, Advanced Financial Accounting, Financial Statement Analysis, International Investments, Options, Futures and Other Derivatives, Quantitative Methods in Marketing.

**Justin Paul,** Ph.D., Indian Institute of Technology Bombay, 2003, Professor. International Marketing, Business in Asia and Emerging Markets, Strategic Management, Services Marketing. **Javier Rodríguez Ramírez,** Ph.D., Houston University, 2003, Professor. Quantitative Methods in Finance; Behavioral Finance; Mutual Funds.

**Alex Ruiz-Torres,** Ph.D., Pennsylvania State University, 1997, Professor. Operations and Supply Chain Management, Reverse Logistics, Production Planning.

María de los M. Santos Corrada, Ph.D., Complutense University of Madrid Marketing, 2002, Assistant Professor. Marketing, Consumer Behavior, Retail Management, Development of New Producers, Sustainable Development.

**Jimmy Torrez,** Ph.D., University of California, 1998, Assistant Professor. Externalities of Free Trade; The Effect of Bureaucracy on Goods and Capital Markets; Market Inefficiencies; International Capital Markets.

# **ADMISSION REQUIREMENTS:**

Students must meet the requirements required by the Graduate School of Business Administration and School of Law to be admitted to the dual program. In general, the School of Law requires applicants to take the LSAT and EXADEP tests. Applicants must pass them with the minimum score established for the semester when requested and have the graduation rates required by each School.

## **GRADUATION REQUIREMENTS:**

The student registered in this Program must pass 116 credits determined by both Schools. Student will be able to complete both degrees in 4 years.

#### STUDY PROGRAM:

First Year: School of Law					
Course	First Semester	Credits	Course	Second Semester	Credits
Dere 7018	Constitutional Law	4	Dere 7115	Public International Law	3
Dere 7017	Civil Procedure	4	Dere 7015	Criminal Law	3
Dere 7068	Legal Research And Writing	2	Dere 7008	Family Law	3
Dere 7066	Legal Profession	2	Dere 7007	Property	3
Dere 7016	Obligation And Contract Law.	4	Dere 7006	Torts	3
Total of Credits		16	Total of Credits		15

### Second Year: Graduate School of Business Administration ("EGAE") and School of Law

Course	First Semester	Credits	Course	Second Semester	Credits
Dere 7026	Evidence	3	11)ere /036	Business Associations And Corporations	3
Dere	Elective Seminar in Law	2	Dere	Elective in Law	3

Admi 6531	Fundamental Factors in Managerial Activity I	3	Merc 6541	Market Management	3
Cont 6501	Accounting For Analysis and Control	3	Mecu 6551	Fundamental Aspects of Statistics	3
Ecog 6567	Economics For Managers I	3	Dere	Elective in Law	3
Total of Cr	edits	14	Total of Credits		15
Third Year	: Graduate School of Bus	iness Adr	ninistration a	and School of Law	
Course	First Semester	Credits	Course	Second Semester	Credits
Dere 7039	Theory Of Law	3	Dere	Electives in Law (6 credits in total)	6
Dere	Seminar: Law Elective	2	Dere	Elective in Law	
Admi 6510	Decision Making (Ecog 6567)	3	Geop 6539	Operation Management (Mecu 6551)	3
	EGAE Elective	3	Fing 6501	Finance For Managers (Cont 6501, Mecu 6551)	3
Dere	Elective in Law	3		EGAE Elective	3
Total of Credits		14	Total of Credits		15
Fourth Yea	r: Graduate School of Bu	siness Ad	lministration	and School of Law	
Course	First Semester	Credits	Summary o	f Crs.	
Dere 7041	Legal Aid Clinic	3	Dere 7042	Legal Aid Clinic	3
	Elective in Law (7 credits total)	7	Admi 6595	Strategic Management (all core)	3
	Elective in Law		Dere	Elective in Law	3
	Elective in Law		Dere	Elective in Law (or EGAE)	3
Admi 6637	Philosophy Of Business	3			
Dere	Elective in Law (or EGAE)	2			
Total of Credits		15	Total of Cre	edits	12
1			E. Law		80
			L. Law		00
			EGAE		36

### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

### **ADMI 6510 Decision Making**

Three credits. Three hours of conference a week.

Prerequisite: ECOG 6567

Examination of cognitive, quantitative, and interpersonal skills required for analyzing events and situations, information management, and decision-making processes in organizations, at both individual and group spheres. Systemic thinking and other thought models are essential tools in the analysis and solution of complex business issues from a holistic perspective.

### **ADMI 6637 Philosophy of Business**

Three credits. Three hours of conference a week. Prerequisites: Admission to graduate program.

The relationship of business to other fields of knowledge. The humanities and behavioral sciences influence economic activity and decision-making and provide managers the necessary philosophical perspective analysis of the development of the philosophy underlying free enterprise through a study of man as seen from current humanistic and behavioral science perspectives; equal needs and unequal capabilities as dramatized by the labor conflicts of capitalism; the dynamics of this conflict and the schools of thought which seek grounds for reconciliation; political and economic formulas for a solution to the problem of equal needs versus unequal capabilities; the impact of social and moral engineers in the attempt to move society toward a more just and equitable distribution of wealth; and the alternative forms that may be taken by current systems of production and distribution in an effort to reconcile the goals of political freedom and economic justice.

### ADMI 6531 Fundamental Factors in Managerial Activity I

Three credits. Three hours of conference a week. Prerequisite: Authorization from the director.

Survey of the basic elements of administrative activity and their integration into the managerial process; human behavior in an organization; the social environment within the organization; and the relationship between the company and the government.

### **CONT 6501 Accounting for Analysis and Control**

Three credits. Three hours of conference a week.

Critical study of the concepts, methods, and types of information management useful to investors, financial analysts, business managers, and others engaged in financial accounting, cost analysis, and control. Budget Preparation and implementation. Emphasis on the use of computers for handling mass data.

### **ECOG 6567 Economics for Managers I**

Three credits. Three hours of discussion a week. Prerequisites: Authorization from the director.

Economics basic principles as formulated by neoclassical theory of the firm; theory of supply and demand in perfect and imperfect markets; equilibrium analysis and its relevance. Notions of satisfactory profits, standard mark-up pricing, monopoly, and other closely related aspects of the measurement and determination of national income.

### **FING 6501 Finance for Managers**

Three credits. Three hours of conference a week.

Analysis of the firm's short-and long-term sources and uses of funds; liquidity, cost and financial goals; modern analytical tools, financial models, decision programs, linear programming and business games. Principles and techniques through problems and short cases.

### **GEOP 6539 Operations Management**

Three credits. Three hours of conference a week.

Prerequisite: MECU 6551 & ADMI 6552.

Comprehensive introduction to the concepts, paradigms, and techniques of operations management necessary to understand, diagnose, and manage the operational activities in service, governmental and manufacturing organizations. It discusses the operational concepts affecting the productivity, effectiveness, and efficiency of the organization's resources, and the relation of discipline with others of the managerial and administrative sciences. (c)

# **MECU 6551 Fundamental Aspects of Statistics**

Three credits. Three hours of conference a week.

Descriptive statistics, probability and probability distributions, principles of classic and Bayesian inference; emphasis on interpretation and statistics; learning computer language.

### **MERC 6541 Marketing Management**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531 & MECU 6551.

Analysis of the distributive process and its relationship to the marketing process; available channels and means of distribution and pertinent legislation. Integration of qualitative factors with auxiliary quantitative methods.

### **ADMI 6595 Strategic Management**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531, ADMI 6637, CONT 6501, FING 6501 GEOP 6539, MECU 6552 & MERC 6541.

Analysis of the decision-making techniques through an evaluation of the managerial responsibility assumed by the administrative hierarchy. Provides insight into problems, objectives, and managerial and administrative strategies.

### **OTHER COURSE DESCRIPTIONS:**

#### **ADMINISTRATION**

### **ADMI 6631 Human Behavior in Organizations**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531

Discussion of the systematic analysis of problems and situations involving the human element in business. The consistency and inconsistency of outside pressures upon the business organization, their effect on the feelings and behavior of the members of the organization. A comparison is made between the authoritarian management style versus a participatory style of leadership, the emotional problems involved in dynamic vs. Static environments, and optimum ways of motivation for productivity.

### **ADMI 6632 Organizational Theory and Change**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531

Study of the theory and change in business firms from various perspectives. Emphasizes the development of analytical skills for a better understanding of organizational complexity and to produce creative actions leading to change and improvement.

### **ADMI 6633 Personnel and Industrial Relations Management**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531 - 6532.

Studies issues related to human resources in business and society, personnel administration policy and practices, the nature of industrial relations, the role, and processes of collective bargaining, as well as management and labor unions in handling of industrial relations, personnel policy, labor relations and the public interest.

### **ADMI 6635 Business, Government, and Society**

Three credits. Three hours of conference a week.

Prerequisite: Admission to Graduate School or Professor's Authorization.

The relationship between the business enterprise, government, and society. The government's role as an essential element in the business environment and examined in areas such as antitrust, minimum wages, taxation, and environmental improvement. Management's public responsibility is analyzed, and attention is given to its participation in legislative and judicial processes.

#### **ADMI 6650 Planning and Organization of New Enterprises**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6532, MECU 6551 y CONT 6501.

This course will explore opportunities for starting up a business and will offer the student a variety

of situational problems through which the student will be able to understand the wide range of opportunities available. It will explore the need to gather data to determine the feasibility of taking a perceived opportunity. It will make the student aware of risks and rewards, the difficulties that may be encountered, and the resourcefulness necessary for overcoming them. Specific topics will include forms of developing estimates of market potential; plans for reaching the market; types of production or operating processes and the facilities needed for them; personnel specifications and sources; financial requirements; time schedules and similar considerations involved in determining whether to start a business, and if so, how to meet the problems of carrying the business through the early growth into a sound, established position.

# ADMI 6715 Research Methodology for The Management and Administrative Sciences

Three credits. Three hours of conference a week.

Study of management and administrative research. Emphasis on the applicability of research to solve problems and formulate theorical managerial studies. Discussion of lectures and cases related to the procedures used in the management theory construction by the leaders in the management and administrative sciences. Also, it will discuss how paradigms emerge and how the established paradigms have been transformed. This course is offered in-person, hybrid and online.

## **ADMI 6728 Research Seminar in Organizational Behavior**

Three credits. Three hours of conference a week.

This course can be repeated up to a maximum of three times (nine credits).

Prerequisite: ADMI 6531

red will be selected on the basis of students' interests and needs. Both the theoretical underpinnings and the operational, applied aspects of each topic will be discussed.

# **ADMI 6735 Labor Law and Jurisprudence**

Three credits. Three hours of conference a week.

Prerequisite: ADMI 6531-6532.

Study of federal and state labor legislation, including jurisprudence concerning working hours, wages, strikes, boycotts, pickets, union representation, and legality of labor contracts.

### ADMI 6736 Leadership and Interpersonal Relationships in Organizations

Three credits. Three hours of conference a week.

Study and analysis of leadership with an emphasis on interpersonal dynamics and effective leadership. The course highlights the development of interpersonal skills for the exertion of effective influence. It will focus on information-producing interventions that may allow conflict resolution and, learning and commitment.

# **ADMI 6995 Cooperative Education Experience**

Two to four credits.

Regular academic semester: Students must work 20-30 hours per week for three credits. 31-40

hours per week for four credits.

Summer session: Students must work at least 20 hours per week for two credits, and more than a total of 300 hours for three credits.

Prerequisites: Completion of one semester in graduate studies and a minimum grade point average of 3.0 on a scale of 4.0.

Experience in applying theoretical knowledge of business fields to a full-time paid work situation with academic supervision. Course in-person, hybrid, and online modalities.

#### **ADMI 8005 Doctoral Seminar**

Credit. Five three-hour seminar sessions during the semester.

Prerequisite: Doctoral Program Student.

Discussion of contemporaneous topics of investigative and empirical character relevant to the field of business administration. Study of the ethical, environmental, and social dilemmas, and implications of management decisions, the entrepreneurship theory and activities, and the educational methodology. Development of skills for electronic information search and preparation of publishable articles. Topics will vary each time the seminar is offered. This course will be repeated at least four times.

#### **ADMI 8105 Doctoral Dissertation**

Four credits. Four hours of doctoral dissertation per week.

Prerequisite: Having passed the comprehensive exam of the specialty.

The doctoral dissertation course is the space created for students to demonstrate that they possess the capability for the creation, and defense of a proposal and conclusion of a doctoral thesis. This process is made with the assistance of the counseling committee which has the main function of helping the student in the development of a product with the highest quality. The students must complete a minimum of twelve credits of doctoral dissertation.

#### INTERNATIONAL TRADE

# **COIN 6700 Management Strategy in A Global Environment**

Three credits. Three hours of discussion a week.

Prerequisite: ADMI 6531

Analysis of theories and practices of international managerial systems within the social environment including anthropological and cultural considerations, the environment strengths and weaknesses of available resources, organizational structures, organizations, and values with a global content.

### **COIN 6702 International Business Theory and Research**

Three credits. Three hours of discussion a week.

Critical assessment of international business theory, research, and development. Analysis of classical theories of international production, the neoclassical conceptualization of foreign

investment, strategic approaches to international business, the tendencies and effects of international production and the socio-economic considerations concerning international business. Discusses the ethic-ethnic dilemmas. Analysis of topics related to research methodologies such as: research designs, development of research instruments, sampling, and data collection problems.

#### **COIN 6703 International Business and Market Research**

Three credits. Three hours of discussion a week. Prerequisite: MECU 6552 or its equivalent.

This course explains the international market and business research process from a practical, legal, and ethical stand. The course combines theory and practice focusing on the problems international researchers face. The international business research process will cover design, method, instrument development, sampling, data collection, data analysis and presentation of results.

### **COIN 6705 International Finance and Economics**

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501 & ECOG 6567.

Analysis and discussion of the international economic environment in which the corporate enterprise operates. The global financial environment is analyzed.

### **COIN 6706 International Business in Latin America and The Caribbean**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 6702 or authorization from the director.

Analysis of international business system and the process of internationalization of production, environmental and managerial factors of conducting business in Latin America and the Caribbean, the historical development and contemporary condition's structure and policies of those economies. Technology transfer and managerial know-how, socioeconomic and cultural factors affecting business strategies in Latin America and the Caribbean. Examines the implications for business of regional trade agreement - nafta, Mercosur, the group of three, among others.

#### **COIN 6707 Logistics and International Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6539, MERC 6541.

Study of topics related to the use of global operations to improve supply chain performances and global competitiveness. Discussion of topics related to the creation of global operations projects to leverage customer-supplier and subsidiary relations. Analysis on streamlining value chains, improving coordination, and improving distribution channel performance.

## **COIN 6708 Legal Aspects of Global Business**

Three credits. Three hours of discussion a week.

Study of the major legal aspects in global business operations. Introduction to public international law and those concepts that directly or indirectly impact trade and commercial disputes. Emphasis is given to current issues and controversies occurring in commerce between nations. Some of the topics discussed are nations' sovereignty, international treaties (e.g., GATT, NAFTA), united nations and its structure, the European Union, international business dispute resolutions mechanisms, intellectual property global issues, and international taxation issues.

#### **COIN 8005 International Business Seminar**

Three credits. Three hours of discussion a week. Prerequisite: ECOG 6701, ECOG 6703, MECU 8005.

Discussion of concepts and theories of international business, advantages, and disadvantages of the economic and political agreements between countries, and international managerial policy alternatives used by the firm, including those used in Latin America. Study of the institutions and processes affecting international business behavior, the interrelation between nations, and international firms.

# **COIN 8006 Legal and Regulatory Aspects of International Business**

Three credits. Three hours of discussion a week.

Study and analysis of the current and emergent national laws and regulations for decision-making related to international business and the institutions regulating international transactions. Includes the legal, governmental, and political background and aspects affecting the commercial transaction of the multinational enterprises in Latin America and the Caribbean.

# COIN 8015 International Organizational Design, Structure and Culture

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study of most recent organizational design, structure, and culture theories and their effects on the performance, efficiency, effectiveness, and adaptability of the international enterprise. Emphasis in the study of cultural manifestations in the enterprise performance and ways to manage them.

#### **COIN 8016 Comparative Business Systems**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study and analysis of differences in process, structure, and power, among others, within the organization in different countries. With emphasis on the comparison of the business processes and practices in the United States, Europe, Japan, Latin America, and the Caribbean using as reference the emergent literature on organizational culture, organizational sciences, and classic

contingency theory. This course will be offered in the following modalities: in-person, hybrid, and online.

### **COIN 8025 International Finance and Economics**

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6701 or its equivalent, 6703 or its equivalent.

Study of the international monetary system and its role in determining currency exchange rates. The factors influencing international investments, the characteristics of the international financial institutions and their relation to domestic markets will be analyzed.

### **COIN 8026 International Business Strategy**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study of different frameworks for evaluating competitive positions in an uncertain environment and descriptive models of the future performance of enterprises that compete in international industries. Comparisons between multi-domestic and transnational strategies and global alliances, including Latin American enterprises.

# COIN 8027 Contemporary Issues in International Business and Trade.

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Study of theories and research methodologies of contemporary topics in the fields of international commerce and business. The course can be repeated up to a maximum of four times, whenever the topic does not repeat itself.

### **COIN 8028 International Marketing Strategies**

Three credits. Three hours of discussion a week.

Prerequisite: COIN 8005

Critical analysis and the development of marketing strategies and tactics used by multinational corporations in international markets. This course can be offered in-person, hybrid and online.

### **ACCOUNTING**

### **CONT 6701 Theory and Problems of Financial Accounting**

Three credits. Three hours of discussion a week. Prerequisite: CONT 6501.

Critical survey of the concepts and standards upon which periodic financial statements are based. Problem Analysis.

#### MANAGERIAL ECONOMICS

### ECOG 6701 Managerial Micro-Economics: Theory of Values

Three credits. Three hours of discussion a week.

The logic of micro-economic analysis. A detailed analysis of the mathematical relationship of supply and demand in a theoretical purely competitive market, an imperfect competition market, and a monopoly condition. The purpose of this course is to train the manager in the strict application of the tools and techniques of economic analysis.

### ECOG 6703 Managerial Macro-Economics: Theory of Income and Money

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6611

A course in aggregate economic theory. It includes the analysis involved in the determination of national income production, employment, and price levels. It examines the effects of consumption, investment, cash flows, interest rates, monetary policy, fiscal policy and public debt policy. It also establishes a relationship between theoretical analysis and present economic problems and how these affect the enterprise.

### **ECOG 6735 Caribbean Economic Development**

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6567 or Director's Authorization.

An analysis of Caribbean economic development patterns and characteristics. The course will integrate the history of thought in the field of economic development theory with an analysis of the industrialization strategies implemented in the area. Alternative development models and industrial policies.

#### **ECOG 8005 Managerial Macroeconomics**

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6567 or equivalent, Calculus I.

This doctoral level course involves analysis of national income, employment, and price levels. We analyze monetary and fiscal policy and how these policies affect the three measurements of the aggregate economy. We explore different theories and their predicted relationship of government policy to national welfare.

#### **FINANCE**

#### FING 6621 Banking and Financial Institutions

Three credits. Three hours of discussion a week.

Prerequisite: ECOG 6611 or professor's authorization.

Review of banking institutions and non-financial institutions. The problems and principles of monetary units of central banking systems and international finance. Emphasis on the implementation and evaluation of monetary policy.

#### FING 6703 Advanced Business Finance

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501, FING 6501 y MECU 6551.

Theory and practice of corporate finance, asset management, capital budgeting, problems of optimization, and socio-economic aspects of financial management. The use of quantitative tools in the analysis of real cases is stressed.

#### FING 6707 Investments

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501, MECU 6551.

Principles and practice of investments, stressing the analysis of investments, the elements of the process of investing money, and the establishment of criteria in the selection of various investment choices. Simulation and mathematical programming techniques are used.

## **FING 6709 Real Estate Financing**

Three credits. Three hours of discussion a week.

Prerequisite: FING 6621 & MECU 6551.

Analysis of the mortgage market, the development and impact of private and public units engaged in real estate financing, typical investment and real estate financing problems, the relationship between real estate investment and the capital market, and the role of credit in the real estate market.

### FING 6710 Options, Futures and Other Derivatives.

Three credits. Three hours of discussion a week.

Prerequisite: CONT 6501, FING 6501.

Intensive and extensive discussion of the theory and applications of derivatives and future investment vehicles to the process of portfolio management and corporate financial risk control. Applications in the investment trading fields. Detailed evaluation of the global market for synthetic and derivates products, particularly the role played by European investors. Legal, technological, and accounting issues will be discussed to the extent they affect the activities being carried out in the derivate markets.

### FING 6711 Theory and Structure of Financial Markets

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501

Analysis of the structure of financial markets and the application of current monetary and economic theories to the markets. The role of financial theory and policy; the influence of a structure on the functions of financial markets; interdependence of real and financial variables in

economic activity.

### FING 6713 Management of Banks and Other Financial Institutions

Three credits. Three hours of discussion a week.

Prerequisite: FING 6621 or professor's authorization.

Analysis of the legal and economic principles involved in the determination of a managerial policy for various types of financial institutions. The following topics will be included: handling of assets and capital sources and fund usage; financial institutions competition and debts; sources of capital and the uses of funds, competition between financial institutions; structural problems of industries (including branch stores, chain stores, and consolidations).

#### FING 6717 International Commerce and Finance

Three credits. Three hours of discussion a week.

Prerequisite: FING 6621

Analysis of trade theory and policy and the theory of international monetary policy. The following topics will also be discussed: capital flows, balance of payments, monetary market exchange, and adjustments in economic activity within flexible monetary exchange systems.

#### **FING 6719 Public Finance**

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501

The sources and use of government funds. The impact of government expenditures and taxes on the level of national income. The influence of taxes and government spending on local goals.

#### FING 6721 Research Seminar in Finance

Three credits. Three hours of discussion a week.

Prerequisite: for students in the graduate level working toward a major in finance.

This course will familiarize the student with the logic and methods of research in the field of corporate finance. Participants will undertake research in microfinance, covering the structure and organization of financial market determination of interest rate and financial asset prices, as well as the internal and external aspects of cash flows, the relation of money and development, public finance, and any other topic concerning aggregate finance usually denoted as money and banking. The professor in charge will supervise the methodology of research, providing close assistance and becoming involved with the student's work. Meetings and contents will depend on student interest.

#### FING 6725 International Investments

Three credits. Three hours of discussion a week.

Prerequisite: FING 6501, CONT 6501 or BBA with concentration in Finance or Accounting

Study of diverse macroeconomic, political, and social aspects that have helped to encourage the individual and institutional investors to look at the international capital markets and a viable

investments alternative. The mechanism used to minimize the risks caused by the volatility in the exchange rates and the tactical moves used to take advantage of these fluctuations will be examined

### FING 8005 Theory of Finance I

Three credits. Three hours of discussion a week. Prerequisite: ECOG 6701, 6703 & MECU 8005

Discussion of the most recent research trends in the finance discipline. Emphasis on the impact of the theory on the financial research conceptual frameworks in Latin America and the Caribbean. Critical analysis of recent legal, social, and ethical issues in the financial and economic environment.

### FING 8006 Theory of Finance II

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

The application of the financial theory will be discussed in the broader context of the corporation. The corporate sectors of manufacturing and services will be examined. Studies of the revision of the empirical evidence from the perspective of the economic positivism. The application of the financial theory in Latin America, the Caribbean and the United States will be emphasized.

### **FING 8017 Quantitative Methods for Finance**

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

Study of the advanced methodological tools required to do research in finance and investment analysis. The modern portfolio theory will be emphasized. Software programs of optimization and statistical analysis will be used to evaluate and to exam the corporations and the investment markets of Latin America and the Caribbean.

### **FING 8019 Independent Studies in Finance**

Three Credits. Three Hours Independent Studies Per Week.

Prerequisite: FING 8006

Independent research in a specialized finance topic in an area of interest whose content is partially or not offered in other courses of the doctoral program. It is fulfilled with the help of a professor who is an expert in the topic. This course can be repeated up to two times (6 credits).

#### **FING 8025 Investment Markets**

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

The most recent research of diverse lines of thoughts on the investment area and the interrelation of those lines with the impact of the Investment methods in the domestics,



Latin America and the Caribbean financial markets will be analyzed. Also, the theoretical views for analyzing the topic of investment markets under uncertainty within the scope of other disciplines. such as microeconomics, macroeconomics and accounting will be discussed.

### **FING 8027 Corporate Finance**

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

The research results of the most recent and controversial developments in corporate finance will be studied. The modern corporation's financial problems and possible research solutions to these problems will be discussed. The results of research projects regarding the finance of modern Latin American corporations will be critically analyzed.

### FING 8029 Contemporary Topics in Financial Markets

Three credits. Three hours of discussion a week.

Prerequisite: FING 8005

Integrative study of the structure and dynamics of international financial markets and their linkages to domestic markets. Emphasis on the recent studies on the optimization of international financial assets portfolios.

#### **OPERATIONS MANAGEMENT**

### **GEOP 6539 Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551 & ADMI 6552.

Comprehensive introduction to the concepts, paradigms, and techniques of operations management necessary to understand, diagnose, and manage the operational activities in service, governmental, and manufacturing organizations. It discusses the operational concepts affecting the productivity, effectiveness, and efficiency of the organization's resources, and the relation of discipline with others of the managerial and administrative sciences. (c)

### **GEOP 6703 Production Resources Planning**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6551

A thorough study of the management of physical production resources. Selection and replacement of equipment, plant location, size of operation, efficient location of equipment in a plant and line balancing are discussed. Some quantitative methods are applied in the analysis of problems. Linear programming and queuing theory are considered.

### **GEOP 6706 Contemporary Themes in Operations Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6539, MECU 6551.

Study of transcendental and contemporary themes in the management of operations. Discussion of studies, technical, methodologies and diverse visions, and their implications in different business sectors. Each time the course is offered, different topics will be covered. The student will be able to register on the course a maximum of three times.

# **GEOP 6707 Advanced Production Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6639

Readings and cases are surveyed to cover the following areas: effective equipment location, purchasing of a physical facility, equipment selection, physical disposition inside the plan, quality and production standards, material purchasing, supply operations, inventory control, and worker's incentives.

### **GEOP 6708 Operations Management for Service Business**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6639

Discussion of concepts and issues that help understanding aspects in the operations of business providing services. Study of the latest tendencies and characteristics of various industries of the service sector as well as methodologies designed for improving the productivity of private public service organizations.

### **GEOP 6723 Statistical Methods for Quality Control**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551

The use of statistical techniques (control graphs) in the detection of special causes and location of the responsibility for reducing the variability of quantity. The statistical techniques for standardization and specification of performance. Consideration of the costs involved in quality control. Procedure design for the acceptance, rejection, or repairs of lots of units of production and the impact of such decisions on inventory policy. Statistical controls in supervision and the management of personnel policy application in business. Elementary theory of the reliability of parts and complex equipment. Maintenance and replacement of equipment.

### **GEOP 6726 Quality Management**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551

Study of the managerial activities related to quality assurance in manufacturing and service organizations.

#### **GEOP 6735 Supply Chain Management**

Three credits. Three hours of discussion a week.

Prerequisite: GEOP 6639

Study of the management of material flow and information through the different stages of the organization. Most important activities for a supply chain, and the interactions between these are considered to form an efficient organizational collective. This course will provide students with the knowledge and tools necessary to develop, implement, and maintain strategies for the management of related subjects of the supply chains.

### **QUANTITATIVE METHODS**

### **MECU 6551 Fundamental Aspects of Statistics**

Three credits. Three hours of discussion a week.

Descriptive statistics, probability and probability distributions, principles of classic and Bayesian inference; emphasis on interpretation and statistics; learning computer language.

#### **MECU 6703 Statistical Inference**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6701 or Director's authorization.

Estimation theory, tests of hypotheses, confidence intervals, subjective probability, prior and posterior distribution, the Likelihood principles, and the Bayes theorem as well as Bayesian inference and non-parametric free distribution techniques.

### **MECU 6709 Decision Theory**

Three credits. Three hours of discussion a week.

Prerequisite: MECU 6551 or its equivalent.

Methods of analysis under conditions of uncertainty. Includes the application of subjective probability and the use of utility theory. Comparison of classical and contemporary methods.

#### **MECU 6715 Econometrics I**

Three credits.

Prerequisite: MECU 6551, MECU 6651, ECOG 6567.

Specification, estimation, and testing of economic models of demand and production. Emphasis is given to the application of statistical methods in economics and business problems.

#### **MECU 6717 Econometrics II**

Three credits.

Prerequisite: MECU 6715

Autoregressive and distributed lag models. Consideration of techniques of long and short run forecasts of business activity both for the economy and for firms and industries.

### **MECU 6725 Quantitative Methods for Management Decisions**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6551

This course introduces quantitative model usage in the decision-making process in managerial and administrative science. Models of deterministic and stochastic nature are discussed, like descriptive and normative models. The focus of this course is on the formulation and use of mathematical models and software, and on the analysis and interpretation of the results. The course provides a comprehensive foundation in analytical tools for other courses.

### **MECU 6739 Multivariate Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: MECU 6551

This course introduces the most utilized techniques in multivariate analysis. The course will discuss the theory of each technique, the most common problems in its application, and the correct way to interpret and to present results. The course will be complemented with the use of statistic software. During the course, examples of the different specializations of the administrative and managerial sciences will be discussed.

### MECU 8005 Integrated Probabilistic and Statistical Analysis

Three credits. Three hours of lecture per week.

Prerequisites:

- 1. At least one statistics course of master's degree level.
- 2. Mathematic courses including differential and integral calculus.
- 3. Course in matrix algebra or its equivalent.
- 4. Knowledge of a statistics program (for example, sas, spss, ncss or minitab).

Comprehensive study of the principles of probabilistic and statistical analysis. Includes the fundamentals of stochastic and deterministic models necessary to understand the modeling used in the field of business.

#### **MARKETING**

### **MERC 6541 Market Management**

Three credits. Three hours of lecture per week. Prerequisites: ADMI 6531 & MECU 6551.

Analysis of the distributive process and its relationship to the marketing process; available channels and means of distribution and pertinent legislation. Integration of qualitative factors with auxiliary quantitative methods.

#### **MERC 6701 Advanced Market Management**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541

A continuation of the basic course in marketing. Topics covered include product planning and development, price determination, advertising and selling, distribution policies, the logistics of physical supply and international marketing. Attention will be given to the development of a research project as well as to cases and problems.

### **MERC 6705 Marketing Research**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541, MECU 6551.

Market research methods as critical tools for problem solving and for maximizing marketing efficiency. All modern techniques, including the most recent developments in the field, are discussed. Cases and group projects are employed.

### **MERC 6708 Consumer Motivation and Behavior**

Three credits.

Designed for second-year students specializing in marketing. The economics and psychology of consumer behavior and applications.

### **MERC 6714 Product Strategy and Management**

Three credits. Eight hours of lecture per week.

Prerequisite: MERC 6541

Emphasis on the process of new product development, the development and management of the product mix in the multi-product firm. Topics include identification and screening of new product opportunities, evaluation of product performance, segmenting the products market, development of a multi-product information system, diversification and simplification of the product line, management of innovation, and role of the brand manager. Aids to decision making such as Bayesian analysis, pert, product concepts and use tests, product screening methods, financial analysis and quantitative applications are considered from the standpoint of the manager. Selected cases and projects will be discussed.

### **MERC 6715 International Marketing**

Prerequisite: MERC 6541

Three credits. Three hours of lecture per week.

The theory and practice of international and interregional marketing. The world environments, comparative marketing, and multinational market groups receive attention. International business is integrated with trade theory. Special attention is given to Latin American problems.

#### **MERC 6717 Services Marketing**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541

The competitive challenges occurring and to occur within the service sector of the economy because of the decline in government regulation, technological innovations, changes in professional association standards and the like, which alter the ways services are marketed.

# **ERC 6719 Graduate Seminar in Marketing**

Three credits. Three hours of lecture per week.

Prerequisite: MERC 6541, 6701.

Discussion of strategic issues affecting the management of marketing processes both in terms of efficiency and effectiveness. The development of a new paradigm is the expected result of such discussions. Variable content related to the subject matter at the time of offering the seminar. The student could repeat the course if the topics presented are different.

#### **HUMAN RESOURCES**

### **REHU 6705 Human Resources Management**

Three credits. Three hours of lecture per week.

Comprehensive introduction to core issues in the management of human resources in various types of organizations. The course will examine important elements of the discipline, enabling the student to recognize critical issues, understand the relationship of the function to the success of the organization, and address the various issues involved. Special emphasis is given to human resources planning, job analysis, job design, recruitment and selection, performance and career management, training and development, compensation and benefits, and employee relations to the job.

### REHU 6706 Administration of Compensation and Rewards Systems.

Three credits.

Prerequisite: REHU 6705

Discussion of compensation and rewards theories in the organizations. Emphasizes the process of design and the implementation of the compensation systems. Also, different topics, such as the evaluation for the appointment, the design of wage polls and wage structures, the programs of wage increments, benefit programs, the compensation to the managerial group, payment for workmanship, and the laws affecting the system of compensation, among others, will be studied.

#### REHU 6715 Contemporary Topics Seminars in Human Resources Management.

Three credits. Three hours of lecture per week.

Study of contemporary themes of human resources management of greater significance. Discussion of themes as: force of the multicultural work, compensation by dexterities, corporate politics on the use of controlled substances in the work and work design in

the new organizations as the virtual organization.



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Jorge Ayala, jorge.ayalacruz@upr.edu ext. 87149, Coordinator iMBA

Víctor Quiñones, victor.quinones1@upr.edu, ext. 87101, Coordinator MBA

#### **DEGREE:**

### **Doctor of Philosophy in Business Administration in International Commerce**

#### **FACULTY:**

**Maribel Aponte,** Ph.D., University of Massachusetts, 1990, Professor. International Business and Development in Latin America and the Caribbean; Comparative Business Models; The Bolivarian Alliance for Our America; New Strategic Regionalism; Production and Trade Chains and Networks; Food Sovereignty; Visual Research.

**Jorge Ayala Cruz,** Ph.D., Rensselaer Polytechnic Institute, 1993, Professor. Systems Dynamics; Strategic Operational Management; Supply Chain Management and Logistics; Quantitative Numerical Methods.

**José Caraballo Cueto,** Ph.D., The New School for Social Research, 2013, Associate Professor. X Goals, Economic Development, Human Development, Entrepreneurship.

**Pedro González Cerrud,** Ph.D., Lehigh University, 1992, Professor. Advanced Corporate Finance, Advanced Financial Accounting, Financial Statement Analysis, International Investments, Options, Futures and Other Derivatives, Quantitative Methods in Marketing.

**Justin Paul,** Ph.D., Indian Institute of Technology Bombay, 2003, Professor. International Marketing, Business in Asia and Emerging Markets, Strategic Management, Services Marketing.

**Javier Rodríguez Ramírez,** Ph.D., Houston University, 2003, Professor. Quantitative Methods in Finance; Behavioral Finance; Mutual Funds.

**Alex Ruiz-Torres,** Ph.D., Pennsylvania State University, 1997, Professor. Operations and Supply Chain Management, Reverse Logistics, Production Planning.

María de los M. Santos Corrada, Ph.D., Complutense University of Madrid Marketing, 2002, Assistant Professor. Marketing, Consumer Behavior, Retail Management, Development of New



Producers, Sustainable Development.

**Jimmy Torrez,** Ph.D., University of California, 1998, Assistant Professor. Externalities of Free Trade; The Effect of Bureaucracy on Goods and Capital Markets; Market Inefficiencies; International Capital Markets.

# **ADMISSION REQUIREMENTS:**

# General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific Program Requirements:**

All applicants must hold a bachelor's degree or higher from a recognized university to be eligible to enroll in the Doctoral Program in Business Administration. For admission to the Program, the following elements will be considered:

- 1. An overall grade point average of at least 3.00 in high school and 3.33 in graduate studies, if applicable (based on 4.00 scale).
- 2. Verbal and written proficiency of the Spanish and English languages.
- 3. Have approved at least one course in each of the following with a grade of no less than B Calculus I (Differential), Calculus II (Integral), and Matrix Algebra. (for a total of nine credits).
- 4. Interview with members of the Admissions Committee.
- 5. Verifiable list of research conducted and published, and a list of academic and professional achievements, if applicable.

### **Documents Required for the Admission Application:**

- 1. Two transcripts of all academic work completed at the baccalaureate (undergraduate) level and beyond.
- 2. Two recommendation letters from professors with whom you have taken courses.
- 3. Written essay discussing the applicant's reason to select this Program.

### **GRADUATION REQUIREMENTS:**

Students seeking a Doctoral degree at the University of Puerto Rico, Rio Piedras Campus must satisfy all general requirements set forth by the School of Graduate Studies as well as requirements set forth by the Doctor of Business Administration Program:

- 1. The 64 required course credits with an academic index of no less than 3.00 (in a scale of 4.00).
- 2. Approval of the comprehensive exam on the fundamental principles in the area of your specialization and other topics relevant to your studies.
- 3. Approval of four credits in doctoral seminars.
- 4. Submit and approve a dissertation.

### STUDY PROGRAM:

Program Requirements	Credits
Core Courses	12
ECOG 6701 - Managerial Microeconomics: Price Theory	3
ECOG 8005 - Managerial Macroeconomics	3
ADMI 6715- Research Methodology for Management Sciences and Administrative	3
MECU 8005 – Integrated Probabilistic and Statistical Analysis	3
Courses in Research Methodology	9
<b>Courses Requirements in the Specialty</b>	6
<b>Elective Courses in the Specialty</b>	12
Free Electives	9
Doctoral Seminars	4
ADMI 8105 Doctoral Dissertation	12 (minimun)
Total of Credits	64

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

### ECOG 6701 Managerial Micro-Economics: Theory of Values

Three credits. Three hours of conference a week.

The logic of micro-economic analysis. A detailed analysis of the mathematical relationship of supply and demand in a theoretical purely competitive market, an imperfect competition market and a monopoly condition. The purpose of this course is to train the manager in the strict application of the tools and techniques of economic analysis.

#### **ECOG 8005 Managerial Macroeconomics**

Three credits. Three hours of conference a week. Prerequisite: ECOG 6567 or equivalent to Calculus I.

This doctoral-level course involves analysis of national income, employment, and price levels. We analyze monetary and fiscal policy and how these policies affect the three measurements of the aggregate economy. We explore different theories and their predicted relationship of government policy to national welfare.

# ADMI 6715 Research Methodology for the Management and Administrative Sciences

Three credits. Three hours of conference a week.

Study of management and administrative research. Emphasis on the applicability of research to

solve problems and formulate theoretical managerial studies. Discussion of lectures and cases related to the procedures used in the management theory construction by the leaders in the management and administrative sciences. Also, the course will discuss how paradigms emerge and how the established paradigms have been transformed. This course is offered in-person, hybrid, and online.

### MECU 8005 Integrated Probabilistic and Statistical Analysis

Three credits. Three hours of conference a week.

1. At least one statistics course of master's degree level. 2. Mathematic courses including differential and integral calculus. 3. Course of matrix algebra or its equivalent. 4. Knowledge of a statistics program (for example, SAS, SPSS, NCSS, Minitab). Comprehensive study of the principles of probabilistic and statistical analysis. Includes the fundamentals of stochastic and deterministic models necessary to understand the modeling used in the field of business.

### **ADMI 8105 Doctoral Dissertation**

Four Credits. Four hours of doctoral dissertation per week.

Prerequisite: Comprehensive exam approval.

The doctoral dissertation course is designed to demonstrate the students' ability to create and defend a proposal and conclusion of a doctoral thesis. This process is made with the assistance of the counseling committee which has the main function of helping the student in the development of a product with the highest quality. The student will have to complete a minimum of twelve credits of doctoral dissertation.

#### OTHER COURSE DESCRIPTIONS:

#### **ADMINISTRATION**

#### **ADMI 8005 Doctoral Seminar**

Credit. Five three-hour seminar sessions during the semester.

Prerequisite: Doctoral Program student.

Discussion of contemporaneous topics of investigative and empirical character relevant to the field of business administration. Study of the ethical, environmental and social dilemmas, and implications of management decisions, the entrepreneurship theory and activities, and the educational methodology. Development of skills for electronic information search and preparation of publishable articles. Topics will vary each time the seminar is offered. This course will be repeated at least four times.

#### INTERNATIONAL TRADE

#### **COIN 8005 International Business Seminar**

Three credits. Three hours of seminar a week.

Previous requirements: ECOG 6701, ECOG 6703, MECU 8005.

Discussion of concepts and theories of international business, advantages and disadvantages of the economic and political agreements between countries, and international managerial policy alternatives used by the firm, including those used in Latin America. Study of the institutions and processes that affect international business behavior, the interrelation between nations, and international firms.

### COIN 8006 Legal and Regulatory Aspects of International Business

Three credits. Three hours of seminar a week.

Study and analysis of the current and emergent national laws and regulations for decision making related to international business and the institutions regulating international transactions. Includes the legal, governmental and political background and aspects affecting the commercial transaction of the multinational enterprises in Latin America and the Caribbean.

### **COIN 8007 International Business in Latin America**

Three credits. Three hours of discussion per week.

Prerequisites: COIN 8005

Issues related to the Latin American business transactions, the integration process and their relations with g-7's countries. This course will be offered in-person, hybrid, at-distance and online.

### **COIN 8008. International Operations Management**

Three credits. Three hours of lecture per week.

Prerequisites: COIN 8005

Analysis and study of the supply chains, logistics systems, and productive systems necessary to provide, maintain, and manage the flow of materials and information in organizations operating at an international scale. The course provides the student a space for a detailed and critical analysis of the design of such systems, and so that the student examines the latest research carried out on these themes.

### COIN 8015 International Organizational Design, Structure and Culture

Three credits. Three hours of seminar a week.

Previous requirements: COIN 8005

Study of most recent organizational design, structure, and culture theories and their effects on the performance, efficiency, effectiveness and adaptability of the international enterprise. Emphasis in the study of cultural manifestations in the enterprise performance and ways to manage them.

#### **COIN 8016 Comparative Business Systems**

Three credits. Three hours of seminar a week.

Previous requirements: COIN 8005

Study and analysis of differences in process, structure and power, among others, within the organization in different countries. Emphasis on the comparison of the business processes and practices in the United States, Europe, Japan, Latin America and the Caribbean using as reference the emergent literature on organizational culture, organizational sciences and classic contingency theory. This course will be offered in the following modalities: in-person, hybrid, and online.

### **COIN 8018 Independent Studies on International Business**

Three credits. Three hours of discussion per week.

Prerequisites: COIN 8005 & 8016

Independent research specialized in one of the areas of international business chosen by the student after consultation with an expert professor in the field.

#### **COIN 8025 International Finance and Economics**

Three credits. Three hours of seminar a week.

Prerequisite: ECOG 6701 or its equivalent or 6703 or its equivalent.

Study of the international monetary system and its role in determining currency exchange rates. The factors influencing international investments, the characteristics of the international financial institutions, and their relation to domestic markets will be analyzed.

# **COIN 8026 International Business Strategy**

Three credits. Three hours of seminar a week.

Previous requirements: COIN 8005

Study of different frameworks for evaluating competitive positions in an uncertain environment and descriptive models of the future performance of enterprises competing in international industries. Comparisons between multi-domestic and transnational strategies and global alliances, including Latin American enterprises.

#### **COIN 8027 Contemporary Issues in International Business and Trade.**

Three credits. Three hours of seminar a week.

Prerequisite: COIN 8005

Study of theories and research methodologies of contemporary topics in the fields of international commerce and business. The course can be repeated up to a maximum of four times, whenever the topic does not repeat itself.

### **COIN 8028 International Marketing Strategies**

Three credits. Three hours of seminar a week.

Previous requirements: COIN 8005

Critical analysis and the development of marketing strategies and tactics used by multinational corporations in international markets. This course can be offered in-person, hybrid and online.



#### **FINANCE**

### FING 8005 Theory of Finance I

Three credits. Three hours of seminar a week.

Previous requirements: ECOG 6701, 6703 y MECU 8005

Discussion of the most recent research trends in the finance discipline. Emphasis on the impact of the theory on the financial research conceptual frameworks in Latin America and the Caribbean. Critical analysis of recent legal, social, and ethical issues in the financial and economic environment.

# FING 8006 Theory of Finance II

Three credits. Three hours of seminar a week.

Previous requirements: FING 8005

The application of the financial theory will be discussed in the broader context of the corporation. The corporate sectors of manufacturing and services will be examined. Study of the revision of the empirical evidence from the perspective of economic positivism. The application of the financial theory in Latin America, the Caribbean and the United States will be emphasized.

### FING 8017 Quantitative Methods for Finance

Three credits. Three hours of seminar a week.

Previous requirements: FING 8005

Study of the advanced methodological tools required to do research in finance and investment analysis. The modern portfolio theory will be emphasized. Software programs of optimization and statistical analysis will be used to evaluate and to exam the corporations and the investment markets of Latin America and the Caribbean.

### **FING 8019 Independent Studies in Finance**

Three credits. Three hours of seminar a week.

Previous requirements: FING 8006

Independent research in a specialized finance topic in an area of interest whose content is partially or not offered in other courses of the doctoral program. It is fulfilled with the help of a professor who is an expert in the topic. This course can be repeated up to two times (6 credits).

#### **FING 8025 Investment Markets**

Three credits. Three hours of seminar a week.

Previous requirements: FING 8005

The most recent research of diverse lines of thought on the investment area and the interrelation of those lines with the impact of the investment methods in the domestic, Latin American, and the Caribbean financial markets will be analyzed. Also, the theoretical views for analyzing the topic of investment markets under uncertainty within the scope of other disciplines such as microeconomics, macroeconomics and accounting will be discussed.

### **FING 8027 Corporate Finance**

Three credits. Three hours of seminar a week.

Previous requirements: FING 8005

The research results of the most recent and controversial developments in the area of corporate finance will be studied. The modern corporation's financial problems and possible research solutions to these problems will be discussed. The results of research projects regarding the finance of modern Latin American corporations will be thoroughly analyzed.

### FING 8029 Contemporary Topics in Financial Markets

Three credits. Three hours of seminar a week.

Previous requirements: FING 8005

Integrative study of the structure and dynamics of international financial markets and their linkages to domestic markets. Emphasis on the recent studies on the optimization of international financial assets portfolios.

# **Graduate School of Planning**

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Website: <a href="http://graduados.uprrp.edu/planificación">https://graduados.uprrp.edu/planificación</a> or <a href="https://planificacion.uprrp.edu/">https://planificacion.uprrp.edu/</a>

**DEGREE:** 

### **Master of Planning**

#### **ACCREDITATIONS:**

Planning Accreditation Board of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning

#### **PROFESSORS:**

Maritza Barreto Orta, Ph.D., University of Puerto Rico, Mayagüez Campus, 1996. Remote Sensing, Natural Disaster Management, Coastal Zone Management, Geology, Physical Geography, Remote Sensing Imagery.

**Aurelio Castro Jimenez**, MA, Sacred Heart University, 2006. Instructor. Computer Systems and GIS. Analysis Methods for Planning

**Angeliz Encarnación Burgos,** Ph.D. University of Texas, Austin, 2020. Professor Auxiliary. Community and Regional Planning, specializing in urban development and health.

**Rafael L. Irizarry Odlum**, Ed.D, Harvard University, 1981, Professor. Higher education, school dropout. Educational Planning, Planning Theory, Social and Educational Policy.

**Criseida Navarro Díaz,** Ph.D., Massachusetts Institute of Technology 2005, Associate Professor. Regional development and urban planning.

**Norma I. Peña Rivera,** Ph.D., University of Illinois, Chicago, 2005. Associate Professor. Transportation Systems and Livable City, Urban Planning and Transportation.

**Raúl Santiago Bartolomei,** Ph.D., University of Southern California, Los Angeles, 2019, Assistant Professor. International development, housing, climate change, disaster recovery, local and regional economic development, infrastructure planning, and environmental planning.

**Ariam Torres Cordero**, Ph.D., University of Illinois at Urbana-Champaign, 2022. Assistant Professor. Urban, environmental, and coastal planning, bottom-up community planning, environmental and climate justice, and climate action planning, including disaster recovery, climate adaptation, and loss and damage.

### **ADMISSION REQUIREMENTS:**

### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones\_graduadas/

### **Specific Master's Program Requirements**

The student must meet the following requirements, in addition to those established by the Río Piedras Campus:

- 1. Bachelor's degree from an accredited university with an academic index of 3.00 points or its equivalent.
- 2. Approval of introductory courses in mathematics, statistics, sociology and economics with a grade of A or B. It is recommended to take them during high school. The Graduate School of Planning (EGP) offers the PLAN 5005 course (4 crs.) during the first semester covering the areas of mathematics, statistics, and economics.
- 3. A one-page, double-spaced essay explaining the reasons for selecting this curriculum.
- 4. Proficiency in Spanish and English.
- 5. Management of computerized programs and information systems.
- 6. Two letters of recommendation using the form that appears on <u>Admissions (upr.edu)</u> If necessary, you will be required to attend an interview scheduled by the Admissions Committee.

### **Required Documents for the Application for Admission**

Complete the Application for Admission process using the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>

The entire admission process is done online, including the payment of the Admission Fee.

- 2. Credit Transcript
- 3. Two Letters of Recommendation.
- 4. Written Essay

### **GRADUATION REQUIREMENTS:**

- 1. Complete the 46-credit approved program of study in an area of emphasis with an academic index of no less than 3.00 points. Courses must be passed with A or B.
- 2. Complete the requirements of the degree within a maximum period of four (4) years. In meritorious cases, if the student does not complete the requirements within the regulatory period, he/she may request an extension to the Dean's Office of Graduate Studies and Research through the Graduate School of Planning. (Certification No. 95 of the 2019-2020 Academic Year from the Academic Senate of the Rio Campus Stones).

#### PROGRAM OF STUDY:

Program Requirements		
Core Courses	28	
PLAN 6076 History and Theory of Planning		

Program Requirements	Credits
PLAN 6077 Introduction to the Planning Profession: The Implementation Dilemma	3
PLAN 6602 Geographic Information Systems for Planning	4
PLAN 6552 Methods of Analysis for Planning	4
PLAN 6601 State, Market and Governance in Planning	3
PLAN 6116 Planning Law	3
PLAN 6603 Fundamentals of Plan Making	3
PLAN 6996 Planning Practicum	5
Courses for Area of Emphasis: Society and Environment	9
PLAN 6135 Society, Environment and Planning	3
PLAN 6607 Analysis Techniques for Environmental Planning	3
PLAN 6617 Environmental Policy and Natural Resources	3
Courses for Area of Emphasis: Urban and Territorial	9
PLAN 6089 Urban and Territorial Planning	3
PLAN 6525 Urban Structure	3
PLAN 6528 Urban Policy	3
Courses for Area of Emphasis: Economic Development and Community	9
PLAN 6604 Theories of Community and Economic Development	3
PLAN 6611 Tools and Techniques for the Analysis of Economic Development Issues	3
PLAN 6605 Economic Development and Community Policies	3
Free Electives	9
TOTAL	46

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# PLAN 6076 Planning History and Theory

Three credits. Three hours of lecture a week.

The course examines the historical development of Planning in Puerto Rico and the United States, Latin America and Europe and evaluates its results. It presents the main theoretical debates of the discipline of Planning within its historical framework. It also evaluates planning theories as a

method that applies knowledge to action to solve society's economic, social, urban, and/or environmental problems in conditions of certainty, uncertainty, risk and ambiguity. It introduces the concepts of general interest and public interest, as well as the central axes of the program: development, and territory, highlighting their topicality. Face-to-face, hybrid and online course modes.

#### PLAN 6077 Introduction to the Planning Profession: The Implementation Dilemma

Three credits. Three hours of lecture per week.

Corequisites: PLAN 6076

The course introduces planning as a process and profession, its methods and objects. It outlines planning tools available by theme, scale, and context of the intervention. It discusses the governmental challenges to implementation within these contexts and the alternatives to overcome them. It also discusses legal challenges to implementation, e.g., property and inheritance rights, due process requirements, the environmental legal framework, and citizen participation requirements. It provides a window into the areas of emphasis, incorporating the themes, contexts, and scales covered in the case studies and guest speakers. Face-to-face, hybrid, and online course modes.

# PLAN 6602 Geographic Information Systems for Planning

Four credits. Two-hour of lectures, one hour of discussion, and one hour of laboratory per week. Prerequisite: Undergraduate level statistics or mathematics course.

Lecture and discussion on the method and life cycle of Geographic Information Systems (GIS), so that students can use GIS technologies for the construction of scenarios and solve problems of planning, regulations and permitting, as well as private and public property tenures and ownership. Geographic information technologies, the collection, organization, and interpretation of geographic data will be studied, emphasizing demonstrations and exercises including planning scenarios and their relationship with current regulations and laws. The course will introduce the tools of field data collection and publication of results using the concept of maps and products on the internet. Each topic will end with hands-on exercises on the techniques discussed. Face-to-face, hybrid and online course modes.

#### PLAN 6552 Research and Analysis Methods

Four credits. Three hours of lecture per week. Prerequisite: Undergraduate level statistics course.

Conference and discussion on methods used for the analysis of economic, social and environmental problems in an urban and regional planning context. Methods of gathering, organizing, summarizing, visualizing and interpreting data will be studied, paying particular attention to the management of social data.

# PLAN 6601 State, Market and Governance in Planning

Three credits. Three hours of seminars per week.

Prerequisites: PLAN 6076, PLAN 6602, PLAN 6077, PLAN 6552, PLAN 6116, PLAN 6603.

The course presents the institutional frameworks under which planning is practiced as a profession. It discusses the role and limits of the market and the state. It addresses issues of governance, participation, deliberation, and social/civil movements towards diversity and its limits. It also discusses the ethical and functional conflicts arising from these contexts. In addition, it addresses the legal impact of privatization on administrative design, the transformation of public law into a market economy, the examination of administrative law legislation and jurisprudence, and other legal aspects such as public procurement, access to public information, and citizen intervention in administrative processes. Face-to-face, hybrid and online course modalities.

# PLAN 6116 Seminar: Planning Law

Three credits. Three hours of lecture a week.

The legal and administrative framework of planning in Puerto Rico and the main instruments for the control and regulation of land uses, including zoning, zoning, flood control, historic zones, neighborhood facilities and certifications. This course is offered in face-to-face, hybrid, and online modalities.

#### PLAN 6603 Fundamentals of Plan Making

Three credits. Two hours of lecture or one hour of discussion per week.

Prerequisites: PLAN 6076 Corequisites: PLAN 6552

This course is an introduction to the basic elements of a comprehensive local plan and the process of developing it. Emphasis will be placed on the logic behind this type of exercise and its wider application. The course will expose students to the main methods and techniques of data collection, analysis, and presentation for planning and plan-making. It discusses the role of different stakeholders in the local planning process and the importance of their effective participation. It examines various models for involving citizens and citizen organizations in the planning process and discuss the various roles that planners can play within the framework of a participatory strategy. Students are expected to develop an understanding of what a plan is (its logic), how to make plans, and the role of institutions and multiple actors in the process of making them. Face-to-face, hybrid, and online course modalities.

# PLAN 6996 Practicum Practice of Planning

Five credits. Prerequisite: PLAN 6076, 6602, 6077, 6552, 6116 and 6603.

This course is the Capstone project of the master's program in planning. Students and faculty collaborate in the analysis of a planning problem and collaboratively develop a planning instrument. It addresses issues and conditions specific to the selected area. They clearly link findings and recommendations to field research data and/or secondary data. They integrate the theory and methods they have learned during the core courses. The course has a real client. The client varies by semester. The instrument or product to be developed may include

methodologies, public policies, plans, programs, projects, guidelines, and regulations, among others. Selecting the appropriate instrument for the situation to be addressed is part of the exercise. They must select a scope and scale appropriate to the nature of this course and the time available. Each student is responsible for the design and programming of at least one intervention. Face-to-face, hybrid, and online course modes.

# PLAN 6135 Society, Environment and Planning

Three credits. Three hours of discussion per week.

The study of how human society and nature shape each other over time and the implications of such interactions for planning. Examination of three central themes using the approaches of political ecology and environmental history: (1) the origins and history of cultural values about nature, (2) the role of science in defining environmental problems and in producing images of nature for environmental analysis and regulation, and, (3) the political context of environmental intervention (public policy and planning), as well as social struggles around environmental issues. This course is offered in face-to-face, hybrid, and online modalities.

# PLAN 6607 Techniques of Analysis for Environmental Planning.

Credits: 3.

Methodologies and tools for the study of environmental planning. The main objective of the course is to equip students with (a) the basic skills necessary to identify sources of pollution; (b) the basic methods and tools used to measure the amount of pollution and to assess its effects; (c) the terminology and parameters of the types of pollutants, their nature, composition, and magnitude; (d) the basic criteria used in stating the nature and magnitude of environmental problems. Air, water, and noise pollution, waste disposal, and aesthetics.

#### PLAN 6617 Environmental Policy and Natural Resources

Three credits. Three hours of lecture per week.

Prerequisite: PLAN 6076, PLAN 6616 or Professor's Authorization.

Corequisite: PLAN 6135

Introduction to the physiological and legal foundations and contemporary debates of environmental public policy. The dominant practices and institutions of environmental management are analyzed, and alternatives from the perspective of sustainability and environmental justice are explored. The course seeks to develop a critical view of environmental public policy processes. It discusses the justifications and instruments of environmental public policy, the challenges of its implementation, the techniques of evaluation (cost-benefit and deliberative) of policies, the role of values and public opinion and specific policies of Puerto Rico on the evaluation of environmental impacts, environmental justice, the role of the federal government and municipalities, citizen participation, forest and water management, coastal zone management, and land use planning. The format of the course is seminary, based on discussion and critical analysis of contemporary readings and issues.

#### PLAN 6089 Urban and Territorial Planning

Three credits. Three hours of lecture per week.

Prerequisites: PLAN 6076

An introductory course in spatial concepts of planning, urban design and public policies on territorial organization. It examines the structure of cities and the historic and contemporary forces that have shaped its present form. It examines the urbanization processes, by taking into account the agents that intervene in shaping the city. It presents models of analysis and theories that help understand the formation of built spaces and the public policies that attempt to manage the processes. Class discussions will give special attention to the insular nature of our territory and to implementation strategies that are adequate for this reality. Course offered face-to-face, hybrid and online.

#### PLAN 6525 Urban Structure

Four credits. Three hours of lecture per week.

prerequisites: plan 6089. corequisites: plan 6528.

The course offers an integrating experience of theory and practice in a workshop format in which students apply urban and regional planning analysis techniques, to examine the morphology, order and qualities of urban space and its inhabitants, including geographical, sociological, economic, functional, and technological factors that affect urban related suburban and rural areas in cities and regions. An ecological approach is used to understand what is the combination of forces that affect the growth and organization of these areas through a team project. The workshop seeks to train the student through constant action-reflection sequences during weekly group meetings with the professor, a client and other planning professionals in virtual as well as face-to-face interactions. The workshop format requires that students be proactive in their work, and likewise, they should take advantage of face-to-face and virtual meetings to discuss the progress of teamwork. This course will be offered face-to-face, hybrid, distance and online modalities.

# PLAN 6528 Urban Development Policy

Three credits. Three hours of lecture a week.

Prerequisite: PLAN 6076 Corequisite: PLAN 6089

This course seeks to introduce the student to think as an urban strategic planner, linking the city to the social, regional and geopolitical environment. Urban policy and instruments available to address today's urban issues or tensions are defined. Methods of policy evolution in the urban environment are studied. It learns from the urban policy used to address urban problems or tensions

throughout history. The urban issues or tensions of the present are discussed, both in Puerto Rico and abroad. Emphasis is placed on the aspects of strategic planning that could help address them and the aspects that concern the development plans to manage the shape of the city and some plans that show the evolution of urban policies in Puerto Rico. It examines the urban policies that have influenced the shaping of the social and built space of the sector.

#### PLAN 6604 Theories of Community and Economic Development

Three credits. Three hours of seminar per week.

Prerequisite: PLAN 6076

This course combines concepts and theories of "community development" and "economic development" beyond growth. The course approaches community and economic development through two lenses. The first is Shaffer's star, which takes aim at resources, markets, rules, society, decision-making, and community space. The second is Flora's community capital framework, which is based on seven assets: financial, political, social, human, cultural, natural, and built. To reason about planning problems when applying these lenses, classical and contemporary theories of growth and development, and their application to contemporary problems of community and economic development, are analyzed. The course will also include discussion of these theories in the context of decision-making within local planning from a community and economic perspective. Face-to-face, hybrid and online course modalities.

#### PLAN 6611 Tools and Techniques for Analyzing Economic Development Issues

Three credits. Three hours of seminar per week.

Corequisite: PLAN 6604.

Every planning process starts with three elements: a project or problem, a baseline analysis, and an aim to provide a future scenario. Prior to proposing solutions, planners seek to understand their communities inside and out, as they seek to identify the forces for change. This class teaches you the basic planning methods planners use to understand a locality. The course entails two streams of knowledge: to teach you how to analyze the current situation, to interpret the analysis, and to make projections based on your empirical results.

#### PLAN 6605 Community and Economic Development Policy

Three credits. Three hours of seminar per week.

Prerequisite: PLAN 6604.

The course explores ways in which economic development policy relates to current discussions of inequality and neighborhood change. It situates community development policy within its historical, political, and institutional contexts. It introduces policies designed to address accessibility and overall Opportunity. It presents strategies to create and preserve accessibility and affordability, including those related to land-use planning.

It introduces community economic development policy in the us and Puerto

Rico, focusing on small business development, low-wage workers, and economic democracy. It uses an analysis of scale to situate analyzed polices in the context of federalism. It explores the role of the state in social welfare and the role of collective action in advancing access to opportunity.

#### OTHER COURSE DESCRIPTIONS:

#### PLAN 6006 Seminar on Municipal Planning

Three credits. Three hours of lecture per week.

This course analyzes centralization and decentralization problems, municipal level citizen participation, municipal problematic applying to policies, economics, socials, urbans, and municipal organization to promote change and development. Analyze specific cases of municipalities in Puerto Rico and the possibility of municipal organization for planning.

Face-to-face, hybrid and online modalities.

# **PLAN 6013 Planning of Economic Systems**

Three credits. Three hours of lecture per week.

Prerequisite: PLAN 6076

Fundamental theoretical knowledge about the behavior of aggregate or institutional economic systems, essential for the study of the professional field of planning. The topics cover microeconomic and macroeconomic models through readings and lectures. The relationship between real and financial resources is studied at both the corporate and aggregate scales. The planning role of management in corporate systems and the formulation of fiscal and monetary public policy are framed within the economic models used as instruments of conceptualization and analysis.

#### PLAN 6016 Urban reality, Perception, and Image.

Credits: 3.

Prerequisites: PLAN 6501-02 or permission of the instructor.

Discussion of the dynamic interaction of man and his urban environment. Inventory and analysis of the urban landscape and its various components. Discussion of perceptual processes and mechanisms used to form urban images. Role of cultural and other values in the structuring and evaluation of urban images. The main components of urban images. Their utility for urban planning special characteristics of the Puerto Rican urban environment as it really is, as it is perceived by its users, and as it is depicted in images. Their role a s basic guides for the urban design and planning to be carried out in Puerto Rico.

# PLAN 6027 Squatter settlements and Urban development.

Credits: 3.

A study of squatter settlements as they relate to national urban and rural development policies, especially in developing countries.

# PLAN 6028 Advanced Urban Analysis

Three credits. Three hours of lecture per week.

Prerequisite: PLAN 6502, 6509.

Presentation of the most advanced techniques used in the analysis of the urbanization process and the preparation of urban growth and development plans. Techniques used in the study of land use, housing, and transportation; Cost-benefit analysis of alternative patterns of urban development. The methodology is used to determine the space required for the different economic and population activities that take place in an urban area.

# PLAN 6029 The Urban Development of the Caribbean: History, Typology and Structure Three credits. Three hours of lecture per week.

Historical and typological analysis of urban development in the Caribbean. Emphasis will be placed on the discussion of the economic, demographic, social and cultural factors that have significantly influenced the Antillean urban structure. A typology of Antillean cities and the characteristics of the Antillean city in terms of its architecture, literature, painting, theater, cinema and religion will be discussed.

#### PLAN 6030 Transportation and Land Use

Three credits.

Prerequisite: PLAN 6502

Analysis of the patterns of interaction between land uses and the generation and attraction of trips. Models and techniques for the planning of transportation systems. Design elements and basic characteristics of different transportation systems.

#### PLAN 6037 Urban Design

Three credits.

The three-dimensional design of specific development projects within the normative context of the general urban plan. Problems may involve issues such as: new developments expanding an existing urban area or an entirely new town, or large-scale redevelopment with different kinds of buildings and land uses, or a detailed study of a particular civic core.

#### PLAN 6038 Economic Analysis

Three credits. Three hours of lecture a week.

Examination of macroeconomic and macroeconomic theories, especially those relating to

economic development.

# PLAN 6041 Management for Development

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisites: PLAN 6076, 6510

Corequisites: PLAN 6013.

Lectures, readings, and case studies worldwide on natural and financial resource management, sustainable development, the study of the literature on the post-industrial era, and concepts related to finance and risk management. Explanation of a strategy to modernize certain economies in which the State has occupied a place analogous in importance and similar in certain respects to the agricultural sector as a container of great potential for hidden savings.

# **PLAN 6046 Development Projects**

Three credits.

The preparation, presentation, evaluation of development projects and their relationship with global and sectoral economic plans. Technical and commercial feasibility.

#### PLAN 6047 FISCAL AND FINANCIAL PLANNING

Credits: 3

Main theoretical elements related to the influence of the budget as a whole, and of the principal types of taxes and subsidies, upon the allocation of real and financial resources to various kinds of consumption and investment, both domestic and foreign. The essentials of monetary and banking theory, the main characteristics of actual budgetary processes and financial institutions. The application of theory and the use of institutions in realistic fiscal and financial programming and planning. discussion and lectures will be completed.

# **PLAN 6048 Location Theory**

Three credits.

Study of the general theory of location and its variants according to which they are applied to different economic sectors. Pragmatic studies of the application of the theory in national, regional, and signature or project planning will be discussed and evaluated.

# PLAN 6050 Techniques of Analysis and Programming in Regional Planning

Credits: 3.

Analytical techniques that have been utilized in regional and spatial analysis. These techniques can be divided into two large groups: those derived from the study of geographical phenomena, and those that are modifications of techniques developed for the study of social and economic factors in a non-spatial context. Such techniques as input-output programming, gravity, and potential models are emphasized.

# PLAN 6059 Spatial Decision Support and Policy Evaluation Systems

Four credits. Two hours of lecture, one hour of discussion and two hours of laboratory per week. Preferably, but not indispensable: PLAN 6020, PLAN 6549, PLAN 6530

Conference, discussion and laboratory on the theory and practice of decision support systems designed for the evaluation of territorial policy and decision making. The students will mainly examine "Xplorah", the system developed by the graduate school of planning used for territorial planning in Puerto Rico.

#### PLAN 6068 Advanced Reading in Planning

Three credits. Three to six hours of lab time a week. Prerequisite: Director's authorization.

Special course for students who wish to pursue advanced studies in topics or areas of interest. Face-to-face, hybrid and online course modalities.

# **PLAN 6070 Social Planning Techniques**

Three credits. Three hours of lecture a week.

Study of techniques and methods for social service planning. These include cost-benefit analysis, clientele analysis, and human resources analysis, among others.

# PLAN 6075 Research Project II

Three credits.

Prerequisite: PLAN 6080

Special course for students who wish to pursue advanced studies in topics or areas of interest. Topics will vary according to the needs, interests, and availability of students and staff.

#### PLAN 6095 The Planning of Energy Policy

Three credits.

Application of analytical and planning methods to the management and use of energy resources. Technical aspects of energy generation and distribution technology and their implications for cost and environmental quality. Aspects of planning an energy policy for Puerto Rico within an international context of scarcity, energy use, conservation, and productivity.

#### PLAN 6096 Analysis and Social Policies for Planning

Three credits. Three hours of lecture per week.

Prerequisite: PLAN 6076

The course focuses on the foundations and functioning of the welfare state in societies with market

economies and the current restructuring on the basis of private enterprise, self-management and community action. It examines the objectives and instruments of social policy to achieve greater well-being and quality of life, security, equity and community solidarity and their indicators, as well as their instrumental use for economic development, modernization and citizen participation in planning processes. The methods and techniques of social policy analysis are used.

#### PLAN 6097 Economic Analysis and Policies for Planning

Three credits. Two hours of lecture and one discussion per week.

Prerequisite: Undergraduate economics course.

Corequisite: PLAN 6076

The basic elements of the instruments of micro and macroeconomics and their application in the specialized areas of planning: urban-territorial, environmental and social. It discusses the application of economic analysis for the achievement of social welfare, land use, impacts on the environment and natural resources in the current context of globalization.

#### PLAN 6098 Environmental Economics for Planners

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PLAN 6097

Conference and discussion for Master of Planning Students on the configuration of economic incentives that may improve or worsen environmental conditions. Human behavior in its natural environment will be studied, focusing on the economic restructuring necessary to avoid deforestation, erosion, desertification, salinization, and loss of biological and genetic diversity. To achieve an equilibrium between environmental impacts and economic institutions, possible public policy and institutional changes will be discussed, considering human needs in the context of a broader ecosystem. Various analysis tools will be applied to understand why there is environmental degradation, its consequences and possible measures to reverse it.

# PLAN 6115 Scenario Construction and Long-Term Planning

Three credits.

Examination of alternative methods of constructing scenarios as an instrument for long-range forecasting. Various techniques for constructing these scenarios will be examined, including Delphi and mathematical models. The use of scenarios in the long-range forecasting of technological change and other variables will also be examined, as well as case studies in which these techniques are used in planning.

# **PLAN 6117 Computer Applications in Planning**

Four credits.

The application of computer programs to the planning process includes its descriptive, analytical, alternative preparation, regression, programming, and spatial interaction phases. This course can

use up to 25% of online resources. Face-to-face, hybrid, and online course modalities.

# PLAN 6118 Needs Study and Customer Analysis

Three credits.

Examination of alternative models of needs studies and clientele analysis for community planning. Discussion of human service planning models, activities, pre-studies, including the determination of required data, methods of collecting information from secondary and primary sources, as well as techniques for analyzing information and communicating results.

# PLAN 6125 Social Impact Analysis of Public Projects

Three credits.

The social element in the evaluation of public projects and programs in the process of planning and development of public policies. Discussion of the conceptual and empirical aspects of analyses and evaluations of social impacts at the institutional, professional and community levels, as well as the presence or absence of distributive and equitable effects of proposed or existing programs, projects, plans, or policies.

# **PLAN 6485 Social Services Planning**

Three credits.

Theory, practice, and problems in the planning of social services, and methods currently in use. Both advanced and less-advanced societies will be considered, and the major social services to be examined will be education, health, social security, housing, public order, and recreation. A comparison between the social-service policies of several countries and those of Puerto Rico.

#### PLAN 6505 Urban environmental quality and Urban forms.

Credits: 3.

Prerequisite: PLAN 6016.

Discussion of the principles and techniques of urban design and environmental psychology. Use of urban design techniques in identification, analysis, and measurement of the quality of the urban environment---both the components of that environment and its totality as experienced by its users, by those engaged in its design, and by civic and government leaders. Urban design as a synthetic discipline whose techniques allow the formulation of alternatives in urban planning and urban environmental-quality control. The use of surveys, inventories, data-collection, and graphic presentations in urban design problems.

#### PLAN 6508 Advanced Urban Design Seminar

Three credits.

Prerequisite: PLAN 6016, 6505



Specific topics in urban design, taking design as a basic component of the type of urban planning that must be done in Puerto Rico. Topics may include urban design, land use and the urban master plan; "new towns"; future urban lifestyles and form; urban design and Puerto Rican cultural, psychological, and physiographic parameters.

# PLAN 6510 Workshop on methods for diagnosis, prognosis and programming

Three credits. Three and a half hours of laboratory work and one hour of lecture per week.

Prerequisites: PLAN 6076 and PLAN 6019.

co-requisite: PLAN 6077.

Techniques of statistical analysis, projection and prognosis, simulation methods of analysis of social dynamics. A practical approach is used through the application of games and the intense use of resources from the Pier Luigi Caldari computing center. Students learn to elaborate scenarios for evaluating alternative futures, through simulation models and role playing. students undertake a group work situation that simulates a professional experience in which they apply programming and project administration techniques. Special emphasis is placed in learning writing techniques for clear communication of ideas and arguments.

## PLAN 6513 Seminar: proposal for planning project

Three credits. Three hours of seminar per week. Prerequisites: approval of the medular courses.

Discussion of the content and requirements of the planning project. Develop the theoretical and methodological framework of the project. Written presentation of the proposal for the planning project.

#### PLAN 6526 Design of Urban Sectors

Three credits. Three hours of lecture a week.

Principles, rules and procedures of land-use planning at the neighborhood and community level; neighborhood vs. communal functions; movement within cities; regulations for neighborhood and community development; technologies relevant to the physical design of neighborhoods and communities; residential sectors; commercial centers and institutional areas; the perceptual elements of the urban environment.

# PLAN 6527 Housing and Urban Renewal

Three credits.

Analysis of the housing problem and government policies and programs aimed at solving it. Review of legislation, production, organization, financing, urban renewal, and communal facilities related to housing.

# PLAN 6529 Seminar: Urban Spatial Segregation

Three credits. Three hours of lecture a week.

Discussion of the characteristics and effects of spatial segregation, various models of segregation, including the dual city, its economic and social aspects, the isolation of various groups from society, and government policy on the subject.

#### PLAN 6530 Transportation Design

Three credits.

Prerequisite: PLAN 6502

Geometric design of internal circulation systems including general concepts, typical sections, criteria, standards and controls, capacity, relationship to adjacent land uses and development, right-of-way issues and access control; Characteristics and schematic geometric design of terminal areas.

## PLAN 6535 Urban Legislation, Administration and Financing

Three credits.

Examination and evaluation of the different legal, administrative and financial instruments for the implementation of policy on urban norms and plans, as well as for the control and guidance of urban land use and other urban activities.

#### PLAN 6537 Financing Urban Development and Housing

Three credits.

The urban development from the economic point of view: the mobilization of financial resources and the policy-making systems that channels these resources the economic aspects of urban development; national-urban relationships; urbanization and industrialization; the role of investment by new sectors of the economy; the economy of decentralization and centralization; and the elements of an urban development policy.

## PLAN 6538 Urban Planning and Programming

Three credits. Three hours of lecture a week.

The process by which the guidelines established by public urban development policies are translated or integrated into an urban master development plan (or regulatory plan) will be examined and discussed. Likewise, the way in which the macro-scale projections of the social, economic, and physical-spatial aspects implicit in the various public actions (transportation, land use, housing, education, health, etc.) are programmed or implemented at the less local urban scale, paying special attention to administrative and financial aspects. Face-to-face, hybrid and online course modes.

#### PLAN 6546 Techniques of Economic Programming

Four credits. Four hours of lecture per week.

A basic review and presentation of applied mathematics (matrix algebra, linear programming, etc.) needed to understand and prepare econometric models for planning.

# **PLAN 6547 Economic Programming Techniques**

Four credits. Four hours of lecture per week.

A basic examination and presentation of applied mathematics (matrix algebra, linear programming, and others), necessary to understand and prepare econometric models for analysis in planning.

#### PLAN 6568 Regional Development Policy

Three credits.

The principal problems of regional or territorial development with which nations are faced, such as unequal growth among regions, overurbanization, the role of natural resources in regional growth, and the criteria used for investment allocation among regions. The various policies that have been employed in regional development, with examples from Puerto Rico and Latin America. A discussion of the urgent need for national policies of urban growth, with examples.

# PLAN 6584 Evaluation of Plans, Programs and Projects

Three credits. Three hours of lecture and discussion and three and a half hours of workshop per week.

Prerequisite: PLAN 6076 and PLAN 6019 Corequisites: PLAN 6077 and PLAN 6549.

Summative and formative evaluation of plans, programs, and projects using quantitative and evaluative techniques to weigh the discrepancies between what is planned, its implementation, and achievements in terms of effectiveness and efficiency and to formulate recommendations for its improvement. Application to situations to identify and measure impacts on beneficiaries and affected parties. Techniques for presenting results are included.

#### PLAN 6586 Social Analysis Techniques

Three credits.

Social policy planning requires qualitative techniques that complement quantitative methodology, particularly in the programming aspects involved in the convergence of community development. The interests of affected groups, positively and negatively, must be adequately understood through specialized techniques that allow the planner to analyze the social consequences of government action or inaction.

#### PLAN 6590 Educational Planning

Three credits. Three hours of lecture a week.

Discussion of the most important purposes of the educational system influenced by different philosophies and demands of education. The fundamental process in educational planning and different approaches and techniques used in the field are studied.

# PLAN 6596 Urban Development and Environmental Change.

Credits: 3.

Urban-regional planning and development must consider the dynamic interrelation of such major urban systems as industry, transportation, electrical energy, water systems, and housing. The changing technology within each system determines major socio-economic variables such as urban employment, income, land use, and environmental change. This course analyzes the role of environmental resources in urban systems and their significance for technology selection and urban development.

# PLAN 6597 Urban Development and Environmental Change

Three credits.

Urban-regional planning and development depends on electric power, aqueduct systems, and residence. The technological mix within each system determines such variables as employment, income, land use, and environmental change. This course discusses the essential role of environmental resources in urban systems and their implications for the selection of new technologies for the urban development process.

#### PLAN 6598 Communities and the Environmental Problems

Three credits.

Analysis of the scientific, organizational, educational, and legal aspects of environmental problems and their impact on communities. It studies the economic and technological changes of the past 40 years that underlie these problems and the mobilizations of communities in the face of these changes. Visits will be made to communities involved in environmental struggles.

# PLAN 6606 Municipal Planning Seminar

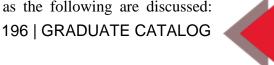
Three credits. Three hours of lecture a week.

This course analyzes the problems of centralization and decentralization, citizen participation at the municipal level, municipal problems in political, economic, social, urban terms, etc. And the municipal organization for the promotion of change and development. It analyzes specific cases of municipalities in Puerto Rico and the probability of the organization. Face-to-face, hybrid and online course modalities.

#### **PLAN 6609 University Planning**

Three credits.

A course on policies and planning of the University Education System and on the organization and planning processes of the Collegiate Campuses. Topics such as the following are discussed:



educational policy planning; planning of higher education at the regional and state levels; criteria for the location and site selection of the venues; specialization and size of venues; enrollment projections; academic planning by departments; structure and organization of courses; space utilization studies; campus development programming; university planning models; design considerations; traffic and parking studies; the campus development plan; landscaping and site improvements; University District Planning and Renewal; building programming; university housing; Academic buildings and central university services.

#### **PLAN 6614 Planning Project**

Three credits. Three hours of project per week. Prerequisites: 24 credits of medullar and optative courses; PLAN 6513 and the required comprehensive examination.

The project covers the entire planning process. An issue is defined and analyzed as a planning problem. Analyzes its causes or structures, propose alternative interventions, evaluate them and make a selection of one of those. Design an implementation and an evaluation plan. Oral presentation and defense of the project before advisors and faculty.

#### PLAN 6618 Environmental Design

Three credits.

The environmental value of good design in human, rural and urban populations is in constant confrontation with technological innovations and accelerated change. This course seeks to evaluate design from the point of view of the environment with a view to minimizing the negative values of development and stimulating its positive, social, economic and spatial values.

#### PLAN 6619 Environmental Studies for Planning

Three credits. Three hours of lecture a week.

It is evident that planning and the environment are so intimately related that it is almost impossible to conceive of planning today without careful consideration of the environmental relationships to the proposed plan. For this relationship to be better understood, it is necessary for the aspiring planner to be properly prepared and trained in some scientific knowledge relevant to the environment. Without this scientific basis, the knowledge acquired in other courses that involve aspects of ecology and methods in the conservation of the courses: water, air, soils, forests, etc., remains incomplete and, to some extent, superficial.

# PLAN 6620 Corporate Strategic Planning Seminar

Three credits. Three hours of lecture a week.

Prerequisite: PLAN 6616

Seminar on discussion and application of modern techniques of corporate strategic planning.

#### PLAN 6621 Environmental Control Administration

Three credits. Three hours of lecture a week.

Prerequisites: PLAN 6076, 6077

Analysis of the environment from an administrative perspective. Examination of how environmental management has been conceived, structured, and practiced. Study of the main legal and administrative strategies for the protection of environmental resources.

# PLAN 6635 History of Urban Planning in the New World

Four credits.

Systematic analysis of the history of urban planning in North, and South America, and the Caribbean, beginning with the prehistoric urban settlements of the Americas, the first urban centers in the Caribbean in the sixteenth century, and the evolution of urban development in the New World until the first half of the twentieth century. It will examine the sources of written and graphic materials available in local archives and libraries and methods of analysis to interpret and understand urban planning and development throughout history. Special emphasis will be placed on the tradition of urban development and planning in Puerto Rico and the Caribbean.

# **PLAN6896 Planning Project Continued**

No credits. Nine hours of conference per week.

Prerequisite: PLAN 6615

Continuation of the planning project, PLAN 6615. Students continue their research and have access to the library and other facilities of the School of Planning.

#### PLAN 6995 Advanced Reading in Planning

From one to six credits.

For students wishing to pursue more advanced studies in topics or areas of their interest. Independent study under supervision. (c)

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Website: <a href="http://graduados.uprrp.edu/planificación">https://graduados.uprrp.edu/planificación</a>, <a href="https://planificacion.uprrp.edu/">https://planificacion.uprrp.edu/</a>

#### **DEGREE:**

#### Post-Baccalaureate Academic Certificate in Disaster Reduction Planning

#### **PROFESSORS:**

**Barreto Orta, Maritza**, Ph.D., University of Puerto Rico, Mayagüez Campus, 1996. Remote Sensing, Natural Disaster Management, Coastal Zone Management, Geology, Physical Geography, Remote Sensing Imagery.

**Jaramillo Nieves, Lorna G.**, Ph.D., University of Colorado at Boulder, 2003, Ph.D., Geology. Epistemology of Science: The study of the construction of knowledge in the geological sciences. • Groundwater modeling. • Geological risk studies and environmental geology. • Application of remote sensing techniques to geological and environmental problems.

**Román Rivera, Glenda M.**, MS, JD., University of Wisconsin-Madison WI 2008,2020. M.S in Environmental Monitoring-specialist Remote Sensing. University of PR- School of Law – Juris Doctor.

**Santiago Bartolomei, Raul**, Ph.D., University of Southern California, Los Angeles, 2019, Assistant Professor. International Development, Housing, Climate Change, Disaster Recovery, Local and Regional Economic Development, Infrastructure Planning, and Environmental Planning

**Santos Hernandez, Jennifer**, Ph.D., University of Delaware, Newark, 2013. Assistant Professor. Collective Behavior and Social Movements, and Disasters, Race and Ethnicity, Integration of Social Vulnerability Perspectives, and Emergency Management in Puerto Rico.

#### **ADMISSION REQUIREMENTS:**

The Certificate Program in Planning for Disaster Reduction has space for fifteen students in each cohort. The admission requirements are as follows:

- 1. Bachelor's or master's degree with a minimum GPA of 3.00.
- 2. Two (2) official credit transcripts of completed degrees.
- 3. One (1) letter of recommendation.
- 4. Essay or letter of intent. Students with only a bachelor's degree from an accredited academic institution are encouraged to have some experience in disaster reduction or to clearly articulate their interests and future academic and professional plans in the essay.
- 5. Complete the application for admission on https://solicitud.upr.edu/.

6. The admissions process includes an interview with the Graduate School Admissions Committee for Planning if necessary.

# **GRADUATION REQUIREMENTS:**

Enrolled students will be able to complete the Certificate in three consecutive semesters. The student must pass sixteen or seventeen credits, with a grade of A, B or C and an overall GPA of 3.00 or higher.

#### **PROGRAM OF STUDY:**

	Program Requirements	Credits	
First semester (core courses)			
PLAN 6001	Introduction to Planning Theory and Practice	1	
PLAN 6002	Disaster Planning Theory	3	
PLAN 6003	Natural Hazards and Hazards	3	
Subtotal		7	
Second semester (core courses)			
PLAN 6004	Research Methods for Disaster Planning	3	
PLAN 6105	Regulatory and Public Policy Instruments for Disaster Planning	3	
Subtotal		6	
Third Semester (choose an elective)			
PLAN6106 Elective	Introduction to Critical Infrastructure	3	
PLAN 6107 Elective	Development and Social Vulnerability	3	
PLAN 6108	Professional Seminar	1	
Subtotal		4	
Total	<ul> <li>16 for those with 50% or more credits approved by a Master's in Planning and,</li> <li>17 credits for students from other programs who must take the 1-credit Introduction course.</li> <li>During the third semester, all students must select one of the two elective courses offered.</li> </ul>		

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# PLAN 6001 Introduction to Planning Theory and Practice

One credit. One hour of lecture per week.

This course provides an introduction to planning theory for practitioners. It covers the basic theoretical approaches to planning as a decision-making process, as well as its impacts on society and territory. The course includes an ethical perspective on planning and the role of the planner, based on a case study approach to disaster recovery. The student has the opportunity to apply planning theory to real and contextual situations that address the planning problem, the roles of the planner, stakeholders, and alternatives to solve planning problems. This course will be offered face-to-face, hybrid, distance learning, and online modalities.

#### PLAN 6002 Theory of Disaster Planning

Three credits. Three hours of lecture a week.

The purpose of the course is to introduce students to principal theoretical tools for disaster reduction. It exposes the students to emergency management operational frameworks, as well as to the dynamic, complex, and exponential properties that characterize emergency management; to the determinants of risk; and to the social production of the disaster impacts. The course will be offered face-to-face, hybrid at distance and online.

#### PLAN 6003 Natural Hazards and Hazards

Three credits. Three hours of lecture a week.

The course focuses on providing the student with basic knowledge about the origin, processes, occurrence and spatial distribution of natural hazards and risks such as earthquakes, tsunamis, hurricanes and tropical storms, extratropical cyclonic systems, floods (riverine and coastal), landslides, storm surge, tidal surges associated with extratropical events, droughts, coastal erosion, among others. Emphasis will be placed on understanding the challenge presented by climate change, bio/climatic change, the occurrence of extreme events, and how they affect the physical and social vulnerability of a geographical area. This course will be offered in face-to-face, hybrid, distance learning, and online modalities.

#### PLAN 6004 Research Methods for Disaster Planning

Three credits. Three hours of conference per week.

This course introduces the student to the application of methodological tools and planning techniques that support disaster reduction; including quantitative, qualitative, and mixed methods. The course is divided in three modules: 1) mitigation and preparedness techniques, 2) spatial dynamics analysis techniques, 3) post-disaster planning techniques. This course will be offered in four modalities: presential, hybrid, at distance and online.

# PLAN 6105 Regulatory and Public Policy Instruments for Disaster Planning

Three credits. Three hours of lecture a week.

The purpose of this course is to provide the student with an overview of regulatory frameworks and public policy instruments that impinge upon governmental decision-making before, during, and after disasters. The course covers the progression of disaster-related policy and the analytical tools that may inform governmental decision-making in disaster reduction planning and management. It emphasizes key emergency management policies and procedures, and how they inform mitigation decisions, and ultimately, the experiences of those affected by disasters. Students will be introduced to fundamental municipal, national and federal policies and documents. The course will be offered in four modalities: face-to-face, hybrid, at distance and online.

#### PLAN 6106 Introduction to Critical Infrastructure Systems

Three credits. Three hours of lecture per week.

This course offers a critical and comprehensive look at understanding the critical infrastructure, in all its complexity, of essential services for citizens (drinking water, food, medical resources, sanitation services, electricity, transportation and telecommunications, among others). It includes an analysis of cascade failures (multiple), as well as the interdependencies, social dimensions, and governance and institutions that govern infrastructure development and management considering disasters. This course will be offered in face-to-face, hybrid, distance learning, and online modalities.

#### PLAN 6107 Development and Social Vulnerability

Three credits. Three hours of lecture per week.

This course provides the student with the opportunity to understand the study of social vulnerability and its importance for disaster reduction planning. The course examines how individuals or groups have expertise in disaster reduction planning. In addition, it examines how individuals or groups have different experiences in disaster situations, elaborates on the capacities of different groups to promote resilience; and discusses how planning can reduce social vulnerability to disasters. This course will be offered in face-to-face, hybrid, distance learning, and online modalities.

#### **PLAN 6108 Professional Seminar**

A credit. One hour of seminar per week.

The seminar offers the student lessons learned by professionals who come from the governmental, academic, community, and third-sector sectors. Topics to be discussed include developing and creating new risks; socio-cultural competencies for comprehensive disaster risk management, challenges and solutions for interagency coordination, collaboration, and communication; management of consultancies and recovery projects; development of adaptation, mitigation, and

post-disaster recovery plans; and risk awareness and communication, among others. The purpose of the seminar is to expose students to an in-depth and realistic discussion on aspects of development, hazard creation and mitigation, post-disaster recovery; and planning to reduce the causes and dynamic pressures that create unsafe conditions and disaster risk. The seminar will be offered in face-to-face, hybrid, distance and online modalities.

# **College of Natural Sciences**

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**Phone:** (787) 764-0000 - extensions: 88109, 88110 y 87943

Email: <a href="mailto:biology.grad@upr.edu">biology.grad@upr.edu</a>
Website: <a href="mailto:http://biology.uprrp.edu/">http://biology.uprrp.edu/</a>

**DEGREE:** 

# **Master of Science in Biology**

#### **FACULTY:**

**Ackerman, James D.,** Ph.D. Florida State University, 1981. Professor. Ecology and evolutionary biology; invasive species biology; biogeography; plant systematics; biology of orchids. <a href="mailto:james.ackerman1@upr.edu">james.ackerman1@upr.edu</a>

**Agosto, José,** Ph.D. Brandeis University (2008), Associate Professor. Molecular genetics; neurobiology of circadian rhythms; neuroscience. jose.agosto1@upr.edu

**Bayman Gupta, Paul,** Ph.D. University of California at Berkeley, 1987. Professor. Mycology; phytopathology; mycorrhizae; mycorrhizae; microtoxins; biodegradation. paul.bayman@upr.edu

**Cuevas Viera, Elvira,** Ph.D. Venezuelan Institute of Scientific Research, 1983. Professor. Ecosystem ecology; nutrient cycling. <a href="mailto:elvira.cuevas@upr.edu">elvira.cuevas@upr.edu</a>

**Fristoe, Trevor,** Ph.D. University of New Mexico, 2015. Assistant Professor. Macroecology; interaction of environmental constraints and evolutionary forces that shape species distributions on Earth.. trevor.fristoe@upr.edu

**García Arrarás, José E.,** Ph.D. Harvard University, 1981. Professor. Organogenesis; developmental biology; cellular and molecular aspects of regeneration. jose.garcia36@upr.edu

**Ghezzi, Alfredo,** Ph.D. University of Texas at Austin (2006), Associate Professor. Behavioral genetics; addiction; epigenetics; molecular neuroscience. <a href="mailto:alfredo.ghezzi@upr.edu">alfredo.ghezzi@upr.edu</a>

**Giray, Tugrul,** Ph.D. University of Illinois, 1997. Professor. Social behavior of the honey bee; Apis mellifera; physiology and behavioral genetics. <a href="mailto:tugrul.giray@upr.edu">tugrul.giray@upr.edu</a>

**Joglar, Rafael,** Ph.D. University of Kansas, 1986. Professor. Systematics; ecology and conservation of West Indian reptiles and amphibians; biology of neotropical frogs of the Eleutherodactylus genus; conservation biology. rafael.joglar1@upr.edu



**Lasalde Dominicci, José A.,** Ph.D. University of Puerto Rico, 1988. Professor. Structure and function of the acetylcholine receptor; lipid and protein interactions in biological membranes; neuronal acetylcholine receptor and nicotine addiction. jose.lasalde@upr.edu

Maldonado Vlaar, Carmen S., Ph.D. Northeastern University, 1994. Professor. Neurobiology of drug addiction; behavioral neuropharmacology; functional neuroanatomy. carmen.maldonado7@upr.edu

**Massey, Steven E.,** Ph.D. University of Kent at Canterbury, 2004. Professor. Bioinformatics; molecular evolution; genome evolution; The origin of life; biological complexity. <a href="massey@upr.edu">steven.massey@upr.edu</a>

**Papa, Riccardo,** Ph.D. University of Parma, Italy (2003), Professor. Population's genetics; molecular aspects of development; systematic. <a href="mailto:riccardo.papa@upr.edu">riccardo.papa@upr.edu</a>

**Peterson, Esther,** Ph.D. University of Michigan-Ann Arbor (2009). Associate Professor. Cell biology; signaling pathways; cancer biology. <a href="mailto:esther.peterson@upr.edu">esther.peterson@upr.edu</a>

**Restrepo**, Carla, Ph.D. University of Florida, 1995. Professor. Landscape ecology; macroecology; frugivory and seed dissemination; conservation biology. <a href="mailto:carla.restrepo1@upr.edu">carla.restrepo1@upr.edu</a>

**Rodríguez-Martínez, José A.,** Ph.D. University of Puerto Rico, 2009. Associate Professor. Molecular recognition of nucleic acids; functional genomics; transcription factors. <a href="jose.rodriguez233@upr.edu">jose.rodriguez233@upr.edu</a>

**Rodríguez-Fernandez, Imilce A.,** Ph.D. University of California, Los Angeles, 2012. Assistant Professor. Microbiomes; host-microbe interactions and their influence on health and aging. <a href="mailto:imilce.rodriguez1@upr.edu">imilce.rodriguez1@upr.edu</a>

**Sabat, Alberto M., Ph.D.** State University of New York, 1990. Professor. Population biology and demography in plants and animals. sabat1@upr.edu

**Santiago Valentín, Eugenio,** Ph.D. University of Washington, Seattle, 1999. Professor. Systematics and plant evolution; island plant biology, conservation. <a href="mailto:eugenio.santiago@upr.edu">eugenio.santiago@upr.edu</a>

**Toranzos, Gary A.,** Ph.D. University of Arizona, 1985. Professor. Environmental microbiology; behavior of microorganisms created by genetic engineering; gene transfer in the environment; environmental pollution and biodegradation of xenobiotics. <a href="mailto:gary.toranzos@upr.edu">gary.toranzos@upr.edu</a>

#### **ADMISSION REQUIREMENTS:**

**Rio Piedras Campus General Requirements** 

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/



## Specific Requirements for the Master's Program in Biology

Meet the requirements for admission to graduate studies at the Río Piedras Campus. In addition, students must meet the specific requirements of the Biology Graduate Program of the College of Natural Sciences:

- 1. Bachelor of Science (or equivalent), preferably in biology.
- 2. Have taken at least one course in two of the following areas: (1) genetics, (2) developmental biology, cell biology, and molecular biology, or (3) ecology, evolution, and organismal biology.
- 3. The following one-year courses with laboratory: General Chemistry, Organic Chemistry, General Physics.
- 4. Calculus I

## **GRADUATION REQUIREMENTS:**

To qualify for graduation, students must comply with the current general requirements for graduation at the Río Piedras Campus. Additionally, students must meet the specific requirements of the program:

- 1. Oral and written qualifying exams
- 2. Master thesis proposal defense
- 3. 30 credits with a minimum average of 3.00 points.
- 4. All students without prior experience in university teaching must work as a teaching assistant. A minimum of one semester of teaching experience is required.

#### **PROGRAM OF STUDY:**

Students must prepare their academic program in consultation with their thesis supervisor.

Program Requirements	Credits
Core and Elective Courses	24
BIOL 6001 & 6002 Colloquium in Biology I & II	2
BIOL 6999 Special Topics in Modern Biology (can be repeated up to 12 credits)	4
6000-8000 level Courses, until completion of 24 credits	
Thesis	6
BIOI 6997 Thesis Research	6
BIOI 6998 Continuation of Thesis Research	0
Total de Créditos	30

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **BIOL 6001 Biology Colloquium I**

One credit. One hour of lecture per week.

Prerequisite: for graduate students in the biology graduate program.

Seminar program of the Department of Biology for the first semester of the academic year. Weekly seminars cover any topics related to biology presented by renowned local, national, and international scientists.

## **BIOL 6002 – Colloquium in Biology II**

One credit. One hour of lecture per week.

Prerequisites: For graduate students in the biology graduate program.

Seminar program of the biology department for the second semester of the academic year. Weekly seminars on any biology topic by renowned local, national, and international scientists.

## **BIOL 6006 – Symbiosis: From Organelle to Ecosystem**

Credits: 3—Two hours of lecture and one hour of discussion per week.

Prerequisites: Have taken two of the following courses: BIOL3349, BIOL3410, or BIOL3705, and professor's authorization.

New concepts on the dynamics of interactions between microorganisms and their hosts are presented, and recent studies in the area of microbiomes are discussed. The student will be updated on advances in this new area of study and will acquire seminar presentation and essay writing skills.

#### **BIOL 6007 – Reproduction in Plants**

Credits: 3—Three hours of lecture and three laboratory hours per week.

Prerequisites: BIOL 3017, 3410, and/or professor's authorization.

An analysis of the ecological, systematic, and evolutionary consequences of the reproduction of flowering plants. Sexual reproduction systems, gametophyte development, pollen-stigma interaction, pollination syndromes, gene flow, reproductive isolation, theory of optimality, competition, coevolution, limitations to fruit and seed production, flowering strategies, and seed dispersal and speciation in angiosperms.

#### **BIOL 6010 – Microbiomes**

Credits: 3 - One hour of lecture, one hour of discussion, and one hour of seminar per week.

New concepts on the dynamics of interactions between microorganisms and their hosts are presented, and recent studies in the area of microbiomes are discussed. The student will be updated on advances in this new area of study and will acquire seminar presentation and essay writing skills.

#### **BIOL 6035 – Fundamentals of Neuropharmacology**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 3101-3102, BIOL 5548 or equivalent.

One of the goals of this introductory course is to expose the student to the basic foundations of neuropharmacology. During the course, the student will have the opportunity to describe and understand the functioning of the neurochemical transmission of the Nervous System. It is expected that the student will be able to develop a critical analysis of scientific articles referring to one of the topics discussed in class. In addition to this, the student will learn about the behavioral pharmacology and molecular biology techniques that are currently used to study neuropharmacology applied to the functioning of the Nervous System.

#### **BIOL 6040 – Biogeography**

Credits: 3 - Three hours of lecture per week and discussion per week.

Prerequisites: Professor's authorization.

The study of the principles of the distribution of organisms. Examples from the Caribbean region are used.

# **BIOL 6100 – Systematics Seminar**

Credits: 2 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Includes the basic principles of systematic biology.

# BIOL 6101 – Sustainability, resilience, and landscapes: Conceptual bases, methods, and practice

Credits: 3

This course integrates concepts necessary to understand the challenges that come with building sustainable societies. Aimed at undergraduate and graduate students interested in understanding what sustainability is and how it is achieved, this course will examine the relationships between the six pillars of sustainability, space, and the resilience of landscapes that are constantly changing. Conferences, discussions, tasks, and guided investigations will be use to meet the course' goals.

#### **BIOL 6115 – Ecology of Populations and Communities**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 3017 or equivalent and professor's authorization.

Population dynamics, "resource partitioning," and factors that control community structure and species diversity.

#### **BIOL 6117 – Plant ecophysiology**

Credits: 3 - Three lecture hours per week and three laboratory hours per week.

Prerequisites: BIOL 3017, 4560, and/or professor's authorization.

Studies of the interaction between plants and their environment with emphasis on physiological responses to various environmental conditions. Topics include energy and heat budgets, gas exchange and the functioning of the stomatal apparatus, photosynthesis and carbon balance, water balance, temperature stress, and the presence or absence of nutrients in the soil. These topics are discussed with a theoretical evolutionary ecology approach.

# **BIOL 6120 – Phylogenetic Systematics**

Credits: 3 - Two hours of lecture, one hour of discussion, and three hours of laboratory per week. Prerequisites: Professor's authorization.

A broad introduction to the theory and practice of contemporary phylogenetic systematics. Analysis of data sets using theory. Emphasis on computerized techniques and methods, as well as directions of thought.

#### **BIOL 6125 – Microbial Ecology**

Credits: 3 - Three hours of lecture and three laboratory hours per week.

Prerequisites: Director's authorization.

The study of factors governing the interactions between microorganisms and their environment. All groups of organisms identified as microbes will be characterized by their physiology, behavior, and energy. The importance of microbes in aquatic, terrestrial, animal, and plant environments will be studied with emphasis on population and community dynamics.

#### **BIOL 6126 – Population Ecology**

Credits: 3 - One and a half hours of lecture, one and a half hours of discussion, and three hours of laboratory per week.

Prerequisites: Professor's authorization.

Study of current methodologies and theories in the analysis of plant and animal populations. Emphasis on quantitative aspects of population biology such as statistical analysis of spatial dispersion of individuals, mathematical models used to describe growth and dynamics in structured and unstructured populations, and mathematical models used to understand decisions reproductive functions in plants and animals as reproductive effort and sexual distribution. The study of population dynamics, including contrasts between plant and animal populations, the effects of intra- and inter-specific competition, survival and life tables, ecology of reproduction and pollination, and the evolution of life cycles.

#### **BIOL 6145 – Bio-preservation**

Credits: 3 - Six hours of lectures, field trips, laboratory, and discussions per week.

Prerequisites: BIOL 3017 or 6135.

Study of the dynamics of natural ecosystems with emphasis on ecosystems of Puerto Rico and their contribution to the economic and social development of the island. Discussion of the importance of our natural ecosystems and the methods used for their conservation.

#### **BIOL 6190 – Advanced Ecology**

Credits: 3 - Three hours of lecture per week.

Prerequisites: Director's authorization.

Analysis of two or three controversial topics in areas of active research in modern ecology.

# **BIOL 6230 – Molecular Aspects of Development**

Credits: 3 - Three hours of lecture and discussion per week. Prerequisites: BIOL 3010 or BIOL 4545 and BIOL 3015.

Study and analysis of contemporary trends in developmental biology at the molecular level.

#### **BIOL 6310 – Genetic Analysis**

Credits: 3 - Six hours of lecture, discussion, and laboratory per week.

Prerequisites: BIOL 3015 and professor's authorization.

Study of mutations, genetic structure, recombination, regulation, and organization of meiosis chromosomes and development analysis. Laboratory work, including induction, mutation discovery, recombination, group-of-four analysis, and the use of genetic techniques in developmental study.

#### **BIOL 6360 – Bioinformatics**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 3349, MATE 3026, MATE 3015.

The course's objective is to explore the application of bioinformatics to answer questions about biological systems processes. The course will provide undergraduate and graduate students of the College of Natural Sciences with an understanding of the tools and principles of bioinformatics for the analysis of biological data and their application in research, both pure and applied, with an emphasis on research biomedical. Emphasis is placed on genomics, including comparative genomics and metagenomics. The course uses open-source bioinformatics programs and databases available on the Internet for the computational analysis of DNA, RNA, and protein; its function, expression, structure, and the application of this computationally derived information to biological problems. A research project will be developed for the academic semester. Each graduate student will lead and coordinate a research project under the supervision of the professor, supervising a team of undergraduate students.

#### **BIOL 6367 – Ecological Genetics**

Credits: 3 - Three hours of lecture and three laboratory hours per week. Field trips.

Prerequisites: BIOL 3015 or equivalent.

Measurement of genetic variation, Forces affecting genetic and genotypic frequencies, including non-random mating. Basic population dynamics. Dispersal dynamics, gene flow and colonization. Speciation, the niche, and different degrees of environmental heterogeneity.

#### BIOL 6410 - Biology of Terrestrial and River Invertebrates of Puerto Rico

Credits: 3 - Six hours of lecture, discussion, and laboratory per week.

Prerequisites: BIOL 4415 or its equivalent.

Study of the biology and systematics of terrestrial and river invertebrates of Puerto Rico.

#### **BIOL 6500 – General Virology**

Credits: 3 -Three hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Integrated discussion of bacterial, mammalian, insect, and plant viruses; their distribution in nature and their functioning by macromolecules; adsorption and entry into cells, viral replication, damage caused to the host cell by viral growth, tumors and other specific diseases caused by viruses.

#### BIOL 6501 - Fundamentals of Molecular and Cellular Biology I

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 4031-4032 or its equivalent.

This introductory course presents fundamental concepts and recent studies in the area of nucleic acid biochemistry. The student becomes familiar with the structure and function of nucleic acids, as well as the processes of replication, recombination, DNA repair and transcription, RNA processing, and protein synthesis. The student will also learn experimental techniques in molecular biology used to study these processes.

#### BIOL 6502 – Fundamentals of Molecular and Cellular Biology II

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 4031-4032 or its equivalent. BIOL 6031 (formerly BIOL 5546 - Biochemistry of Nucleic Acids).

This course is a continuation of BIOL 6031 (which will replace BIOL 5546 - Biochemistry of Nucleic Acids). This is an introductory course that will present fundamental concepts and recent studies in the area of molecular and cellular biology. In particular, the student will become familiar with the structure and function of proteins and membranes, as well as the transport of proteins in the cell and the properties of membranes. In addition, the processes of cell communication, cell cycle, and the molecular biology of cancer will be discussed. The student will also learn experienced techniques in the field of molecular biology used to study these processes.

#### **BIOL 6515 – Cellular Physiology**

Credits: 3 - Six hours of lecture, discussion and laboratory per week.

Prerequisites: Professor's authorization.

Study of biological functioning at the cellular level. Intense laboratory work where the student becomes familiar with the methods and techniques in this field.

#### **BIOL 6526 – Membrane Biology**

Credits: 3 - Three hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Study of the structure and function of the plasma membrane and the membranes of other cellular organelles, including photosynthetic functions, excitability, and transport.

#### **BIOL 6537 – Current Topics in Cell Biology**

Credits: 3 - Three hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Analysis of current topics in cell biology literature.

# BIOL 6586 - Cell Culture Techniques and Their Application to Biological Research

Credits: 3 - Five hours of discussions, demonstrations, lectures, and laboratory per week Prerequisites: Professor's authorization.

Primary cell culture, sub-culture of established cell lines "cloning", cell hybridization, karyotyping (Karyotyping), comparative study of normal cells and transformed cells; the "in vitro" environment; aseptic techniques; preparation of culture medium and quality control; application of techniques to solve various problems in the biological field.

#### **BIOL 6597 – Hormones and Environment**

Credits: 3 - Six hours of lecture, discussion and laboratory per week.

Prerequisites: Professor's authorization.

Study of the role of hormonal systems in the ecological adaptations of organisms.

#### **BIOL 6600 – Marine Ecology**

Credits: 3 -Six hours of lecture, discussion, laboratory, and field trips per week.

The study of marine organisms and the environmental conditions affecting them, with special emphasis on marine communities in the tropics.

# **BIOL 6745 – Biometrics**

Credits: 3 - Two hours of lecture and two laboratory hours per week.

Prerequisites: MATE 3051 or taken concurrently and professor's authorization.

Elementary probability and probability distributions, estimates of biological parameters, and testing of biological hypotheses. An elementary understanding of frequency analysis (such as chisquare), regression analysis, and analysis of variance, as they are used in biological research.

#### **BIOL 6800 – Animal Behavior**

Credits: 3 - Six hours of lecture, discussion and laboratory per week.

Prerequisites: Professor's authorization.

Comparative study of animal behavior, perception, orientation, instinct, learning, memory motivation, social behavior, organizations, communication, regulative behavior, and behavioral evolution.

#### **BIOL 6802 - Evolution**

Credits: 3 -Three hours of lecture per week.

Prerequisites: BIOL 4345 or professor's authorization.

This course is a detailed study of the mechanisms involved in evolutionary processes and the resulting patterns of biodiversity. Throughout the course, we will discuss the fundamental questions of evolutionary biology and how scientists ask and answer these questions. A central aspect of the course will be examining the details of evolutionary theory and its respective quantitative models. Additionally, we will focus on the impact that evolutionary biology has on contemporary health, agriculture, and conservation issues.

#### **BIOL 6855 – Biology Problems**

Credits: 3

Prerequisites: Professor's authorization.

Three to twelve hours per week of supervised research work in the laboratory or field.

# BIOL 6900 - Cellular Ultrastructure and the Electron Microscope

Credits: 3 - Two hours of lecture and four laboratory hours per week.

Introduction to cellular ultrastructure and the techniques necessary for its study, with the use of the transmission electron microscope. Ultrastructural methods and tests are included.

#### **BIOL 6910 – Supervised Research**

Credits: 2

Prerequisites: Prior discussion and authorization from the professor, who will serve as the student's supervisor.

Directed practical work in a laboratory or research project. The objective is to familiarize the student with different areas of research. In particular, the aim is for the student to actively participate in the activities of a laboratory in order to identify an area for the future development of their thesis or doctoral dissertation work through 1) participation in weekly laboratory meetings, 2) conducting experiments, 3) data collection and analysis, 4) discussion and presentation of results, 5) bibliographic searches within ongoing research projects, among others.

#### **BIOL 6995 – Topics in Tropical Biology**

Credits: 2-4 One to three hours of lecture and discussion, and three to six hours of laboratory or field work. Maximum of six credits applicable to the bachelor's degree in science or the master's degree in science.

Prerequisites: Director's authorization.

Origin, development, structure, and function of tropical ecosystems and their biotic components. Discussion of basic mechanisms operating in tropical ecosystems or in the components that make them up. Study of the ecological relationship's characteristic of tropical environments. (C)



#### **BIOL 6996 – Zoology Seminar**

Credits: 1-3 Three hours of lecture a week and three trips during the semester. It can be repeated up to a maximum of eight credits.

Prerequisites: BIOL 3015 and BIOL 3420 or BIOL 4415 or BIOL 4440 or BIOL 4455.

Discussion of various topics on the biology (evolution, physiology, anatomy, behavior, and ecology) of specific groups of animals.

#### **BIOL 6999 – Special Topics in Modern Biology**

Credits: 2-4 One to three hours of lecture and three to six laboratory hours per week.

Prerequisites: Director's authorization. It can be taken repeatedly, up to a maximum of eight credits.

Readings, lectures, laboratory or fieldwork taught by specialists in the field from the department's faculty or visiting professors. (C)

#### **BIOL 6991 – Independent Research in Biology**

Credits: 1-3

Prerequisites: Professor's authorization.

Independent research problems, not associated with a doctoral thesis or dissertation, in areas that cover student's interests and needs.

## BIOL 6995 – Integrated Studies in Biology: Experience in Intensive Courses

Credits: 2-8

Prerequisites: Regular graduate students (in good standing). Consent of the student's mentor and the biology graduate program coordinator.

To provide credit to graduate students enrolled in accredited seminars, workshops, and courses offered by other international academic institutions or organizations such as the Tropical Studies Organization. Opportunities may include a range of topics in biology offered at local, national, or international institutions. Courses and workshops can be in lecture, laboratory, or field research format, at regular hours, or in total immersion form.

#### **BIOL 6997 – Thesis Research**

Credits: 1-6

Prerequisites: Professor's authorization.

Research for master's thesis.

#### **BIOIL6998 – Continuation of Research for Thesis**

Credit: 0

Prerequisites: Students must have completed all credit requirements in research courses corresponding to the master's degree.

Designed so that the master's program student can continue their thesis research. It allows students to remain in an active state while completing the thesis work.

# **BIOL 8210 – Development Analysis Seminar**

Credits: 2—Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Discussion of a selection of topics from development literature.

#### **BIOL 8340 – Genetics Seminar**

Credits: 2—Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Discussion of new discoveries and recent publications in the field of genetics.

#### **BIOL 8368 – Population Biology Seminar**

Credits: 3—Three hours of lecture per week.

Prerequisites: BIOL 3015 and 3017. Professor's authorization.

Critical discussion of selected topics from recent literature in genetics and population ecology. (C)

# **BIOL 8505 – Biotechnology Seminar**

Credits: 3—Three hours of lecture per week. Prerequisites: Professor's authorization.

Discussion of a selection of topics from recent literature in a particular area of biotechnology. Emphasis on the biological aspect, molecular techniques, and practical applications. The course can be repeated up to a maximum of six credits, provided that the topics are different.

#### **BIOL 8527 – Neurophysiology Seminar**

Credits: 2 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Discussion of the structure and function of excitable cells and the processes of information transmission in the nervous system of animals through lectures and readings of original works.

#### **BIOL 8538 – Biochemistry Seminar**

Credits: 3 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Discussion and practices of the most recent techniques in the field of biochemistry and molecular biology.

#### **BIOL 8991 – Advanced Research**

Credit: 3-6

Prerequisites: Discussion and consent of the student's mentor.

Research for doctoral students prior to admission to candidacy.

## **BIOL 8995 – Doctoral Seminar**

Credits: 3 - One to three hours of lecture per week.

Prerequisites: Be a student in the doctoral program in biology.

Written presentation and oral defense of a research proposal on a topic, other than the doctoral thesis, accompanied by an exhaustive search of the relevant literature. The work will be supervised by a professor from the program, and the oral defense will be in front of a committee of professors with expertise in the area. (C)

### **BIOL 8997 – Dissertation Research**

Credits: 1-18

Prerequisites: Research for doctoral candidates.

A written report of the work carried out in the research area required to obtain a doctoral degree in Biology. This report must be defended in a public presentation and receive approval from the Thesis Committee.

## **BIOL 8998 – Continuation of Dissertation Research**

Credit: 0

Prerequisites: Continuation of research for doctoral candidates.

For students of the doctoral program who have completed the credit requirements in courses and research and remain active students of the Campus while completing their thesis work.



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Email: programagraduado\_biol@yahoo.com

Website: http://biology.uprrp.edu/

**DEGREE:** 

# **Doctor of Philosophy in Biology**

#### **FACULTY:**

**Ackerman, James D., Ph.D.** Florida State University, 1981. Professor. Ecology and evolutionary biology; invasive species biology; biogeography; plant systematics; biology of orchids. <a href="mailto:james.ackerman1@upr.edu">james.ackerman1@upr.edu</a>

**Agosto, José, Ph.D.** Brandeis University (2008), Associate Professor. Genética Molecular; neurobiologia de los ritmos circadianos; neurociencia. <u>jose.agosto1@upr.edu</u>

**Bayman Gupta, Paul, Ph.D.** University of California at Berkeley, 1987. Professor. Micología; fitopatología; micorrizas; microtoxinas; biodegradación. paul.bayman@upr.edu

**Cuevas Viera, Elvira, Ph.D.** Instituto Venezolano de Investigaciones Científicas, 1983. Professor. Ecología del ecosistema; ciclado de nutrientes. <u>elvira.cuevas@upr.edu</u>

**Fristoe, Trevor, Ph.D.** University of New Mexico, 2015. Assistant Professor. Macroecology; interaction of environmental constraints and evolutionary forces that shape species distributions on Earth.. trevor.fristoe@upr.edu

García Arrarás, José E., Ph.D. Harvard University, 1981. Professor. Organogenesis; developmental biology; cellular and molecular aspects of regeneration. jose.garcia36@upr.edu

**Ghezzi, Alfredo, Ph.D.** University of Texas at Austin (2006), Associate Professor. Behavioral genetics; addiction; epigenetics; molecular neuroscience. <a href="mailto:alfredo.ghezzi@upr.edu">alfredo.ghezzi@upr.edu</a>

**Giray, Tugrul, Ph.D.** University of Illinois, 1997. Professor. Social behavior of the honey bee; Apis mellifera; physiology and behavioral genetics. <a href="mailto:tugrul.giray@upr.edu">tugrul.giray@upr.edu</a>

**Joglar, Rafael, Ph.D.** University of Kansas, 1986. Professor. Systematics; ecology and conservation of West Indian reptiles and amphibians; biology of neotropical frogs of the Eleutherodactylus genus; conservation biology. rafael.joglar1@upr.edu

**Lasalde Dominicci, José A., Ph.D.** University of Puerto Rico, 1988. Professor. Structure and function of the acetylcholine receptor; lipid and protein interactions in biological membranes; neuronal acetylcholine receptor and nicotine addiction. jose.lasalde@upr.edu



Maldonado Vlaar, Carmen S., Ph.D. Northeastern University, 1994. Professor. Neurobiology of drug addiction; behavioral neuropharmacology; functional neuroanatomy. carmen.maldonado7@upr.edu

Massey, Steven E., Ph.D. University of Kent at Canterbury, 2004. Professor. Bioinformatics; molecular evolution; genome evolution; The origin of life; biological complexity. <a href="massey@upr.edu">steven.massey@upr.edu</a>

**Papa, Riccardo, Ph.D.** University of Parma, Italy (2003), Professor. Population's genetics; molecular aspects of development; systematic. <a href="mailto:riccardo.papa@upr.edu">riccardo.papa@upr.edu</a>

**Peterson, Esther, Ph.D.** University of Michigan-Ann Arbor (2009). Associate Professor. Cell biology; signaling pathways; cancer biology. <a href="mailto:esther.peterson@upr.edu">esther.peterson@upr.edu</a>

**Restrepo**, Carla, Ph.D. University of Florida, 1995. Professor. Landscape ecology; macroecology; frugivory and seed dissemination; conservation biology. <a href="mailto:carla.restrepo1@upr.edu">carla.restrepo1@upr.edu</a>

**Rodríguez-Martínez, José A., Ph.D.** University of Puerto Rico, 2009. Associate Professor. Molecular recognition of nucleic acids; functional genomics; transcription factors. <a href="jose.rodriguez233@upr.edu">jose.rodriguez233@upr.edu</a>

**Rodríguez-Fernandez, Imilce A., Ph.D.** University of California, Los Angeles, 2012. Assistant Professor. Microbiomes; host-microbe interactions and their influence on health and aging. <a href="mailto:imilce.rodriguez1@upr.edu">imilce.rodriguez1@upr.edu</a>

**Sabat, Alberto M., Ph.D.** State University of New York, 1990. Professor. Population biology and demography in plants and animals. <a href="mailto:sabat1@upr.edu">sabat1@upr.edu</a>

**Santiago Valentín, Eugenio, Ph.D.** University of Washington, Seattle, 1999. Professor. Systematics and plant evolution; island plant biology, conservation. <a href="mailto:eugenio.santiago@upr.edu">eugenio.santiago@upr.edu</a>

**Toranzos, Gary A., Ph.D.** University of Arizona, 1985. Professor. Environmental microbiology; behavior of microorganisms created by genetic engineering; gene transfer in the environment; environmental pollution and biodegradation of xenobiotics. gary.toranzos@upr.edu

## **ADMISSION REQUIREMENTS**

**General Requirements of the Río Piedras Campus** 

http://graduados.uprrp.edu/admisiones/requisitos grados.htm

Specific Requirements of the Doctoral Program in Biology



Meet the requirements for admission to graduate studies at the Río Piedras Campus. In addition, students must meet the specific requirements of the Biology Graduate Program of the College of Natural Sciences:

- 1. Bachelor of Science (or equivalent) with significant undergraduate research experience or Master of Science degree, preferably in biology.
- 2. Have taken at least one course in two of the following areas: (1) genetics, (2) developmental biology, cell biology, and molecular biology, or (3) ecology, evolution, and organismal biology.
- 3. The following one-year courses with laboratory: General Chemistry, Organic Chemistry, General Physics, Calculus I.

### **CANDIDACY**

Those students who have passed the oral and written qualifying exams and have defended the doctoral proposal are considered Doctoral candidates.

# **GRADUATION REQUIREMENTS**

To qualify for graduation, students must comply with the current general requirements for graduation at the Río Piedras Campus. Additionally, students must meet the specific requirements of the program:

- 1. Students must have completed 60 credits with a minimum average of 3.00 points, both at the Río Piedras Campus and at the Medical Sciences Campus, including a minimum of 18 hours of research.
- 2. All students without prior experience in university teaching must work as a teaching assistant. A minimum of two semesters of teaching experience is required (teaching semesters do not have to be consecutive).

#### PROGRAM OF STUDY

Students must prepare their academic program in consultation with their thesis supervisor.

Program requirements	Credits
Core and elective courses	42
BIOL 6001 & 6002 Colloquium in Biology I & II	2
BIOL 6999 Special Topics in Modern Biology (can be repeated up to	4
12 credits)	4
BIOL 6910 Supervised Research (can be repeated up to three times,	2
provided that each time is with a different supervisor)	2
BIOI 8991 Independent Research	3
BIOL 8995 Doctoral Seminar	3
6000-8000 level Courses, until completion of 42 credits	
BIOL 8900 Qualifying exam	0
Dissertation Research	18

Program requirements	Credits
BIOL 8997 Dissertation Research	18
BIOL 8998 Continuation of Dissertation Research	0
Total de Créditos	60

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023 to be included in the 2023-2024 Graduate Catalog.

# BIOL 6001 - Colloquium in Biology I

Credits: 1

Prerequisites: Regular student in the biology graduate program.

Seminar program of the biology department for the first semester of the academic year. Weekly seminars on any biology topic by renowned local, national, and international scientists.

# BIOL 6002 - Colloquium in Biology II

Credits: 1

Prerequisites: Regular student in the biology graduate program.

Seminar program of the biology department for the second semester of the academic year. Weekly seminars on any biology topic by renowned local, national, and international scientists.

## **BIOL 6006 – Symbiosis: From Organelle to Microsystem**

Credits: 3 - Two hours of lecture and one hour of discussion per week.

Prerequisites: Have taken two of the following courses: BIOL3349, BIOL3410, or BIOL3705, and Professor's authorization.

New concepts on the dynamics of interactions between microorganisms and their hosts are presented, and recent studies in the area of microbiomes are discussed. The student will be updated on advances in this new area of study and will acquire seminar presentation and essay writing skills.

#### **BIOL 6007 – Reproductive Process in Plants**

Credits: 3 - Three hours of lecture and three laboratory hours per week.

Prerequisites: BIOL 3017, 3410, and/or professor's authorization.

An analysis of the ecological, systematic, and evolutionary consequences of the reproduction of flowering plants. Sexual reproduction systems, gametophyte development, pollen-stigma interaction, pollination syndromes, gene flow, reproductive isolation, theory of optimality, competition, coevolution, limitations to fruit and seed production, flowering strategies, and seed dispersal and speciation in angiosperms.

#### **BIOL 6010 – Microbiomes**

Credits: 3 - One hour of lecture, one hour of discussion, and one hour of seminar per week.

New concepts on the dynamics of interactions between microorganisms and their hosts are presented, and recent studies in the area of microbiomes are discussed. The student will be updated on advances in this new area of study and will acquire seminar presentation and essay writing skills.

## **BIOL 6035 Neuropharmacology**

Three credits.

Prerequisites: BIOL 3101-3102, BIOL 5548 or its equivalent.

In this introductory course one of its main goals is to expose students to the basic concepts of neuropharmacology. During the course, each student will have the opportunity to describe and understand how neurochemical transmission within the nervous system works. It is also expected that the student will be able to develop critical analysis of scientific articles related to the topics discussed in the course. Furthermore, the student will learn about behavioral neuropharmacological techniques and molecular biology protocols that presently are utilized to study functional neuropharmacology within the nervous system.

# BIOL 6040 - Biogeography

Credits: 3 -Three hours of lecture per week and discussion per week.

Prerequisites: Professor's authorization.

The study of the principles of the distribution of organisms. Examples from the Caribbean region are used.

## **BIOL 6100 – Seminar on Systematics**

Credits: 2 -Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Includes the basic principles of systematic biology.

# BIOL 6101 – Sustainability, resilience, and landscapes: Conceptual bases, methods, and practice

Credits: 3

This course integrates concepts necessary to understand the challenges that come with building sustainable societies. Aimed at undergraduate and graduate students interested in understanding what sustainability is and how it is achieved, this course will examine the relationships between the six pillars of sustainability, space, and the resilience of landscapes that are constantly changing. To do this, use will be made of conferences, discussions, tasks and guided investigations.

# **BIOL 6115 – Population and Community Ecology**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 3017 or equivalent and professor's authorization.

Population dynamics, "resource partitioning," and factors that control community structure and species diversity.

## **BIOL 6117 – Physiological Plant Ecology**

Credits: 3 - Three lecture hours per week and three laboratory hours per week.

Prerequisites: BIOL 3017, 4560, and/or professor's authorization.

Studies of the interaction between plants and their environment with emphasis on physiological responses to various environmental conditions. Topics include energy and heat budgets, gas exchange and the functioning of the stomatal apparatus, photosynthesis and carbon balance, water balance, temperature stress, and the presence or absence of nutrients in the soil. These topics are discussed with a theoretical evolutionary ecology approach.

# **BIOL 6120 – Phylogenetic Systematics**

Credits: 3 - Two hours of lecture, one hour of discussion, and three hours of laboratory per week. Prerequisites: Professor's authorization.

An introduction to and a broad an overview of the theory and practice modern phylogenetic systematics. Development of skills in application of current theory to real data sets by analysis of data. Computer methodology and techniques will be stressed as well as current trends in the field.

#### **BIOL 6125 – Microbial Ecology**

Credits: 3 - Three hours of lecture and three laboratory hours per week.

Prerequisites: Director's authorization.

The study of those factors that govern the interactions between microorganisms and their environment. All groups of organisms identified as microbes will be characterized by their physiology, behavior, and energy. The importance of microbes in aquatic, terrestrial, animal, and plant environments will be studied with emphasis on population and community dynamics.

## **BIOL 6126 – Population Ecology**

Credits: 3 - One and a half hours of lecture, one and a half hours of discussion, and three hours of laboratory per week.

Prerequisites: Professor's authorization.

A study of the fundamental theories and methodologies currently used in the analysis of animal and plant populations. Emphasis will be in the quantitative aspects of population biology such as the statistical analysis of spatial dispersion patterns, the mathematical models describing the growth and dynamics of unstructured and age/stage

structured populations, and the mathematical models that attempt to explain reproductive decisions in plants and animals such as reproductive effort and sex allocation.

#### **BIOL 6145 – Bioconservation**

Credits: 3 - Six hours of lectures, field trips, laboratory, and discussions per week.

Prerequisites: BIOL 3017 or 6135.

Study of the dynamics of natural ecosystems with emphasis on ecosystems of Puerto Rico and their contribution to the economic and social development of the island. Discussion of the importance of our natural ecosystems and the methods used for their conservation.

## **BIOL 6190 – Advanced Ecology**

Credits: 3 - Three hours of lecture per week.

Prerequisites: Director's authorization.

Analysis of two or three controversial topics in areas of active research in modern ecology.

## **BIOL 6230 – Molecular Aspects of Development**

Credits: 3 - Three hours of lecture and discussion per week. Prerequisites: BIOL 3010 or BIOL 4545 and BIOL 3015.

Study and analysis of contemporary trends in developmental biology at the molecular level.

## **BIOL 6310 – Genetic Analysis**

Credits: 3 - Six hours of lecture, discussion, and laboratory per week.

Prerequisites: BIOL 3015 and Professor's authorization.

Study of mutations, genetic structure, recombination, regulation, and organization of meiosis chromosomes and development analysis. Laboratory work includes induction, mutation discovery, recombination, group-of-four analysis, and the use of genetic techniques in developmental study.

#### **BIOL 6360 – Bioinformatics**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 3349, MATE 3026, MATE 3015.

This course is designed as an introduction to bioinformatics and will cover all topics in the field to give a broad overview of the subject to the students. Workshops will be conducted that will provide the hands-on skills required for effectively using bioinformatics tools. In addition, real research project will be conducted by the graduate students as a team, under the mentorship of the professor, the project will be testing the latest concepts in the field and will involve training in techniques that will be of use to the student in their own research. Also, the students will present on their own graduate research, and a brainstorming session will be conducted as a group in order to generate ideas that will strengthen their own research.

# **BIOL 6367 – Ecological Genetics**

Credits: 3 - Three hours of lecture and three laboratory hours per week. Field trips.

Prerequisites: BIOL 3015 or equivalent.

Measurement of genetic variation, Forces affecting genetic and genotypic frequencies, including non-random mating. Basic population dynamics. Dispersal dynamics, gene flow and colonization. Speciation, the niche, and different degrees of environmental heterogeneity.

## BIOL 6410 - Biology of Terrestrial and Freshwater Invertebrates of Puerto Rico

Credits: 3 – Three hours of lecture, discussion, and laboratory per week.

Prerequisites: BIOL 4415 or its equivalent.

Study of the systematics and biology of the terrestrial and freshwater invertebrate fauna of Puerto Rico.

# **BIOL 6500 – General Virology**

Credits: 3 - Three hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Integrated discussion of bacterial, mammalian, insect, and plant viruses; their distribution in nature and their functioning by macromolecules; adsorption and entry into cells, viral replication, damage caused to the host cell by viral growth, tumors and other specific diseases caused by viruses.

## BIOL 6501 – Fundamentals of Molecular and Cellular Biology I

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 4031-4032 or its equivalent.

This is an introductory course that will cover basic concepts and recent literature in the field of molecular biology. Topics that will be covered include: structure and function of nucleic acids; DNA replication; mechanisms of DNA repair and recombination; prokaryotic and eukaryotic transcription; RNA processing; post-transcriptional control of gene expression and protein synthesis. The student will also be exposed to novel molecular and cellular techniques to study those processes mentioned above.

#### BIOL 6502 – Fundamentals of Molecular and Cellular Biology II

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 4031-4032 or its equivalent. BIOL 6031 (formerly BIOL 5546 - Biochemistry of Nucleic Acids).

This course is a continuation of BIOL 6031 (previously known as BIOL 5546 "biochemistry of nucleic acids"). This is an introductory course that will cover basic concepts and recent literature in the fields of molecular and cellular biology. Topics that will be covered include: proteins structure and



function; membrane transport and the electrical properties of membranes; cell-cell communication; cell cycle and cancer biology. The student will also be exposed to novel molecular and cellular techniques to study those processes.

## **BIOL 6515 – Cellular Physiology**

Credits: 3 - Six hours of lecture, discussion and laboratory per week.

Prerequisites: Professor's authorization.

Study of biological functioning at the cellular level. Intense laboratory work where the student becomes familiar with the methods and techniques in this field.

## **BIOL 6526 – Membrane Biology**

Credits: 3 - Three hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Study of the structure and function of the plasma membrane and the membranes of other cellular organelles, including photosynthetic functions, excitability, and transport.

# **BIOL 6537 – Current Trends in Cell Biology**

Credits: 3 -Three hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Analysis of current topics in cell biology literature.

## BIOL 6586 - Cell Culture Techniques and Their Application to Biological Research

Credits: 3 - Five hours of discussions, demonstrations, lectures, and laboratory per week Prerequisites: Professor's authorization.

Primary cell culture, sub-culture of established cell lines "cloning", cell hybridization, karyotyping (Karyotyping), comparative study of normal cells and transformed cells; the "in vitro" environment; aseptic techniques; preparation of culture medium and quality control; application of techniques to solve various problems in the biological field.

#### **BIOL 6597 – Hormones and the Environment**

Credits: 3 - Six hours of lecture, discussion and laboratory work per week.

Prerequisites: Professor's authorization.

Study of the role of hormonal systems in the adaptation of organisms to the environment.

#### **BIOL 6600 – Marine Ecology**

Credits: 3 - Six hours of lecture, discussion, laboratory, and field trips per week.

The study of marine organisms and the environmental conditions affecting them, with special emphasis on marine communities in the tropics.



#### **BIOL 6745 – Biometrics**

Credits: 3 - Two hours of lecture and two laboratory work per week. Prerequisites: MATE 3051 or currently and professor's authorization.

Elementary probability and probability distributions, estimates of biological parameters, and testing of biological hypotheses. An elementary understanding of frequency analysis (such as chisquare), regression analysis, and analysis of variance, as they are used in biological research.

#### **BIOL 6800 – Animal Behavior**

Credits: 3 - Six hours of lecture, discussion and laboratory exercises per week.

Prerequisites: Professor's authorization.

Comparative study of animal behavior, perception, orientation, instinct, learning, memory motivation, social behavior, organizations, communication, regulative behavior, and behavioral evolution.

#### **BIOL 6802 – Evolution**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 4345 or professor's authorization.

This course is a detailed study of the mechanisms involved in evolutionary processes and the resulting patterns of biodiversity. Throughout the course, we will discuss the fundamental questions of evolutionary biology and how scientists ask and answer these questions. A central aspect of the course will be examining the details of evolutionary theory and its respective quantitative models. Additionally, we will focus on the impact that evolutionary biology has on contemporary health, agriculture, and conservation issues.

# **BIOL 6855 – Problems in Biology**

Credits: 3

Prerequisites: Professor's authorization.

Three to twelve hours per week of supervised research work in the laboratory or field.

## BIOL 6900 – Cellular Ultrastructure and the Electron Microscopy

Credits: 3 - Two hours of lecture and four laboratory hours per week. Prerequisite: Graduated student and authorization from the professor.

Introduction of the cellular ultrastructure and the techniques required for its study using transmission electron microscopy. State-of-art methods, including ultrastructural probes and image processing, will be presented.

# **BIOL 6910 – Supervised Research**

Two credits.

Prerequisites: previous approval of the professor in charge of the supervision

of the student.

Supervised research in various research laboratories. May be repeated a maximum of three times provided the student works in different research laboratory each time.

## **BIOL 6995 – Tropics in Tropical Biology**

Credits: 2-4 - One to three hours of lecture and discussion, and three to six hours of laboratory or field work. Maximum number of credits applicable toward the B.S. or M.S. is six.

Prerequisites: Director's authorization.

Origin, development, structure, and function of tropical ecosystems and their biotic components. Discussion of basic mechanisms operating in tropical ecosystems or in the components that make them up. Study of the ecological relationship's characteristic of tropical environments.

## **BIOL 6996 – Seminar in Zoology**

From no credits to four. Three hours of lecture per week and three field trips during the semester. It can be repeated up to a maximum of eight credits.

Prerequisites: BIOL 3015 and BIOL 3420 or BIOL 4415 or BIOL 4440 or BIOL 4455.

Discussion of various topics on the biology (evolution, physiology, anatomy, behavior, and ecology) of specific groups of animals.

# **BIOL 6999 – Special Topics in Modern Biology**

Credits: 2-4 - One to three hours of lecture and three to six laboratory hours per week.

Prerequisites: Director's authorization. It can be taken repeatedly, up to a maximum of eight credits.

Readings, lectures, laboratory or fieldwork taught by specialists in the field from the department's faculty or visiting professors.

# BIOI 6991 - Independent Research in Biology

Credits: 1-3

Prerequisites: Professor's authorization.

Independent research problems, not associated with a doctoral thesis or dissertation, in areas that cover student's interests and needs.

## BIOI 6995 – Integrated Studies in Biology: Experience in Intensive Courses

Credits: 2-8

Prerequisites: Regular graduate students (in good standing). Authorization from the student's mentor and the biology graduate program coordinator.

To provide credit to graduate students enrolled in accredited seminars, workshops, and courses offered by other international academic institutions or organizations such as the Tropical Studies Organization. Opportunities may include a range of topics in biology offered at local, national, or international institutions. Courses and workshops can be in lecture, laboratory, or field research format, at regular hours, or in total immersion form.

## **BIOI 6997 – Thesis Research**

Credits: 1-6

Prerequisites: Counselor's authorization.

Research for master's thesis.

### **BIOI 6998 – Continuation of Research for Thesis**

Credit: 0

Prerequisites: Have completed all credit requirements in research courses corresponding to the master's degree.

Designed so that the master's Program student can continue their thesis research. It allows you to remain in an active state while completing the thesis work.

# **BIOL 8210 – Seminar: The Analysis of Development**

Credits: 2 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Discussion of themes related to developmental processes.

## **BIOL 8340 – Seminar on Genetics**

Credits: 2 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Review of up-to-date publications and new discoveries in the field of genetics.

# **BIOL 8368 – Seminar in Population Biology**

Credits: 3 - Three hours of lecture per week.

Prerequisites: BIOL 3015 and 3017. Professor's authorization.

Critical discussion of selected topics from recent literature in genetics and population ecology.

## **BIOL 8505 – Seminar in Biotechnology**

Credits: 3 - Three hours of lecture per week.

Prerequisites: Professor's authorization. Can be taken twice, six credits, if content varies.

Discussion of a selection of topics from recent literature in a particular area of biotechnology. Emphasis on the biological aspect, molecular techniques, and practical applications.

## **BIOL 8527 – Seminar on Neurophysiology**

Credits: 2 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Lectures and reading of original papers used as basis for discussion on the structure and function of excitable cells, and the processes of information transmission in the animal nervous system.

## **BIOL 8538 – Seminar on Biochemistry**

Credits: 3 - Two hours of lecture and discussion per week.

Prerequisites: Professor's authorization.

Discussion and practices of the most recent techniques in the field of biochemistry and molecular biology.

# **BIOI 8991 - Advanced Research**

Credit: 3-6

Prerequisites: Discussion and authorization from the student's mentor.

Research for doctoral students prior to admission to candidacy.

# **BIOL 8995 – Doctoral Seminar**

One to three credits. A maximum of three credits. One-three hours of lecture per week.

Prerequisite: for students in the doctoral program.

Preparation and oral defense of a research proposal in a field other than that of the thesis research of the student, accompanied by an exhaustive search of the literature on the subject matter. The work is to be supervised by a member of the program, and defended orally before a committee of professors with expertise in the selected field.

#### **BIOL 8997 – Doctoral Dissertation**

One to eighteen credits.

Prerequisites: Research for doctoral candidates.

Written report of the work done in research required for the doctoral degree in Biology. This work must be defended by the student in a public presentation and approved by his or her thesis committee. (C)

## **BIOL 8998 Communication of Investigation for Doctoral Candidates**

No credit.

Prerequisite: research continuation for doctoral candidates.

For the Ph.D. degree program students that have completed all course and research credit requirements to maintain an active student status while

completing their thesis work.



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Email: environmental.graduados@upr.edu/omar.perez15@upr.edu

Website: <a href="https://natsci.uprrp.edu/envsci/">https://natsci.uprrp.edu/envsci/</a>

#### **DEGREE:**

## **Master of Science in Environmental Sciences**

#### **ENVIRONMENTAL SCIENCE FACULTY:**

Gao, Quiong, Ph.D., Cornell University, 1987, Professor. Ecosystem modeling

**Hernández, Edwin,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2000, Associate Researcher. Marine ecology.

**Louime, Clifford,** Ph.D., Florida Agricultural and Mechanical University, 2005, Associate Professor, Sustainable Biofuel Production.

Meléndez- Ackerman, Elvia, Ph.D. University of California-Irvine, 1995, Professor. Evolution and bioconservation.

**Moreno**, **Gabriel**, Ph.D., State University of New York-Stony Brook, 1990, Professor. Sustainable urban systems.

**Nytch, Christopher,** Ph.D. University of Puerto Rico, Río Piedras Campus, 2018. Associate Professor, Forest Ecology, Ecosystem Services, Sustainable Resource Management

**Ortiz, Jorge,** Ph.D., University of Colorado-Boulder, 1998, Professor. Applied limnology, Water resources management.

**Pérez-Reyes, Omar,** Ph.D., Utah State University, 2014, Associate Professor, Ecology, Invertebrate Zoology, Freshwater Biology.

**Ríos, Rafael A.,** Ph.D., University of Texas, Austin, 1975, Professor. Treatment of drinking water and wastewater. Solid waste management.

Yu, Mei, Ph.D., Chinese Academy of Sciences, 1998, Professor. Spatial Analysis, Modeling.

Zimmerman, Jess, Ph.D., University of Utah, 1989, Professor. Plant ecology.

Zou, Xiaoming, Ph.D., Colorado State University, 1992, Professor. Soil ecology.

#### SCHOOL OF PLANNING, UPRRP

**Barreto, Maritza,** Ph.D., University of Puerto Rico-Mayaguez Marine Sciences Geological Oceanography, 1997, Distinguished Professor. Geological Oceanographer and Coastal processes.

# **BIOLOGY DEPARTMENT, UPRRP**

**Agosto, José L.,** Ph.D., Brandeis University, 2008, Genetic Control of Sleep and Circadian Rhythms.

Cuevas, Elvira, Ph.D., Venezuelan Institute of Scientific Research, 1983, Professor Ecology.

Giray Tugrul, Ph.D., University of Illinois, 1997, Professor. Animal behavior.

**Massey, Steven E.,** Ph.D., University of Kent at Canterbury, 2004. Professor, Bioinformatics; molecular evolution; genome evolution; The origin of life; complexity.

Sabat, Alberto, Ph.D., SUNY-Albany, 1989, Professor. Ecology and Bioconservation.

# CHEMISTRY DEPARTMENT, UPRRP

**Carballeira**, **Néstor**, Ph.D., University of Würzburg, 1983, Professor. Chemistry of Natural Products.

**Díaz Vázquez**, **Liz,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2005, Professor. Analytic Chemistry.

**Tinoco, Arthur**, Ph.D., Yale University, 2007, Associate Professor. Chemistry Bioinorganic. Bioinorganic Chemistry, Proteomics, anticancer research, Metal-based therapeutics.

**Weiner, Brad. R.**, Ph.D. University of California, Davis, 1986, Professor. Chemical Physics; Environmental and Physical Chemistry; Chemistry of Materials. Dynamics of reactions of gas phase molecules, photochemistry and photophysics of lasers, kinetics of gas phase reactive intermediates, non-linear photoprocesses, molecular energy transfer, Cancer Biology.

## MATHEMATICS DEPARTMENT, UPRRP

**Pérez, María Eglée,** Ph.D., Central University of Venezuela, 1994, Professor. Bayesian Statistics; biostatistics.

**Pericchi, Luis,** Ph.D., University of London, Imperial College, Department of Mathematics 1981, Professor. Statistical Modeling and Applications to Antropology, Biomedicine, Biostatistics, Bioinformatics, Epidemiology, Econometrics, Engineering and Fraud Detection.

#### PHYSICS DEPARTMENT, UPRRP

**Morell, Gerardo,** Ph.D., University of Puerto Rico, 1995, Professor. Nanotechnology and Cancer Biology.



## INTERNATIONAL INSTITUTE OF TROPICAL FORESTRY

González, Grizelle, Ph.D., University of Colorado, 1999, Scientific. Soil ecology.

Gould, William, Ph.D., University of Colorado, 1999, Scientist. Geographic information systems

**Heartsill-Scalley**, **Tamara**, Ph.D., Utah State University, 2005, Scientific. Riparian Forest, Forest Ecology.

Wunderle, Joseph, Ph.D., University of Minnesota, 1980, Scientist. Ornithology.

# INSTITUTE OF NEUROBIOLOGY, UPR

Marie, Bruno, Ph.D., University of Sussex, 2000, Adjunct Professor. Genetics.

**Miller, Mark W.**, Ph.D., University of Connecticut, 1980, Professor. Environmental Neurobiology.

# UNIVERSITY OF PUERTO RICO, MAYAQÜEZ CAMPUS

**Dumas Rodríguez, José,** Ph.D., University of Puerto Rico, Río Piedras Campus, 1999, Professor. Analytic Chemistry

**Ríos Hernández, Luis A.,** Ph.D., University of Oklahoma, 2003 Assistant Professor. Microbiology.

Snyder, Víctor A., Ph.D., Cornell University, 1980, Professor. Soil.

## **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://solicitud.upr.edu/

# **Specific Requirements of the Master's Program**

To be considered for graduate admission, students must submit the following requirements:

- 1. A Bachelor of Science degree (or its equivalent) with a concentration in Environmental Science, Biology, Computer Science, General Science, Physics, Mathematics, Chemistry or Engineering from an accredited
- 2. Students with a bachelor's degree from an accredited university, but without a concentration in any of the aforementioned disciplines, can apply for admission to the graduate program, through the UPR platform (<a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>), once they have

passed the following requirements with a minimum GPA (academic index) of 3.00. Also, a year of General Biology, one year of General Chemistry, Calculus I, and an Introduction to Environmental Sciences course. However, satisfactory completion of these courses does not guarantee admission to the program.

- 3. A minimum general GPA of 3.00 (on a 4.00 scale) and a minimum GPA in science of 3.00 at the undergraduate level.
- 4. Submit an official copy of your most recent academic record.
- 5. Submit three letters of recommendation from professors with whom you have taken science courses.
- 6. Possess adequate knowledge of English and Spanish, both written and oral.
- 7. Submit TOEFL results (only for foreign students). Attend an interview, if required by the Admissions Committee.

## **GRADUATION REQUIREMENTS:**

The approval of 38 Total graduate credits with a minimum academic index of 3.00 must be completed as follows: 18 credits of core courses, 6 credits in emphasis courses, 2 credits in graduate seminars, and 6 credits in elective courses. Approval of 6 research credits and the successful presentation and defense of a thesis based on research.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Required courses	18
CIAM 6115 The Terrestrial Environment	3
CIAM 6116 Tropical Ecosystems *	3
CIAM 6117 The Coastal Environment	3
CIAM 6118 The Urban Environment	3
CIAM 6235 Remote Sensing I *	3
CIAM 6256 Methods for the statistical analysis of environmental systems	3
Courses in Environmental Sciences	6
Graduate Seminars	2
CIAM 6901 Graduate Seminar (May be repeated for a maximum of two	1
credits)	
Graduate Research	6
CIAM 6999 Master's Graduate Research *	6
CIAM 6896 Master's Thesis *	0
Free Electives	
Students with prior authorization from the thesis committee may also take	6
courses offered by other graduate programs.	
CIAM 6910 Supervised Graduate Research (Rotation)	1
Total Credits	38

Program Courses	Credits
CIAM 8225 Spatial Analysis Methods	3
CIAM 8226 Geospatial Techniques in Environmental Sciences	3
CIAM 8236 Remote Sensing II	3
CIAM 8257 Techniques for the construction of environmental models	3
CIAM 8405 Seminar on Sustainable Environmental Management Topics of Islands and Tropical Regions.	2
CIAM 8425 Environmental Geology	3
CIAM 8435 Environmental Hydrology	3
CIAM 8115 Human Dimensions of Environmental Change	2
CIAM 8116 Environmental Policy and Ethics	2
CIAM 8117 Urban Environment, Design and Expansion	2
CIAM 8118 Ecological Informatics and Socio-Ecological Models.	2
CIAM 8119 Ecosystem Services and the Ecological Economy.	2
CIAM 8120 Communication about the Environment	2
CIAM 8205 Seminar on Environmental Analysis Topics	2
CIAM 8206 Seminars on topics of environmental spatial analysis	2
CIAM8775 Waste Management and Disposal	3
CIAM8785 Power Generation	3
CIAM8990 Special Topics in Environmental Sciences	3

Elective courses marked with \* may be substituted for elective courses approved by the Program.

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **CIAM 6115 The Terrestrial Environment**

Three credits. Three hours of conference a week.

Study of the geological, geomorphological, hydrological and climatological processes of mountainous, alluvial regions and characteristics of islands and tropical regions. It focuses on the study of the impact of human activities, the environmental problems resulting from these actions, and the strategies to promote their sustainable development. The topics are discussed and analyzed within the context of general systems theory using the watershed as the unit of study.

## **CIAM 6116 Tropical Ecosystems**

Three credits. Three hours of conference a week.



Prerequisite: Admission to the environmental sciences graduate program or professor's authorization.

Study and spatial distribution of the characteristic ecosystems of islands and tropical regions. The interaction between the different biotic and abiotic components of these ecosystems is systematically examined, as well as the impact of natural processes and human activities on them.

### **CIAM 6117 The Coastal Environment**

Three credits. Three hours of lecture per week.

Study of the ecology and processes (geological, geomorphic, hydrologic and climatic) of the coastal region, including the intertidal surge zone, estuaries reefs and others. The focus is on the study of the impact of human interactions on this environment, environmental problems associated with these interactions, and strategies to promote sustainable development in these regions.

## **CIAM 6118 The Urban Environment**

Three credits. Three hours of lecture per week.

Prerequisite: Admission to the environmental sciences graduate program or professor's authorization.

Study of cities from a systems perspective. urban structure and function, city climate, urban ecology, the impact of transportations systems, energy gene ration, water distribution, disposal of used water and solid waste, and the impact human activities on environmental quality are examined. Issues in urban planning, green areas, natural risks, urban noise distribution of poverty pockets, and aspects of environmental justice are considered. Strategies are discussed to improve the quality of life within cities and promote sustainable development. Characteristic contaminants of urban area and their transport and diffusion mechanisms are examined.

# **CIAM 6235 Remote Sensing I**

Three credits.

Theoretical and practical study of methodologies for analyzing land cover and land use through satellite images. The essential physical laws for the study of remote sensing, systems for obtaining images, correction and classification of images, and interpretation of results are examined. A project is developed where the student performs an analysis to classify land cover and use using satellite images of islands and tropical regions.

## CIAM 6256 Statistical Analysis Methods for Environmental Systems

Three credits. Three hours of lecture per week.

Prerequisites: Admission to the environmental science graduate program.



Study of statistical methods for the analysis of environmental data that include multiple variables. Multiple linear regression models, principal component analysis, cluster analysis, multidimensional surface analysis, canonical analysis, discriminant analysis and others are studied. The variables are analyzed in order to quantitatively understand the behavior of environmental processes. Different statistics programs for computers are discussed and applied and scientific research works where they have been used are discussed.

## CIAM 6901 Graduate Seminar in Environmental Sciences I

Three credits. One hour of seminar per week.

Conference and discussion on special topics in environmental sciences, usually by guest speakers or based on recent literature in the area. The course can be repeated up to a maximum of 2 credits.

#### **CIAM 6910 Graduate Research**

One to three credits. One to three hours of research per week.

Prerequisite: Authorization of the Coordinator of the Graduate Program in Environmental Sciences

Research in Environmental Sciences supervised by a faculty member in his or her laboratory, to introduce incoming graduate students to the concepts, procedures, and techniques used to conduct their research in a specific area. The course may be taken up to two times for a maximum of 6 credits by a master's program student and up to four times for a maximum of 9 credits by a doctoral student.

## CIAM 6999 Graduate Research for the Master of Environmental Sciences

One to three credits. 5-15 hours of research.

Prerequisite: Authorization of the Director or Coordinator of the Graduate Program in Environmental Sciences.

Thesis research leading to the degree of master's in environmental sciences. (Up to a maximum of 6 credits).

## CIAM 6896 Continuation of master's thesis

Zero credits.

Prerequisite: CIAM 6999 and Authorization of the Director or Coordinator of the Graduate Program in Environmental Sciences.

Continuation of thesis research leading to the degree of master's degree in environmental sciences.

#### CIAM 6990 Special Topics in Environmental Sciences

One to three credits. One to three hours of lecture per week.

Prerequisite: Admission to the Environmental Sciences Graduate Program or permission of the professor.

Detailed study of one or more specific topics in the area of environmental sciences, usually by visiting professors or specialists in some of the areas of environmental sciences. The course is designed to offer a practical and theoretical experience on specific and current topics in environmental sciences. The topics vary each year. The format of the course encourages guest experts on the selected topic to dedicate a week or more to their lectures and empirical experiences. (Maximum of 12 credits)

### OTHER COURSE DESCRIPTIONS:

# **CIAM 8115 Human Dimensions of Environmental Change**

Two credits. Two hours of lecture per week.

Prerequisite: Authorization of the director or coordinator of the environmental sciences graduate program.

Relationship between humans and the environment with emphasis in the social, political, economic and cultural factors of the conservation of natural resources and environmental degradation. Various topics will be explored such as the social construction of nature, environmental justice and environmental movements, presents a broad and panoramic perspective to contextualize decision-making processes (at the state, community organizational and individual levels) regarding the management of natural resources promotes the application of concepts learned through collaborative projects with constituents on environmental issues contemporaries in Puerto Rico.

# CIAM 8116 Policy and Ethics of the Environment

Two credits. Two hours of lecture per week.

Prerequisite: authorization of the director or coordinator of the graduate program in environmental sciences.

This course focuses on how environmental policy evolves and on the ethics of different stakeholder positions, especially in relation to the selected Puerto Rico environmental problems. Students will explore "environmental capacity", defined as both, the possession of the proper resources necessary for the implementation of activities associated with environmental protection, as well as the willingness to use those resources. Environmental issues are question of managing the commons, meaning that conflicting values are involved. Therefore students will need to apply an ethical perspective to environmental issues, health promotion issues and policy solutions. Students will apply principles to selected group projects.

# **CIAM 8117 Policy and Ethics of the Environment**

Two credits. Two hours of lecture per week.

Prerequisite: Authorization of the director or coordinator of the graduate program in environmental sciences.

This course focuses on how environmental policy evolves and, on the ethics, of different stakeholder positions, especially in relation to the selected



Puerto Rico environmental problems. students will explore "environmental capacity", defined as both, the possession of the proper resources necessary for the implementation of activities associated with environmental protection, as well as the willingness to use those resources. Environmental issues are question of managing the commons, meaning that conflicting values are involved. Therefore students will need to apply an ethical perspective to environmental issues, health promotion issues and policy solutions. students will apply principles to selected group projects.

# CIAM 8118 socio-ecological models and ecological informatics.

Two credits. Two hours of lecture per week.

Prerequisites: permission of the director or coordinator of the graduate program in environmental sciences considering an appropriate mathematics background of the student.

Modeling and informatics are increasingly important tools for environmental scientists. Students will be introduced to the basics of modeling for social-ecological models and environmental informatics. Topics to be covered include types and uses of models; distinguishing between models and hypotheses; data structure, metadata, and data interpretation information theory; hypothesis formation and testing; modeling methodologies and when to use them; relational databases and web-based data services; and examples of simple and complex models, with parametrization and validation. Students will apply these techniques to components of the natural and social systems for the selected group project.

## **CIAM 8119 Ecosystem Services and the Ecological Economics**

Two credits. Two hours of lecture per week.

Prerequisites: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

As per millennium ecosystem assessment, the course will focus on supporting provisioning, and regulating ecosystem services as the link between human economies and natural systems, and the increasing pressures these systems face.

The just allocation and sustainability of these services will be considered from different economic points of view, including regulated and open markets, the tragedy of the commons, and ecological economics. To be examined are the conflicts between growth and sustainability, as well as possible solutions, such as valuations that include the true ecological and social costs of resource exploitation and incentive structures. Students will apply principles of ecological economics to selected group projects.

#### **CIAM 8120 Environmental Communication**

Two credits. Two hours of lecture per week.

Prerequisites: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

To engage diverse community members in environmental science and policy formulation, students will develop formal debate and argumentation skills. Special emphasis will be given to the ethical dimensions of natural resource allocation and sustainability. The course will analyze how the media present environmental sciences and the feedback from said presentation on national and international initiatives. Through selected topics, students will explore the ethical foundations of different viewpoints with an emphasis on clarity and accuracy in communicating science that supports diverse members of the community.

# **CIAM 8205 Special Topics in Spatial Analysis**

Two credits. One hour of lecture and one discussion per week. Prerequisite: Permision of the director or coordinator of the graduate program of environmental sciences.

Advanced seminar directed to analysis and discussion of literature and recent advances in environmental spatial analysis with emphasis on islands and tropical regions.

# CIAM 8206 Seminar on topics of environmental spatial analysis

Two credits.

Prerequisite: Authorization of the Director or Coordinator of the Graduate Program in Environmental Sciences.

Advanced seminar aimed at the analysis and discussion of literature and recent developments in spatial analysis of the environment, especially as it concerns islands and tropical regions.

## CIAM 8225 Methods for environmental spatial analysis

Three credits.

Prerequisite: CIAM 5235

Advanced methods in geospatial analysis. Issues of scaling, spatial autocorrelation, spatial interpolation, spatial point patterning, patch analysis, hydrological analysis, and image analysis will be discussed, along with their uses in environmental science. The issues will be addressed at conferences and via analysis of key articles. Students will develop and present detailed projects, applying techniques to a chosen environmental problem.

## CIAM 8226 Geospatial Techniques in Environmental Sciences

One credit. Three hours of laboratory per week.

Prerequisite: CINA4995

Laboratory course in which applications of cutting-edge geospatial techniques in environmental science will be discussed and conducted. Students will apply the knowledge and the techniques acquired to solve the environmental problems through a series of case studies. The topics cover the application in community assemblages, hydrological dynamics, landslides epidemic disease, land cover, land use changes, and global carbon dynamics. It will include critical

oral presentations on frontier papers, workflows to solve environmental problems, and written reports for the topics.

## **CIAM 8236 Remote Sensing II**

Three credits.

Requirements: CIAM 6235

Practical study of advanced satellite image analysis methodologies and the theory that underpins these techniques. Emphasis is placed on the use and application of programs such as Imagine, ENVI, and Idrisi for the study and analysis of environmental processes and problems of islands and tropical regions due to their ability to analyze images with shadows caused by clouds and mountains. At the end of the course, the student will have completed research work that could be presented at a regional scientific conference.

## **CIAM 8257 Environmental Model Construction Techniques**

Three credits.

Prerequisite: Admission to the Environmental Sciences Graduate Program or Authorization from the professor.

The course is designed to train students in the intermediate level of modeling environmental resource systems incorporating system dynamics. Students will work with models such as population-resources, lake conservation, automobile air pollution, the nitrogen cycle, and more, using software that handles most of the mathematical computations (such as STELLA or its equivalent) so that the students can focus on developing the model structure and obtaining or identifying key parameters in real-world systems.

# CIAM8405 Seminar on Sustainable Environmental Management Topics of Islands and Tropical Regions.

Two credits. Two hours of seminar a week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Advanced seminar aimed at the analysis and discussion of literature and recent developments in sustainable environmental management of islands and tropical regions.

# **CIAM 8425 Environmental Geology**

Three credits. Three hours of lecture per week. Prerequisite: CIAM 6115, 6117, and 6118.

Study of the interaction between human activities and geological processes problems related to slope stability, processes of erosion, transport, and sedimentation, and measurement of the physiochemical properties of geological materials are analyzed. Chemical equilibrium, transport mechanisms, and destination of characteristic contaminants of the soil matrix are examined. The hydrogeology, diffusion and transport of pollutants through the soil and aquifers, sampling techniques, rehabilitation strategies for contaminated sites geological hazards induced by natural phenomena and geological problems

resulting from the development of human infrastructure in mountains, karst, flood plains and coastal regions are also studied.

# **CIAM 8435 Environmental Hydrology**

Three credits. Three hours of lecture per week.

Prerequisites: CIAM 6115, 6115, 6118.

Study of hydrological processes and water pollution. Chemical equilibria transport mechanism, and destination of contaminants characteristic of the water matrices are examined. Measurement of water budgets, determination of physical and chemical parameters for natural waters, techniques for sampling and analysis of contaminants, processes of diffusion and transport of contaminants in surface and groundwater, impact of diverse human activities on hydrologic balances and water quality are discussed, as well as strategies for prevention, remediation, and mitigation of surface and groundwater contamination.

## **CIAM 8775 Waste Management and Disposal**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences. CIAM6115, 6117, 6118.

Analysis of the problem of waste disposal of all types on islands and tropical regions, focusing on Puerto Rico and study of the different alternatives and technologies available. Strategies for reduction, reuse, recycling, disposal in local and regional landfills, gasification plants, incineration and others are examined. The environmental impact of the different alternatives to the problem of waste management in islands and tropical regions is discussed, focusing on solutions consistent with sustainable development.

# **CIAM 8785 Energy Generation**

Three credits. Three hours of lecture per week.

Prerequisite: CIAM6115, 6117, 6118.

Study of the fundamental concepts of energy, the laws of thermodynamics, and their practical applications. Analysis of energy demand and alternatives for its generation within the context of sustainable development. The environmental impact of the different generation alternatives and the measures that can be used to minimize this impact are discussed.

# CIAM 8901-8902 Graduate Seminar in Environmental Sciences I and II Credit.

Lecture and discussion on special topics in environmental sciences, usually by guest speakers or based on recent literature in the area.

# **CIAM 8990 Special Topics in Environmental Sciences**

One to three credits. One hour of lecture and two of research per week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Detailed study on one or more specific topics in the area of environmental sciences, usually by visiting professors or specialists in one of the areas of environmental sciences. The course is designed to offer practical and theoretical experience on specific current topics in environmental science. The themes vary each year. The format of the course encourages invited experts in the selected topic to dedicate a week or more to their lectures and empirical experiences. (Up to a maximum of 18 credits).

Mailing Address: 17 University Ave., Ste. 1701, San Juan, Puerto Rico 00925-2537

**Telephone:** (787) 764-0000, ext. 88242

Email: environmental.graduados@upr.edu/omar.perez15@upr.edu

Website: https://natsci.uprrp.edu/envsci/

#### **DEGREE:**

## **Doctor of Philosophy in Environmental Sciences**

#### **ENVIRONMENTAL SCIENCE FACULTY:**

Gao, Quiong, Ph.D., Cornell University, 1987, Professor. Ecosystem modeling.

**Hernández, Edwin,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2000, Associate Researcher. Marine ecology.

**Louime, Clifford,** Ph.D., Florida Agricultural and Mechanical University, 2005, Associate Professor, Sustainable Biofuel Production.

Meléndez- Ackerman, Elvia, Ph.D., University of California-Irvine, 1995, Professor. Evolution and bioconservation.

**Moreno**, **Gabriel**, Ph.D. State University of New York-Stony Brook, 1990, Professor. Sustainable urban systems.

**Nytch, Christopher,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2018. Associate Professor, Forest Ecology, Ecosystem Services, Sustainable Resource Management.

**Ortiz, Jorge,** Ph.D., University of Colorado-Boulder, 1998, Professor. Applied limnology, Water resources management.

**Pérez-Reyes, Omar,** Ph.D., Utah State University, 2014, Associate Professor, Ecology, Invertebrate Zoology, Freshwater Biology.

**Ríos, Rafael A.,** Ph.D., University of Texas, Austin, 1975, Professor. Treatment of drinking water and wastewater. Solid waste management.

Yu, Mei, Ph.D., Chinese Academy of Sciences, 1998, Professor. Spatial Analysis, Modeling.

Zimmerman, Jess, Ph.D., University of Utah, 1989, Professor. Plant ecology.

Zou, Xiaoming, Ph.D., Colorado State University, 1992, Professor. Soil ecology.

SCHOOL OF PLANNING, UPRRP

**Barreto, Maritza,** Ph.D., University of Puerto Rico-Mayaguez Marine Sciences Geological Oceanography, 1997, Distinguished Professor. Geological Oceanographer and Coastal processes.

#### **BIOLOGY DEPARTMENT**

José l. Agosto, Ph.D., Brandeis University, 2008, Control Genético del sueño y ritmos circadianos.

Cuevas, Elvira, Ph.D., Venezuelan Institute of Scientific Research, 1983, Professor. Ecology

Giray Tugrul, Ph.D. University of Illinois, 1997, Professor. Animal behavior.

**Massey, Steven E.,** Ph.D., University of Kent at Canterbury, 2004. Professor. Bioinformatics; molecular evolution; genome evolution; The origin of life; complexity.

Sabat, Alberto, Ph.D., SUNY-Albany, 1989, Professor. Ecology and Bioconservation.

#### CHEMISTRY DEPARTMENT

**Néstor Carballeira**, Ph.D., University of Würzburg, 1983, Catedrático. Química de Productos Naturales

**Díaz Vázquez**, **Liz**, Ph.D., University of Puerto Rico, Río Piedras Campus, 2005, Professor. Analytic Chemistry

**Tinoco, Arthur**, Ph.D., Yale University, 2007, Associate Professor. Chemistry Bioinorganic. Bioinorganic Chemistry, Proteomics, anticancer research, Metal-based therapeutics.

**Weiner, Brad. R.**, Ph.D., University of California, Davis, 1986, Professor. Chemical Physics; Environmental and Physical Chemistry; Chemistry of Materials. Dynamics of reactions of gas phase molecules, photochemistry and photophysics of lasers, kinetics of gas phase reactive intermediates, non-linear photoprocesses, molecular energy transfer, Cancer Biology.

#### MATHEMATICS DEPARTMENT

**Pérez, María Eglée,** Ph.D., Central University of Venezuela, 1994, Professor. Bayesian Statistics; biostatistics.

**Pericchi, Luis,** Ph.D., University of London, Imperial College, Department of Mathematics 1981, Professor. Statistical Modeling and Applications to Antropology, Biomedicine, Biostatistics, Bioinformatics, Epidemiology, Econometrics, Engineering and Fraud Detection.

# PHYSICS DEPARTMENT, UPRRP

**Morell, Gerardo,** Ph.D., University of Puerto Rico, 1995, Professor. Nanotechnology and Cancer Biology.



### INTERNATIONAL INSTITUTE OF TROPICAL FORESTRY

González, Grizelle, Ph.D., University of Colorado, 1999, Scientific. Soil ecology.

Gould, William, Ph.D., University of Colorado, 1999, Scientist. Geographic information systems.

**Heartsill-Scalley**, **Tamara**, Ph.D., Utah State University, 2005, Scientific. Riparian Forest, Forest Ecology.

Wunderle, Joseph, Ph.D., University of Minnesota, 1980, Scientist. Ornithology.

## INSTITUTE OF NEUROBIOLOGY, UPR

Marie, Bruno, Ph.D., University of Sussex, 2000, Adjunct Professor. Genetics.

**Miller, Mark W.**, Ph.D., University of Connecticut, 1980, Professor. Environmental Neurobiology.

# UNIVERSITY OF PUERTO RICO, MAYAQÜEZ CAMPUS

**Dumas Rodríguez, José,** Ph.D., University of Puerto Rico, Río Piedras Campus, 1999, Professor. Analytic Chemistry.

**Ríos Hernández, Luis A.,** Ph.D., University of Oklahoma, 2003 Assistant Professor. Microbiology.

Snyder, Víctor A., Ph.D., Cornell University, 1980, Professor. Soil.

## **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://solicitud.upr.edu/

## **Specific Requirements of the Doctoral Program**

1. A Bachelor of Science degree (or its equivalent) or master's degree with a concentration in Environmental Science, Biology, Computer Science, General Science, Physics, Mathematics, Chemistry or Engineering from a university accredited. Students with a bachelor's/master's degree from an accredited university, but without a concentration in any of the aforementioned disciplines, can apply for admission to the graduate program, through the UPR platform (<a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>), once they have passed the following requirements with a minimum academic index of 3.00: one year of General Biology, one year of General Chemistry, Calculus I, and one Introduction to Environmental Sciences

- course. However, satisfactory completion of these courses does not guarantee admission to the program.
- 2. A minimum general GPA of 3.00 (on a 4.00 scale) and a minimum GPA in science of 3.00 at the undergraduate level.
- 3. Submit an official copy of your most recent academic record.
- 4. Submit three letters of recommendation from professors with whom you have taken science courses.
- 5. Possess adequate knowledge of both written and oral English and Spanish.
- 6. Submit TOEFL results (only for foreign students).
- 7. Attend an interview, if required by the Admissions Committee.

# **GRADUATION REQUIREMENTS:**

The approval of 60 graduate credits in total with a minimum academic index of 3.00 must be completed in the following way: 18 credits of core courses, 9 credits in emphasis courses, 6 credits in graduated seminars, 9 credits in elective courses and 18 graduate research.

# **Satisfactory Completion of the Degree Candidacy Requirements**

Approval of 18 research credits and the successful presentation and defense of a thesis based on research.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Required courses	18
CIAM 6115 The Terrestrial Environment	3
CIAM 6116 Tropical Ecosystems *	3
CIAM 6117 The Coastal Environment	3
CIAM 6118 The Urban Environment	3
CIAM 6235 Remote Sensing I *	3
CIAM 6256 Methods for the statistical analysis of environmental systems	3
Graduate Research	18
CIAM 8999 Graduate Research PhD	18
CIAM 8896 Continuation of Doctoral Thesis	0
Emphasis Courses	9
Graduate Seminars	6
Free Electives	
Students with prior authorization from the thesis committee may also take	9
courses offered by other graduate programs. CIAM 6910 Supervised Graduate	
Research (Rotation) 3 credits	
Total Credits	60

Program Courses	Credits
CIAM 8225 Spatial Analysis Methods	3

Program Courses	Credits
CIAM 8226 Geospatial Techniques in Environmental Sciences	3
CIAM 8236 Remote Sensing II	3
CIAM 8257 Techniques for the construction of environmental models	3
CIAM 8425 Environmental Geology	3
CIAM 8435 Environmental Hydrology	3
CIAM 8115 Human Dimensions of Environmental Change	2
CIAM 8116 Environmental Policy and Ethics	2
CIAM 8117 Urban Environment, Design and Expansion	2
CIAM 8118 Ecological Informatics and Socio-Ecological Models.	2
CIAM 8119 Ecosystem Services and the Ecological Economy.	2
CIAM 8120 Communication about the Environment	2
CIAM 8205 Seminar on Environmental Analysis Topics	2
CIAM 8206 Seminars on topics of environmental spatial analysis	2
CIAM 8775 Waste Management and Disposal	3
CIAM 8785 Power Generation	3
CIAM 8990 Special Topics in Environmental Sciences	3
Advanced Graduate Seminars (2 requirements and 4 from the advanced seminar list)	6
CIAM 8901-02 Graduate Seminar (two semesters) Requirement	2
CIAM 8205 Seminar on Sustainable Management of Tropical Islands I *	2
CIAM 8206 Seminar on Environmental Modeling and Spatial Analysis I *	2
CIAM 8405 Seminar on Sustainable Environmental Management Topics of Islands and Tropical Regions I.	2
CIAM 8406 Seminar on Sustainable Environmental Management Topics of Islands and Tropical Regions II.	2

<sup>\*</sup>Elective courses marked with \* may be substituted for elective courses approved by the Program.

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **CIAM 6115 The Terrestrial Environment**

Three credits. Three hours of conference a week.

Study of the geological, geomorphological, hydrological and climatological processes of mountainous, alluvial regions and characteristics of islands and tropical regions. It focuses on the study of the impact of Human activities, the environmental problems resulting from these actions and the strategies to promote their sustainable development. The topics are discussed and analyzed within the context of general systems theory using the watershed as the unit of study.

## **CIAM 6116 Tropical Ecosystems**

Three credits. Three hours of conference a week.

Prerequisite: Admission to the environmental sciences graduate program or professor's authorization.

Study and spatial distribution of the characteristic ecosystems of islands and tropical regions. The interaction between the different biotic and abiotic components of these ecosystems is systematically examined, as well as the impact of natural processes and human activities on them.

#### **CIAM 6117 The Coastal Environment**

Three credits. Three hours of conference a week.

Study of the ecology and geological, geomorphological, hydrological and climatological processes of the coastal and marine region, including the maritime-terrestrial zone, the surge zone, the coastal zone, estuaries, reefs and others. It focuses on the study of the impact of human interactions on said environment, the environmental problems resulting from said interactions and strategies to promote sustainable development of said regions.

#### **CIAM 6118 Urban Environment**

Three credits. Three hours of conference a week.

Prerequisite: Admission to the environmental sciences graduate program or professor's authorization.

Study of the city from a system perspective. Its structure and function, the climatology of cities and urban ecology are examined; the environmental impact of transportation systems, energy generation, water distribution, disposal of used water and solid waste, and the impact of human activities on environmental quality. Problems of urban planning, green areas, natural risks, urban noise, distribution of pockets of poverty, and aspects of environmental justice are considered. Strategies are discussed to improve the quality of life in cities and promote sustainable development. The characteristic pollutants of urban areas, and their transport and diffusion mechanisms, are examined.

## CIAM 6235 Remote Sensing I.

Three credits.

Theoretical and practical study of methodologies for analyzing land cover and land use through satellite images. The essential physical laws for the study of remote sensing, systems for obtaining images, correction and classification of images, and interpretation of results are examined. A project is developed where the student performs an analysis to classify land cover and use using satellite images of islands and tropical regions.

## CIAM 6256 Statistical Analysis Methods for Environmental Systems

Three credits.

Prerequisite: Admission to the environmental science graduate program.



Study of statistical methods for the analysis of environmental data including multiple variables. Multiple linear regression models, principal component analysis, cluster analysis, multidimensional surface analysis, canonical analysis, discriminant analysis, and others are studied. The variables are analyzed in order to quantitatively understand the behavior of environmental processes. Different statistical programs for computers are discussed and applied, and scientific research works are discussed.

### **CIAM 6910 Graduate Research**

One to three credits. One to three hours of research per week.

Prerequisite: Authorization of the Coordinator of the Graduate Program in Environmental Sciences.

Research in Environmental Sciences supervised by a faculty member in his or her laboratory, to introduce incoming graduate students to the concepts, procedures, and techniques used to conduct their research in a specific area. The course may be taken up to two times for a maximum of 6 credits by a master's program student and up to four times for a maximum of 9 credits by a doctoral student.

#### CIAM 8999 Graduate Research for the Dissertation in Environmental Sciences

One to six credits. 5 to 30 hours of research.

Prerequisite: Authorization of the director or coordinator of the environmental sciences graduate program.

Thesis research leading to the master's degree in environmental sciences. (up maximum 18 credits).

#### CIAM 8896 Continuation of Doctoral Thesis.

Zero credits.

Requirements: Have completed the research courses that are required for the master's degree in environmental sciences.

To enroll in this course, the student must have passed all the academic requirements and research credits to obtain the master's degree in environmental sciences, and only the phase of completing, presenting, and defending the master's thesis must remain. A student enrolled in this course will be considered a full-time student of the master's Program in Environmental Sciences and the Río Piedras Campus of the University of Puerto Rico.

#### OTHER COURSE DESCRIPTIONS:

## **CIAM 6990 Special Topics in Environmental Sciences**

One to three credits. One to three hours of lecture per week.

Prerequisite: Admission to the Environmental Sciences Graduate Program or professor's authorization.

Detailed study of one or more specific topics in the area of environmental sciences, usually by visiting professors or specialists in some of the areas of environmental sciences. The course is

designed to offer practical and theoretical experience on specific and current topics in environmental sciences. The topics vary each year. The format of the course encourages guest experts on the selected topic to dedicate a week or more to their lectures and empirical experiences. (Maximum of 12 credits).

## **CIAM 8115 Human Dimensions of Environmental Change**

Two credits. Two hours of conference a week.

Prerequisite: Authorization of the director or coordinator of the environmental sciences graduate program.

Relationship between humans and the environment with emphasis on the social, political, economic, and cultural factors of the conservation of natural resources and environmental degradation. Various topics will be explored such as the social construction of nature, environmental justice and environmental movements. Presents a broad and panoramic perspective to contextualize decision-making processes (at the state, community organizational, and individual levels) regarding the management of natural resources, and promotes the application of concepts learned through collaborative projects with constituents on environmental issues contemporaries in Puerto Rico.

# **CIAM 8116 Environmental Policy and Ethics**

Two credits. Two hours of conference a week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

This course focuses on how environmental policy evolves and on the ethics of the positions of the various stakeholders, especially in relation to selected environmental issues in Puerto Rico. Students will explore "environmental capacity," defined as the possession of adequate resources necessary for the execution of activities related to environmental protection, as well as the willingness to use those resources. Environmental issues are related to questions about the management of the commons, which means that conflicting values are involved. Therefore, students will be required to apply an ethical perspective to environmental issues, health promotion issues, and political solutions. Students will apply the principles of environmental policy to the projects of selected groups.

#### CIAM 8117 Urban Environment, Design and Expansion

Two credits. Two hours of conference a week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Students will study the environmental characteristics of cities and suburbs, the impacts of urban development on the environment, especially in the tropics, and the principles of improved design for the sustainability of urban and suburban areas, especially as they relate to the problems in Puerto Rico, the US and elsewhere. Economic agents, the environment, and society have the capacity to create and transform the urban space where they are located. The long-term sustainability of the urban development process is based on the ability to reconcile the interests of growth (economic and urban), conservation, and social equity. This course will analyze "urban

space" as a scenario where economic agents, the environment and society interact. In turn, these elements can have the capacity to create and transform the urban space where they are located.

## CIAM 8118 Ecological Informatics and Socio-Ecological Models.

Two credits. Two hours of conference a week.

Prerequisite: Authorization of the director or coordinator of the Environmental Sciences Graduate Program, considering that the student has the appropriate mathematical background.

Computing and modeling have become even more important tools for environmental scientists. Students will be taught the basic components of environmental informatics and socio-ecological models. Topics to be covered include types and uses of models; distinguish between models and hypotheses; data structure; metadata and data interpretation; information theory; hypothesis formation and testing; modeling methodologies and when to use them; relationship database and web-based data services; examples of complex systems with parameterization and validation. Students will apply techniques for components of natural and social systems in the selected group project.

## CIAM 8119 Ecosystem Services and the Ecological Economy.

Two credits. Two hours of conference a week.

Prerequisites: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Based on the Millennium Ecosystem Assessment, the course will focus on the support, provisioning, and regulation of ecosystem services as the link between the economies of natural and human systems and the increasing pressures these systems face. The fair allocation and sustainability of these services will be considered through different economic viewpoints, including regulated and open markets, the tragedy of the commons, and ecological economics. Conflicts between growth and sustainability will be examined, as well as possible solutions, such as valuations including the true ecological and social costs of resource exploitation and incentive structures. Students will apply the principles of ecological economics to group projects they select.

#### **CIAM 8120 Communication about the Environment**

Two credits. Two hours of conference a week.

Prerequisites: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

To engage diverse community members in environmental science and policy formulation, students will develop formal debate and argumentation skills. Special emphasis will be given to the ethical dimensions of natural resource allocation and sustainability. The course will analyze how the media present environmental sciences and the feedback from said presentations on national and international initiatives. Through selected topics, students will explore the ethical foundations of different viewpoints with an emphasis on clarity and accuracy in communicating science that supports diverse members of the community.

#### **CIAM 8205 Seminar on Environmental Analysis Topics**

Two credits. One hour of seminar and one hour of conference per week.



Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Advanced seminar aimed at the analysis and discussion of literature and recent developments in the area of spatial analysis of the environment with emphasis on islands and tropical regions.

## CIAM 8206 Seminar on topics of environmental spatial analysis

Two credits.

Prerequisite: Authorization of the Director or Coordinator of the Graduate Program in Environmental Sciences.

Advanced seminar aimed at the analysis and discussion of literature and recent developments in spatial analysis of the environment, especially as it concerns islands and tropical regions.

## **CIAM 8225 Methods for Environmental Spatial Analysis**

Three credits.

Prerequisite: CIAM 5235

Advanced methods in geospatial analysis. Issues of scaling, spatial autocorrelation, spatial interpolation, spatial point patterning, patch analysis, hydrological analysis, and image analysis will be discussed, along with their uses in environmental science. The issues will be addressed at conferences and via analysis of key articles. Students will develop and present detailed projects, applying techniques to a chosen environmental problem.

# **CIAM 8226 Geospatial Techniques in Environmental Sciences**

Credit. Three laboratory hours a week.

Prerequisite: CINA 4995

Laboratory course in which applications of cutting-edge geospatial techniques will be discussed and students will apply the knowledge and techniques learned to solve environmental problems through the use of case studies. Topics will cover applications in community groups, hydrological dynamics, landslides, epidemics, land use changes and global carbon dynamics. It will include oral presentations of frontier articles, workflows for solving environmental problems, and written reports of the topics.

#### **CIAM 8236 Remote Sensing II**

Three credits.

Requirements: CIAM 6235

Practical study of advanced satellite image analysis methodologies and the theory that underpins these techniques. Emphasis is placed on the use and application of programs such as Imagine, ENVI, and Idrisi for the study and analysis of environmental processes and problems of islands and tropical regions due to their ability to analyze images with shadows caused by clouds and mountains. At the end of the course, the student will have completed research work that could be presented at a regional scientific conference.

#### **CIAM 8257 Environmental Model Construction Techniques**

Three credits.

Prerequisite: Admission to the Environmental Sciences Graduate Program or Authorization from the professor.

The course is designed to train students in the intermediate level of modeling environmental resource systems incorporating system dynamics. Students will work with models such as population-resources, lake conservation, automobile air pollution, the nitrogen cycle, and more, using software that handles most of the mathematical computations (such as STELLA or its equivalent) so that the students can focus on developing the model structure and obtaining or identifying key parameters in real-world systems.

# CIAM 8405 Seminar on Sustainable Environmental Management Topics of Islands and Tropical Regions.

Two credits. Two hours of seminar a week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Advanced seminar aimed at the analysis and discussion of literature and recent developments in the area of sustainable environmental management of islands and tropical regions.

## **CIAM 8425 Environmental Geology**

Three credits. Three hours of conference a week.

Prerequisite: CIAM 6115, 6117, 6118.+

Study of the interaction between human activities and Geological processes. Problems of slope stability, erosion, transport and sedimentation processes and the measurement of the physicochemical properties of geological materials are analyzed. The chemical balances and mechanisms of transport and fate of contaminants characteristic of the soil matrix, hydrogeology, diffusion and transport of contaminants through soils and aquifers, sampling techniques, rehabilitation strategies for contaminated places, induced geological hazards are examined. Natural phenomena and geological problems are studied in the context of the effect of human infrastructure development in mountainous, arctic regions, floodplains and coasts.

#### CIAM 8435 Environmental Hydrology

Three credits. Three hours of conference a week. Previous requirements: CIAM 6115, 6115, 6118.

Study of hydrological processes and water pollution. The chemical balances and transport and fate mechanisms of contaminants characteristic of the water matrix are examined. The measurement of water budgets, the determination of physical and chemical parameters for natural water, sampling and analysis techniques for contaminants, the diffusion and transport processes of contaminants in surface and groundwater, the impact of various human activities are discussed, in hydrological balances and water quality, as well as prevention, remediation and mitigation strategies for contamination of surface and groundwater.

## **CIAM 8775 Waste Management and Disposal**

Three credits. Three hours of conference a week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences. CIAM 6115, 6117, 6118.

Analysis of the problem of waste disposal of all types on islands and tropical regions, focusing on Puerto Rico and study of the different alternatives and technologies available. Strategies for reduction, reuse, recycling, disposal in local and regional landfills, gasification plants, incineration and others are examined. The environmental impact of the different alternatives to the problem of waste management in islands and tropical regions is discussed, focusing on solutions consistent with sustainable development.

#### **CIAM 8785 Power Generation**

Three credits. Three hours of conference a week.

Prerequisite: CIAM 6115, 6117, 6118.

Study of the fundamental concepts of energy, the laws of thermodynamics and their practical applications. Analysis of energy demand and alternatives for its generation within the context of sustainable development. The environmental impact of the different generation alternatives and the measures that can be used to minimize this impact are discussed.

# CIAM 8901-8902 Graduate Seminar in Environmental Sciences I and II 2 Credits.

Lecture and discussion on special topics in environmental sciences, usually by guest speakers or based on recent literature in the area.

#### CIAM 8990 Special Topics in Environmental Sciences

One to three credits. One hour of lecture and two hours of research per week.

Prerequisite: Authorization of the director or coordinator of the Graduate Program in Environmental Sciences.

Detailed study on one or more specific topics in the area of environmental sciences, usually by visiting professors or specialists in one of the areas of environmental sciences. The course is designed to offer practical and theoretical experience on specific current topics in environmental science. The themes vary each year. The format of the course encourages invited experts in the selected topic to dedicate a week or more to their lectures and empirical experiences. (Up to a maximum of 18 credits). This course is a full academic load.

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**Telephone:** 787.764.0000 Ext. 88341, 88349

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Email: ccom-contact@upr.edu

Website: <a href="https://natsci.uprrp.edu/ccom/graduate-program/">https://natsci.uprrp.edu/ccom/graduate-program/</a>

**DEGREE:** 

# **Master of Science in Computer Science**

#### **FACULTY**:

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<a href="https://scholar.google.com/citations?user=ye\_FQawAAAJ">https://scholar.google.com/citations?user=ye\_FQawAAAJ</a>

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**José Ortiz Ubarri**, Ph.D., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2010. Professor. Interests: Computer Networks, HPC (High Performance Computing), Cybersecurity, Computer Science Education, Coding Theory. Ext. 88351. jose.ortiz23@upr.edu. http://ccom.uprrp.edu/~jortiz/



**Humberto Ortiz Zuazaga**, Ph.D., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2008. Professor. Interests: Bioinformatics, Cybersecurity. Ext. 88363, 88364. <a href="mailto:humberto.ortiz@upr.edu">humberto.ortiz@upr.edu</a>. <a href="http://ccom.uprrp.edu/~humberto/">http://ccom.uprrp.edu/~humberto/</a>

**Ivelisse Rubio Canabal**, Ph.D., Applied Mathematics, Cornell University, 1997. Professor. Interests: Finite Fields, Number Theory. Ext. 88356. <a href="mailto:ivelisse.rubio@upr.edu">ivelisse.rubio@upr.edu</a>. <a href="http://ccom.uprrp.edu/~labemmy/">http://ccom.uprrp.edu/~labemmy/</a>

## **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones\_graduadas/

#### **Specific Requirements of the master's program**

Candidates must meet the admission requirements for graduate studies at the Río Piedras Campus. Additionally, students must meet the specific requirements of the Computer Science program:

- 1. Bachelor's degree in computer science or a bachelor's degree and the equivalent of the courses in Data Structures (CCOM 3034) and Algorithm Design and Analysis (CCOM 5050).
  - a. Students who do not possess the skills provided by the Algorithms course may receive conditional admission so that they can complete that requirement during their first semester<sup>1</sup>.
- 2. A minimum GPA of 3.00 (on a scale of 0-4).
- 3. Adequate knowledge of written and oral Spanish and English.

#### **Documents Required for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format through <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. Two official copies of your most recent transcript
- 3. A minimum of two letters of recommendation, preferably three, from teachers or employers. It is recommended that at least one of the letters comes from a professor.
- 4. Essay expressing your interest in Computer Science and obtaining the requested degree.
- 5. Participate in an interview, if required by the Graduate Affairs Committee.

#### **GRADUATION REQUIREMENTS:**

Meet the general graduation requirements of the Río Piedras Campus. Additionally, students must meet specific program requirements:

1. Complete all 27 credits of course work.

2. Prepare a thesis or a project. Although the new academic policy for Graduate encourages the replacement of a master's thesis with a project, we provide both alternatives. Students working on theoretical aspects of Computer Science will be best served with a thesis that can lead to publications and motivate them to pursue doctoral studies. The minimum level of the master's thesis must be that of an academic document of an expository nature related to the courses that the student has taken. The minimum level of the project must be that of an application that can serve a specific target audience.

#### **STUDY PROGRAM:**

The student must prepare their academic program in conjunction with their supervisor.

Program Requirements	Credits
Core courses	15
CCOM 6050 Algorithm Design and Analysis	3
CCOM 6029 High Level Programming Languages	3
CCOM 6XXX A Systems course: Some possible systems courses are:	
Operating Systems, Databases, Networks, Cybersecurity and	3
Computer Architecture.	
CCOM 6035 Development of Applications with Social Impact	3
Thesis or project: CCOM 6996 Master's Thesis or CCOM 6997 Master's Project	3
6000 Level Computer Science Electives	6
Free electives	9
Total de Credits	30

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **CCOM 6029 High Level Programming Languages**

Three credits. One hour of lecture and two hours of discussion per week

The course completes the education of programming languages, exposing the student to concepts such as: syntax, semantics and elements of the three best-known programming paradigms, which are imperative, functional and logical. It provides answers to questions about why there are so many programming languages and why there is no single unified model of programming languages. This course will be offered under in-person, hybrid and online modalities.

#### **CCOM 6035 Development of Applications with Social Impact**

Three credits. One hour of lecture and two hours of discussion per week.

The course provides students with the opportunity to develop an application that will have a direct impact on the community and society. This is done through group work under the supervision of a teacher following co-design methods and mindsets combined with the Scrum framework to

design and develop applications focused on interest and with constant participation of the people affected by the application. Students will have periodic meetings to present and discuss the development process, progress made, and actions necessary to complete the project. At the end of the semester, each group will deliver the software application with a user manual. This course will be offered under in-person and hybrid modalities.

# **CCOM 6050 Design and Analysis**

Three credits. One hour of lecture and two hours of discussion per week.

The course is a graduate level course on designing efficient algorithm analysis. Advanced algorithm design methods are taught, including divide and conquer, dynamic programming, greedy methods, randomized algorithms, and approximation algorithms. Asymptotic, amortized and probabilistic analysis methods associated with efficient algorithm design strategies are studied. Additionally, an introduction to computational intractability, specifically NP-completeness, is presented. This course will be offered under in-person, hybrid and online modalities. This course is equivalent to MATE 6682.

#### **CCOM 6996 Master's Thesis**

Three credits.

Prerequisites: Authorization from the professor.

In this course, students will delve into the selected topic and carry out research that leads to the preparation of the master's thesis. The resulting work is expected to be expository related to the courses taken and written in a format following the guidelines of our departmental manual. This course will be offered in person, hybrid, and online.

#### **CCOM 6997 Master's Project**

Three credits.

Prerequisites: Authorization of the professor.

The course is for students to plan and develop a project with the supervision of a professor. The resulting work is expected to solve a problem or task for a specific target audience. This course will be offered under in-person, hybrid and online modalities.

#### OTHER COURSE DESCRIPTIONS:

#### **CCOM 6017 Operating Systems**

Three credits. Two hours of lecture and one hour of discussion per week.

In this graduate course, operating systems are presented as a vehicle for applications at the user level, their usefulness as the guardian between applications, the diversity and functionality of computer resources. This through the topics on processes and threads, memory management, file system and security. There will be an emphasis on virtualization and distributed systems

in process concurrency problems and their traditional solutions. This course will be offered face-to-face, hybrid and online.

## **CCOM 6030 Software Engineering**

Three credits. Two hours of lecture and one hour of discussion per week.

The course provides an overview of software engineering principles and concepts. The elements of the software life cycle, requirements analysis, implementation, verification, and validation, as well as ethical issues related to the software development process, are presented. Students will develop a group project that will put them in the position of software designers and developers. This course will be offered in in-person, n, hybrid and online modalities.

## **CCOM 6045 Computational Cell Biology**

Three credits. One hour and a half of lecture, one hour of discussion per week.

Prerequisite: CCOM 6681

The course will introduce the student to mathematical modeling of different cellular activities. Examples of cellular processes will be used to motivate concepts and techniques used in computational cell biology. The complexity of cellular functions modeled with mathematical and computational techniques will progressively increase. The course will focus on the simulation of functions that describe certain physiological behaviors in the cell. This course will be offered in in-person, hybrid, and online modalities.

#### **CCOM 6070 Introduction to Machine Learning**

Three credits. Two hours of lecture and one hour of discussion per week.

The course presents basic concepts and techniques of machine learning. The class provides a fluid introduction primarily to supervised classification algorithms, such as simple linear classifiers, decision trees, neural networks, and support vector machines. Other topics include unsupervised and semi-supervised learning, reinforcement learning, and probabilistic graphical models. The emphasis of the course will be experimentation and practice. This course will be offered in inperson, hybrid and online modalities.

# **CCOM 6086 Computer Architecture**

Three credits. Two hours of lecture and one hour of discussion per week.

The course qualitatively and quantitatively examines the decisions made during computer design and their impact. You learn about simple processors that can execute multiple instructions concurrently and why current memory systems are almost as complex as processors. Unlike an introductory computer architecture course that discusses just enough to create a working processor,

this course focuses on techniques for designing "the best" processor. This course will be offered in in-person, hybrid and online modalities.

## **CCOM 6120 Introduction to Computer Vision**

Three credits. Two hours of lecture and one hour of discussion per week.

The course is graduate level that introduces image analysis and computer vision over mathematical models and algorithms that allow computer to automatically extract information from images and videos. Topics to be covered will be the three main aspects: pixel-level image processing, machine learning of visual models, and estimation of geometric. Pratice will be developed with the programming of applications such as image segmentation, detection and recognition of objects, using open-source software libraries. This course will be offered face-to-face, hybrid and online.

#### **CCOM 6130 Data Visualization**

Three credits. Three hours of lecture, discussion and laboratory per week.

The course trains students in the concepts and tools used to perform visualization on a variety of data types. Of particular interest will be the visualization of spatial data 2d and 3d, tradionally known as scientific visualization of non-spatial data such as tables, time series or relationships, viewed as information visualization. This course involves programming projects. This course can be offered face-to-face, hybrid and online.

#### **CCOM 6150 Data Mining**

Three credits. Three hours of lecture, discussion and laboratory per week.

The course provides an overview of the main topics of data mining and algorithmic background. Students are exposed to hands-on experiences analyzing large data sets to uncover hidden properties, relationships, and organize the data in ways that are useful for analysis. Topics include data modeling, frequent itemset mining, clustering, classification, sketching, dimensionality reduction, regression, link analysis classification, network statistics, and importance measures for links and nodes. This course will be offered in in-person, hybrid and online modalities.

## **CCOM 6189 High Performance Computing**

Three credits. Two hours of lecture and one hour of discussion per week.

The course is an elective course where high-performance computing systems are designed: clusters, co-processors, interconnection networks, parallel file systems. Students will learn techniques for designing software achieving high performance in these systems, such as performance measurement and the factors determining it. There will be practical experiences

applying the skills acquired in scientific computing problems. This course will be offered in inperson, hybrid and online modalities. This course is equivalent to MATE 6681.

## **CCOM 6680 Computational Analysis**

Three credits. Two hours of lecture and one hour of discussion per week.

The course is about numerical analysis, which aims to provide computational methods for studying and solving mathematical problems involving real variables. These methods provide approximations to the true solution of the problem, the study of errors which is very important for numerical analysis. The mathematical foundations of numerical methods are provided; analyze the basic theoretical properties of the method: stability, precision, and computational complexity. Additionally, illustration of the performance of the methods through computational examples and counterexamples using a high-level programming language such as MATLAB/Octave. This course will be offered in in-person, hybrid and online modalities. This course is equivalent to MATE 6680.

## **CCOM 6685 Applied Bioinformatics**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisites: Authorization of the professor.

The course will introduce the student to algorithm design and data analysis for molecular biology. Examples of molecular processes will be presented to motivate the study of the concepts and techniques used in computational molecular biology. The complexity of the data studied will progress, as will the mathematical and computational techniques for its analysis. The focus of the course will be the analysis of biological sequences. This course will be offered in face-to-face, hybrid and online modalities. This course is equivalent to MATE 6685.

## **CCOM 6882 Optimization**

Three credits. Two hours of lecture and one hour of discussion per week.

This is a course on nonlinear optimization problems, both unconstrained and constrained. We will study the optimality conditions and the basic numerical optimization methods with their convergence analysis. Numerical methods include basic descent methods, conjugate direction methods, quasi-Newton algorithms, reduced gradient method, gradient projection method, penalty and barrier methods, duality, and Larange methods. This course is equivalent to MATE 6882.

## **CCOM 6981 Research and Teaching Techniques for Computer Scientists**

Three credits. Two hours of lecture and one hour of discussion per week.

The course will introduce the basic skills that are essential to becoming a successful researcher and graduate student. Lecture topics will include pedagogy, research methodology, experimental design, career options, professional ethics and academic integrity, and oral and written presentation techniques in English. Presentations will be offered by CCOM faculty members and graduate students on their own research that will allow them to develop cognitive competencies for the detection and formulation of problems, as well as the development of problem-solving strategies,

as a diagnostic basis for the elaboration of proposals and projects. This course will be offered in in-person, hybrid and online modalities.

## **CCOM 6995. Topics in Computer Science**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisites: Authorization from the professor.

In this course, students will carry out a detailed study through literature review, analysis, presentation, and discussion on one or more specific topics in Computer Science. Given the changing nature of the area, topics will vary frequently. The course offers students the opportunity to learn about current topics related to Computer Science. The course can be taken multiple times if the topics are different. This course will be offered in in-person, hybrid, and online modalities.

## CCOM 8017. Advanced Topics in Operating Systems.

Three credits. Prerequisites: CCOM 6017

In the course, the student will carry out a detailed study on one or more specific topics in Operating Systems. The topics of this course are expected to be theoretical. The course offers students the opportunity to learn about current topics related to Operating Systems. The course can be taken multiple times if the topics are different. Examples of topics are methods of operating systems on multi-core computers, multi-thread control, and distributed systems concepts. This course will be offered in person, hybrid, and online modalities.

#### CCOM 8050. Advanced topics in Algorithm Design and Analysis.

Three credits. Prerequisites: CCOM 6050

In the course, the student will carry out a detailed study on one or more specific topics in Algorithm Design and Analysis. The topics of this course are expected to be theoretical. The course offers students the opportunity to learn about current topics related to Algorithm Design and Analysis. The course can be taken multiple times if the topics are different. Some examples of topics are greedy algorithms, online algorithms, and streaming algorithms. This course will be offered in person, hybrid, and online.

## CCOM 8070. Advanced Topics in Machine Learning.

Three credits. Prerequisites: CCOM 6070

In the course, students carry out a detailed study on one or more specific topics in Machine Learning. The topics of this course are expected to be theoretical in nature. The course offers students the opportunity to learn about current topics related to Machine Learning. The course can be taken multiple times if the topics are different. Examples of topics are kernel-based methods, reinforcement learning, and convolutional neural networks. This course will be offered in-person, hybrid, and online modalities.

## CCOM 8089. Advanced Topics in Compiler Design.

Three credits. Prerequisites: CCOM 6029 and CCOM 6050.

In the course the student will carry out a detailed study on one or more specific topics in Compiler Design. The topics of this course are expected to be theoretical in nature. The course offers students the opportunity to learn about current topics related to compiler design. The course can be taken multiple times if the topics are different. Examples of topics are interprocedural analysis, garbage collection, and symbolic execution. This course will be offered in-person, hybrid, and online.

## CCOM 8995. Advanced Topics in Computer Science.

Three credits. Prerequisites: Authorization from the professor.

In the course, the student carries out a detailed study on one or more specific advanced topics in Computer Science. Given the changing nature of the area, topics will vary frequently. The course offers students the opportunity to learn about current advanced topics related to Computer Science. The course can be taken multiple times if the topics are different. This course will be offered inperson, hybrid, and online.

#### CCOM 8996. Doctoral Dissertation.

Three credits. Prerequisites: Pass the degree exam and authorization from the Graduate Committee.

The course is for the student to delve deeper into a selected topic by making a proposal and research/creation work resulting in a dissertation and dissemination of the results. It is expected that the work will advance knowledge in Computer Science, by making theoretical and methodological approaches in the field of study; by critically evaluating and questioning a situation or problem and offering solutions. This course will be offered in-person, hybrid, and online.

#### **CCOM 8997. Continuation Doctoral Dissertation.**

Zero credits. Prerequisites: CCOM 8996.

The course is for the student to continue his work resulting in a dissertation and dissemination of the results. The work is expected to advance knowledge in Computer Science, by making theoretical and methodological approaches in the field of study; by critically evaluating and questioning a situation or problem and offering solutions. The course will count as a full load for the student. This course will be offered in-person, hybrid, and online.

#### CCOM 8999. Advanced Research in Computer Science.

Three credits. Prerequisites: Authorization from the professor.

In this course, the student will carry out exhaustive research in an area of Computer Science. The course offers students the opportunity to develop as researchers using all the skills necessary to carry it out. The course can be taken multiple times if the topics are different. This course will be offered in-person, hybrid, and online.

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**DEGREE:** 

## **Doctor of Philosophy in Computer Science**

#### **FACULTY:**

**Rafael Arce Nazario**, Ph.D., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2007. Professor. Interests: Computer Science Education, Hardware Security. Ext. 88362. <a href="mailto:rafael.arce@upr.edu.http://bit.ly/raanweb">rafael.arce@upr.edu.http://bit.ly/raanweb</a>

**Daniel Ayala**, Ph.D., Computer Science, University of Illinois at Chicago, 2017. Assistant Professor. Interests: Mobile data management, Intelligent transportation systems, Algorithms to improve urban transportation systems, Data science. Ext. 88341. daniel.ayala4@upr.edu

Carlos J. Corrada Bravo, Ph.D., Electrical Engineering, University of Southern California, 2002. Professor. Interests: Machine Learning Applications for Ecology, Software Development, Databases. Ext. 88354. <a href="mailto:carlos.corrada2@upr.edu">carlos.corrada2@upr.edu</a>. <a href="https://scholar.google.com/citations?user=ye\_FQawAAAJ">https://scholar.google.com/citations?user=ye\_FQawAAAJ</a>

**David Flores Granados**, Ph.D., Computer Science, Center for Scientific Research and Higher Education of Ensenada, Baja California, 2015. Assistant Professor. Interests: Bioinformatics, Data Science, Video Game Design and Development. Ext. 88341. <a href="mailto:david.flores8@upr.edu">david.flores8@upr.edu</a>

Marie Lluberes Contreras, Ph., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2000. Assistant Professor. Interests: Bioinformatics, Data Science. Ext. 88350. <a href="mailto:marie.lluberes@upre.edu">marie.lluberes@upre.edu</a>

**Rémi Mégret**, Ph.D., Computational Science, National Institute of Applied Sciences – Lyon (France), 2003. Associate Professor. Interests: Computer Vision, Machine Learning. Ext. 88355. remi.megret@upr.edu. http://ccom.uprrp.edu/~rmegret

**Edusmildo Orozco**, Ph.D., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2005. Professor. Interests: Finite Fields, Parallel Computing, Computer Science Education. Ext. 88353. edusmildo.orozco1@upr.edu. http://natsci.uprrp.edu/ccom

**José Ortiz Ubarri**, Ph.D., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2010. Professor. Interests: Computer Networks, HPC (High Performance Computing), Cybersecurity, Computer Science Education, Coding Theory. Ext. 88351. <a href="mailto:jose.ortiz23@upr.edu">jose.ortiz23@upr.edu</a>. <a href="http://ccom.uprrp.edu/~jortiz/">http://ccom.uprrp.edu/~jortiz/</a>

**Humberto Ortiz Zuazaga**, Ph.D., Information and Computing Sciences and Engineering, University of Puerto Rico - Mayagüez, 2008. Professor. Interests: Bioinformatics, Cybersecurity. Ext. 88363, 88364. <a href="mailto:humberto.ortiz@upr.edu">humberto.ortiz@upr.edu</a>. <a href="http://ccom.uprrp.edu/~humberto/">http://ccom.uprrp.edu/~humberto/</a>

**Ivelisse Rubio Canabal**, Ph.D., Applied Mathematics, Cornell University, 1997. Professor. Interests: Finite Fields, Number Theory. Ext. 88356. <a href="mailto:ivelisse.rubio@upr.edu">ivelisse.rubio@upr.edu</a>. <a href="http://ccom.uprrp.edu/~labemmy/">http://ccom.uprrp.edu/~labemmy/</a>

## **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones\_graduadas/

#### Specific Requirements of the Doctoral Program (applicants without a master's degree).

- 1. Bachelor's degree in computer science from an accredited university or a Bachelor's degree and the equivalent of the courses in Data Structure (CCOM 3034) and Algorithm Design and Analysis (CCOM 5050).
- 2. Have a minimum general academic index of 3.00 (on a scale of 0-4).

## Specific Requirements of the Doctoral Program (applicants with a master's degree).

- 1. Master's degree in computer science or related area (the area will be evaluated by the Graduate Affairs Committee).
- 2. Have a minimum general academic index of 3.50 (on a scale of 0-4).

#### **Documents Required for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format through <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. Two official copies of most recent transcript
- 3. A minimum of two letters of recommendation, preferably three, from professors or employers. It is recommended that at least one of the letters be written by a professor.
- 4. Essay expressing your interest in Computer Science and in obtaining the requested degree.
- 5. Participate in an interview, if required by the Graduate Affairs Committee.

# GRADUATION REQUIREMENTS (students WITHOUT a master's degree in computer science)

- 1. 12 credits course requirements.
- 2. 6 credits: dissertation.
- 3. 27 credits: electives in CCOM or related courses (21 of them at the 8000 level).



- 4. 9 credits: free electives.
- 5. Pass a qualifying exam before proceeding to dissertation work.

## STUDY PROGRAM (students WITHOUT a master's degree in computer science):

Program Requirements	Credits
Core courses	18
CCOM 6050 Algorithm Design and Analysis	3
CCOM 6029 High Level Programming Languages	3
CCOM 6XXX A Systems course: Some possible systems courses are:	
Operating Systems, Databases, Networks, Cybersecurity and	3
Computer Architecture.	
CCOM 6035 Development of Applications with Social Impact	3
CCOM 8996 Doctoral Dissertation	3
CCOM 8997 Continuation Doctoral Dissertation	3
Electives in COM or related courses (21 of them at the 8000 level)	27
Free electives	9
Total Credits	54

## GRADUATION REQUIREMENTS (students WITH a master's degree in computer science)

- 1. 6 credits: dissertation
- 2. 18 credits: electives in CCOM or related courses at the 8000 level.
- 3. 6 credits: free electives
- 4. Pass a qualifying exam before proceeding to dissertation work

## STUDY PROGRAM (students WITH a master's degree in computer science):

Program Requirements	Credits
Core courses	6
CCOM 8996 Doctoral Dissertation	3
CCOM 8997 Continuation Doctoral Dissertation	3
Electives in COM or related courses at the 8000 level	18
Free electives	6
Total Credits	30

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **CCOM 6029 High Level Programming Languages**

Three credits. One hour of lecture and two hours of discussion per week.



The course completes the education on programming languages, exposing the student to concepts such as: syntax, semantics and elements of the three best-known programming paradigms, which are imperative, functional and logical. It provides answers to questions about why there are so many programming languages and why there is no single unified model of programming languages. This course will be offered using in-person, hybrid or online modalities.

# **CCOM 6035 Development of Applications with Social Impact**

Three credits. One hour of lecture and two hours of discussion per week.

The course provides students with the opportunity to develop an application that will have a direct impact on the community and society. This is done through group work under the supervision of a professor following co-design methods and mindsets combined with the Scrum framework to design and develop applications focused on interest and with constant participation of the people affected by the application. Students will have periodic meetings to present and discuss the development process, progress made, and actions necessary to complete the project. At the end of the semester, each group will deliver the software application with a user manual. This course will be offered using in-person or hybrid modalities.

## **CCOM 6050 Algorithm Design and Analysis**

Three credits. One hour of lecture and two hours of discussion per week.

The course is a graduate level course on designing and analysis of efficient algorithms. Advanced algorithm design methods are taught, including divide and conquer, dynamic programming, greedy methods, randomized algorithms, and approximation algorithms. Asymptotic, amortized and probabilistic analysis methods associated with efficient algorithm design strategies are studied. Additionally, an introduction to computational intractability, specifically NP-completeness, is presented. This course will be offered using in-person, hybrid or online modalities. This course is equivalent to MATE 6682.

#### **CCOM 6996 Master's Thesis**

Three credits.

Prerequisite: Authorization from the professor.

In this course, students will delve into the selected topic and carry out research that leads to the preparation of the master's thesis. The resulting work is expected to be expository, related to the courses taken, and written in a format that follows the guidelines of our departmental manual. This course will be offered in person, hybrid, or online.

## **CCOM 6997 Master's Project**

Three credits. Variable credits course up to a maximum of 6 credits.

Prerequisite: Authorization from the professor.

The course is for students to plan and develop a project with the supervision of a professor. The resulting work is expected to solve a problem or task for a specific target audience. This course will be offered using in-person, hybrid or online modalities.

## **CCOM 6017 Operating Systems**

Three credits. Two hours of lecture and one hour of discussion per week.

In this graduate course, operating systems are presented as a vehicle for user-level applications, their usefulness as the gatekeeper between applications, the diversity and functionality of computer resources. This is through topics on processes and threads, memory management, file systems, and security. There will be an emphasis on virtualization and distributed systems, process concurrency problems and their traditional solutions. This course will be offered using in-person, hybrid or online modalities. This course is equivalent to CCOM 6006 and double coding with CCOM 4017.

## **CCOM 6030 Software Engineering**

Three credits. Two hours of lecture and one hour of discussion per week.

The course provides an overview of software engineering principles and concepts. The elements of the software life cycle, requirements analysis, implementation, verification, and validation, as well as ethical issues related to the software development process, are presented. Students will develop a group project to place them in the position of software designers and developers. This course will be offered using in-person, hybrid, or online modalities.

## **CCOM 6045 Computational Cell Biology**

Three credits. One hour and a half of lecture, one hour of discussion per week.

Prerequisite: CCOM 6681

The course will introduce the student to mathematical modeling of different cellular activities. Examples of cellular processes will be used to motivate concepts and techniques used in computational cell biology. The complexity of cellular functions modeled with mathematical and computational techniques will progressively increase. The course will focus on the simulation of functions that describe certain physiological behaviors in the cell. This course will be offered using in-person, hybrid, or online modalities.

#### **CCOM 6070 Introduction to Machine Learning**

Three credits. Two hours of lecture and one hour of discussion per week.

The course presents basic concepts and techniques of machine learning. The class provides a fluid introduction primarily to supervised classification algorithms, such as simple linear classifiers, decision trees, neural networks, and support vector machines. Other topics include unsupervised and semi-supervised learning, reinforcement learning, and probabilistic graphical models. The emphasis of the course will be experimentation and practice. This course will be offered using inperson, hybrid or online modalities.

#### **CCOM 6086 Computer Architecture**

Three credits. Two hours of lecture and one hour of discussion per week.

The course qualitatively and quantitatively examines the decisions made during computer design and their impact. Students learn about simple processors that can execute multiple instructions



concurrently and why current memory systems are almost as complex as processors. Unlike an introductory computer architecture course that discusses just enough to create a working processor, this course focuses on techniques for designing "the best" processor. This course will be offered using in-person, hybrid or online modalities.

## **CCOM 6120 Introduction to Computer Vision**

Three credits.

Two hours of lecture and one hour of discussion per week.

It is a graduate course that introduces image analysis and computer vision on mathematical models and algorithms that allow computers to automatically extract information from images and videos. The topics to be covered will be the three main aspects: pixel-level image processing, machine learning of visual models and estimation of geometric models. Practice will be developed with programming applications such as image segmentation, object detection and recognition, using open-source software libraries. This course will be offered using in-person, hybrid or online modalities.

## **CCOM 6150 Data Mining**

Three credits.

The course provides an overview of the main topics of data mining and algorithmic background. Students are exposed to hands-on experiences analyzing large data sets to uncover hidden properties, relationships, and organize the data in ways that are useful for analysis. Topics include data modeling, frequent itemset mining, clustering, classification, sketching, dimensionality reduction, regression, link analysis classification, network statistics, and important measures for links and nodes. This course will be offered using in-person, hybrid or online modalities.

#### **CCOM 6189 High Performance Computing**

Three credits. Two hours of lecture and one hour of discussion per week.

The course is an elective course where high-performance computing systems are designed: clusters, co-processors, interconnection networks, parallel file systems. Students will learn techniques for designing software achieving high performance in these systems, such as performance measurement and the factors that determine it. There will be practical experiences applying the skills acquired in scientific computing problems. This course will be offered using in-person, hybrid or online modalities. This course is equivalent to MATE 6681.

#### **CCOM 6680 Computational Analysis**

Three credits. Two hours of lecture and one hour of discussion per week.

The course is about numerical analysis, which aims to provide computational methods for studying and solving mathematical problems involving real variables. These methods provide approximations to the true solution of the problem, the study of errors which is very important for numerical analysis. The mathematical foundations of numerical methods are provided; analyze the basic theoretical properties of the method: stability, precision and computational complexity. Additionally, illustration of the performance of the methods through computational examples and

counterexamples using a high-level programming language such as MATLAB/Octave. This course will be offered using in-person, hybrid or online modalities. This course is equivalent to MATE 6680.

## **CCOM 6685 Applied Bioinformatics**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Authorization from the professor.

The course will introduce the student to algorithm design and data analysis for molecular biology. Examples of molecular processes will be presented to motivate the study of the concepts and techniques used in computational molecular biology. The complexity of the data studied will progress, as will the mathematical and computational techniques for its analysis. The focus of the course will be the analysis of biological sequences. This course will be offered in face-to-face, hybrid or online modalities. This course is equivalent to MATE 6685.

#### **CCOM 6882 Optimization**

Three credits. Two hours of lecture and one hour of discussion per week.

This is a course on nonlinear optimization problems, both unconstrained and constrained. We will study the optimality conditions and the basic numerical optimization methods with their convergence analysis. Numerical methods include basic descent methods, conjugate direction methods, quasi-Newton algorithms, reduced gradient methods, gradient projection methods, penalty and barrier methods, duality, and Larange methods. This course is equivalent to MATE 6882.

#### **CCOM 6981 Research and Teaching Techniques for Computer Scientists**

Three credits. Two conference sessions and one hour of discussion per week.

The course will introduce the basic skills that are essential to becoming a successful researcher and graduate student. Lecture topics will include pedagogy, research methodology, experimental design, career options, professional ethics and academic integrity, and oral and written presentation techniques in English. Presentations will be offered by CCOM faculty members and graduate students on their own research that will allow them to develop cognitive competencies for the detection and formulation of problems, as well as the development of problem-solving strategies, as a diagnostic basis for the elaboration of proposals and projects. This course will be offered using in-person, hybrid or online modalities.

## **CCOM 6995. Topics in Computer Science**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Authorization from the professor.

In this course, students will carry out a detailed study through literature review, analysis, presentation and discussion on one or more specific topics in Computer Science. Given the changing nature of the area, topics will vary frequently. The course offers students the opportunity to learn about current topics related to Computer Science. The course can be taken multiple times if the topics are different. This course will be offered using in-person, hybrid or online modalities.

## **CCOM 8017. Advanced Topics in Operating Systems**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: CCOM 6017.

In the course the student will carry out a detailed study on one or more specific topics in Operating Systems. The topics of this course are expected to be theoretical in nature. The course offers students the opportunity to learn about current topics related to Operating Systems. The course can be taken multiple times if the topics are different. Examples of topics are methods of operating systems on multi-core computers, multi-thread control, and distributed systems concepts. This course will be offered in person, hybrid or online.

## CCOM 8050. Advanced Topics in Design and Analysis of Algorithm

Three credits. Three hours of lecture and discussion per week.

Prerequisite: CCOM 6050.

In the course, the student will carry out a detailed study on one or more specific topics in Algorithm Design and Analysis. The topics of this course are expected to be theoretical in nature. The course offers students the opportunity to learn about current topics related to Algorithm Design and Analysis. The course can be taken multiple times if the topics are different. Some examples of topics are greedy algorithms, online algorithms, and streaming algorithms. This course will be offered in person, hybrid or online.

## **CCOM 8070. Advanced Topics in Machine Learning**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: CCOM 6070.

In the course, students carry out a detailed study on one or more specific topics in Machine Learning. The topics of this course are expected to be theoretical in nature. The course offers students the opportunity to learn about current topics related to Machine Learning. The course can be taken multiple times if the topics are different. Examples of topics are kernel-based methods, reinforcement learning, and convolutional neural networks. This course will be offered in-person, hybrid or online.

#### CCOM 8089. Advanced Topics in Compiler Design

Three credits. Three hours of lecture and discussion per week.

Prerequisites: CCOM 6029 and CCOM 6050.

In the course, the student will carry out a detailed study on one or more specific topics in Compiler Design. The topics of this course are expected to be theoretical in nature. The course offers students the opportunity to learn about current topics related to compiler design. The course can be taken multiple times if the topics are different. Examples of topics are interprocedural analysis, garbage collection, and symbolic execution. This course will be offered in-person, hybrid or online.

## **CCOM 8995.** Advanced Topics in Computer Science

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Authorization from the professor.

In the course, the student carries out a detailed study on one or more specific advanced topics in Computer Science. Given the changing nature of the area, topics will vary frequently. The course offers students the opportunity to learn about current advanced topics related to Computer Science. The course can be taken multiple times if the topics are different. This course will be offered inperson, hybrid or online.

#### **CCOM 8996. Doctoral Dissertation.**

Three credits. Three hours of lecure of investigation.

Prerequisites: Pass the degree exam and authorization from the Graduate Committee.

The course is for the student to continue their work that results in a dissertation and dissemination of the results. The work is expected to advance knowledge in computer science, by making theoretical and methodological approaches in the field of study; by critically evaluating and questioning a situation or problem and offering solutions. This course will be offered face-to-face, hybrid and online.

#### **CCOM 8997. Continuation of Doctoral Dissertation**

No credit. Forty-five hours of investigation.

Prerequisites: CCOM 8996.

The course is for the student to continue their work that results in a dissertation and dissemination of the results. The work is expected to advance knowledge in computer science, by making theoretical and methodological approaches in the field of study; by critically evaluating and questioning a situation or problem and offering solutions. This course will be offered face-to-face, hybrid and online.

#### CCOM 8999. Advanced Research in Computer Science

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Authorization from the professor.

In this course, the student will carry out exhaustive research in an area of Computer Science. The course offers students the opportunity to develop as researchers using all the skills necessary to carry it out. The course can be taken multiple times if the topics are different. This course will be offered in-person, hybrid or online modalities.



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**DEGREE:** 

#### **Master of Science in Physics**

#### **FACULTY:**

**Altschuler Stern**, **Daniel R.**, Ph.D., Brandeis University, 1975, Professor. Astronomy, extragalactic radio sources; active galactic nucleus.

**Bhuiyan, Lutful B.**, Ph.D., University of London, 1977, Professor. Statistical mechanics; chemical-physics; electrolyte structure and thermodynamics; double electric layers; theory of liquids.

**Feng, Xianping**, Ph.D., La Trobe University, Australia, 2000, Professor. Performed experiments on laser-matter interaction utilizing Nd:YAG short pulselasers; thin film deposition and research; Photoemission & laser characterization; Study/analyze hot and dense plasma generated by laser radiation or in plasma focus.

**Fonseca Zamora**, **Luis**, Ph.D., University of Puerto Rico, 1985, Professor. Solid-state physics; optical and electrical properties of crystalline and amorphous materials; nanostructured semiconductors: synthesis and opto-electronic properties.

**Katiyar, Ram S.**, Ph.D., Indian Institute of Science, Bangalore, 1968, Professor. Raman and infrared spectroscopy; growth and characterization of ferroelectrics, transparent semiconductors, solid state ionics in thin film and nano-ctystalline forms for optoelectronic applications; Lattice dynamics of phonons.

**Martínez Collazo**, **Antonio**, Ph.D., American University, 1990, Professor. Condensed matter physics; epitaxial growth of metals and widebandgap semiconductors; transport properties; surface physics.

**Morell Marrero**, **Gerardo**, Ph.D., University of Puerto Rico, 1995. Professor. Novel nanostructured materials for technological applications.

**Nieves Vázquez**, **José F.,** Ph.D., University of Pennsylvania, 1980, Professor. Theoretical particle physics.

**Palai**, **Ratnakar**, Ph.D., University of Strathclyde, UK, 2004, Professor. Nanostructure Materials, "spintronic devices".



**Pantoja**, **Carmen**, Ph.D., University of Oklahoma, 1995, Professor. Astronomy; spectral analysis; galaxies; cosmology.

**Selsby**, **Ronald G.**, Ph.D., Ohio State University, 1969, Professor. Chemical-physics; calculations of molecular ionization energies and electronic affinities.

**Ubriaco, Marcelo R.,** Ph.D., University of North Carolina, 1989, Professor. Quantum field theory; quantum group applications to quantum statistical mechanics.

Vargas, Arnaldo, Ph.D., Indiana University, 2016, Assistant Professor, Theoretical Physics, phenomenology.

**Velev, Julian,** Ph.D., University of Illinois, Urbana-Champaign, 2002, Professor. Condensed matter physics, (electronic structure and transport).

## **ADMISSION REQUIREMENTS:**

## **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Requirements of the Master's Program**

- 1. Application for Admission to Graduate Studies in electronic format through <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. A bachelor's degree in physics. If the student has pursued previous graduate studies, the corresponding academic record will also be taken into account for admission.
- 3. Academic index of 3.00 on a 4.00 scale, or equivalent.
- 4. Have a working knowledge of both oral and written English and Spanish languages to enrich the academic and cultural experience. It is advisable to take the TOEFL exam to demonstrate that you have a working knowledge of English. However, there are other ways to certify language proficiency. For example, if the student comes from a university whose curriculum is in English, this demonstrates that they have a working knowledge of English. The program coordinator can also certify the candidate's working knowledge of English after interviewing in English.
- 5. Two letters of recommendation.
- 6. Conditional admission: In all cases, the complete academic record of the applicants will be evaluated to determine the need to compensate for any area of Physics, and if necessary, specific undergraduate courses will be assigned to each case during the first year of studies. These cases will be considered conditional admission, and the undergraduate credits recommended by the program coordinator will be included in the nine credits required to be considered a full-time graduate student but will not be included in the total credits required to complete the master's degree. Students who have received conditional admission must fulfill the conditions required by the Graduate Committee during their first year of graduate studies. If they do not comply

with them, the conditional admission will be automatically canceled, and they will not be able to enter the Program.

## **GRADUATION REQUIREMENTS:**

- 1. 18 credits in core courses
- 2. 2 credits in the Graduate Colloquium (PHYS 6500)
- 3. 4 credits of Research Experiences in Physics (PHYS 6101)
- 4. 6 credits in 6000 level electives in Physics, Chemistry or Mathematics.
- 5. Comprehensive Examination  $\square$  Present a graduate seminar.

## **STUDY PROGRAM:**

Program requirements	Credits
Core courses	18
PHYS 6401 Methods of Theoretical Physics	3
PHYS 6412 Classical Mechanics I	3
PHYS 6431 Electromagnetic Theory	3
PHYS 6451 Quantum Mechanics I	3
PHYS 6452 Quantum Mechanics II	3
PHYS 6454 Statistical Mechanics	3
Elective courses (Physics, Chemistry or Mathematics 6000 level)	6
PHYS 6500 Graduate Colloquium	2
PHYS 6101 Research Experiences in Physics	4
Comprehensive Examination	0
Total credits	30

#### **COURSES DESCRIPTION:**

The course descriptions below are the latest ones registered in the Student Information System of the Rio Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### PHYS 6401 Methods of Theoretical Physics I

Three credits. Three hours of lecture per week.

Prerequisites: Authorization from the Graduate Committee.

Vector analysis. Curvilinear coordinates and tensor differential operators. Infinite series: Taylor expansion, power series. Functions of a complex variable. Conformal mapping. Calculus of residues. Special functions: Bessel functions, Legendre functions, Hermite functions, and Laguerre functions. Spherical harmonics. Application of Green's functions to electrostatic boundary problems.

#### PHYS 6412 Advanced Mechanics I

Three credits. Three hours of lecture per week.

Generalized coordinates. Lagrange's equations. Examples of Lagrange's equations: Central forces, spherical coordinates, two-particle system, simple and compound pendulum. Conservation laws. Motion in a central field. Collision of particles. Rutherford scattering. Small oscillations. Rotating coordinate systems. Inertial forces. Dynamics of a rigid body. General principles of mechanics; integral principles, the extremal property of action, Hamilton's equations. Poisson brackets. The action as a function of coordinates. Canonical transformations.

## PHYS 6431 Electromagnetic Theory

Three credits. Three hours of lecture per week.

Prerequisites: PHYS 6401

Electrostatics: Boundary Value Problems, Green functions for the Poisson equation; Multiple expansions, Dielectrics. Magnetostatics and Time-varying Fields: Maxwell Equations and Conservation Laws, Propagation of plane waves in dielectrics and conducting media, wave guides.

#### PHYS 6451 Quantum Mechanics I

Three credits. Three hours of lecture per week.

Non-relativistic quantum mechanics. Development of the basic formalism including the various representations and 'pictures'. One-dimensional problems. Symmetries and constants of the motion. Central forces and angular momentum. Spin 1/2 and two-level systems. Time-independent and time-dependent perturbation methods. Systems of identical particles: spin and statistics. Applications to atoms and molecules.

#### PHYS 6452 Quantum Mechanics II

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6451 or equivalent.

Potential scattering theory. Irreducible representations of the 3rd rotation group. The Clebsch-Gordan series. Addition of angular momenta. Irreducible tensors and applications. The occupation number representation of identical particles and second quantization. Applications: phonons, liquid He and superconductivity. Nonrelativistic radiation theory. Special topics: The measurement problem, Bell inequalities, geometric phases.

#### **PHYS 6454 Statistical Mechanics**

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6451, 6412.

Microcanonical, canonical, and grand-canonical ensembles. Boltzmann statistics. Density matrix. Bose and Fermi-Dirac statistics. Ideal gases: photons and bosons. Fermi ideal gas, Virial coefficients, fluids, distribution functions. Phase transitions.

## PHYS 6500 Colloquium I and II

Zero to one credit. Weekly meetings.

Lectures by visitors or faculty members on research in various areas of physics. One credit. Students will participate in a weekly presentation offered by visiting local faculty and graduate students in the various research areas of Physics.

#### PHYS 6101 Research Experiences in Physics

Four credits.

Prerequisites: Authorization of the supervising professor of the project.

Prerequisite: PHYS 6500

In this course, the student will conduct a research project under the supervision of a faculty member. It is intended for graduate students who will complete their master's degree without a thesis. Experimental research will include advanced instrumentation techniques, inspection of instruments used in experimental physics, and computer controlled experimental apparatus. Theoretical research will include the study and application of theoretical physics techniques to a relevant problem in the literature of modern physics.

#### PHYS 6402 Methods of Theoretical Physics II

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6401

Fourier series. Integral transforms: Convolution theorem. Fourier and Laplace transforms. Integral equations: Generating functions. Hilbert-Scmidt theory. Calculus of variations. Applications of the Euler equation. Lagrangian multipliers. Manifolds and differential forms. Tangent and cotangent space. Hodge star. Riemannian manifolds: Relation to classical tensor calculus.

#### PHYS 6406 Advanced Laboratory I

Three credits. Three hours of lecture and three hours of lab per week.

Prerequisites: Authorization from the Graduate Committee

Advanced instrumentation techniques used in research work. Survey of instrumentation used in experimental physics. Computer controlled experimental apparatus; use of GPIB and other instruments interfaces. Noise abatement techniques. Electronic circuit design and modeling using SPICE.

## PHYS 6407 Advanced Laboratory II

Three credits. Three hours of lecture and three hours of lab per week. Prerequisites: PHYS 6406



Continuation of advanced instrumentation techniques used in research work. Survey of instrumentation used in experimental physics with emphasis on standard preparation and characterization techniques and equipment.

#### PHYS 6413 Advanced Mechanics II

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6412

Liouville's theorem, Hamilton-Jacobi theory, Optical-mechanical analogies, Covariant formulation of Special Relativity, Lagrangian formulation of relativistic mechanics, Lagrangian and Hamiltonian description of continuous systems and fields, Examples in relativistic field theory, Noether's Theorem.

#### PHYS 6426 Solid State Physics

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6451, 6454.

Crystal Lattices, Reciprocal Lattices, X-Ray Diffraction and Crystal Structure. Classical Theory of the Harmonic Crystal (The Dynamical Matrix), Quantum Theory of the Harmonic Crystal (Phonons), Lattice Anharmonic Effects. Electrons in Periodic Potentials, Band Theory. Electron dynamics and conduction in metals. Electron-electron, electron-phonon, and phonon-phonon interactions, Dielectric and Magnetic properties.

## PHYS 6432 Classical Electrodynamics

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6431

After completing this course, the student will be able to solve problems of electromagnetic radiation and understand the relativistic formulation of Electrodynamics and its applications to electromagnetic radiation by relativistic particles.

#### PHYS 6438 Basic Electron Microscopy

Three credits. Three hours of lecture per week.

Prerequisites: Open to all graduate students in good standing interested in electron microscopy. No previous experience required.

This is an introductory course on electron microscopy for the study of materials. Electron microscopy has indeed become essential in the characterization of a variety of materials. The course is designed to include significant exposure to instrumentation. Also, to use the instrumentation available to its best, students will gain some light theoretical knowledge and practical tips, in the form of short lectures. Topics will include the basics: sample preparation, scanning electron microscopy, transmission electron microscopy, and structural determination.

#### PHYS 6441 Nuclear Theory

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6452

Nuclear forces: nucleon-nucleon scattering and deuteron. The phenomenological nuclear potential and elementary Yukawa theory. Size and shape of nuclei: electron scattering and nuclear form factors, neutron scattering and the optical model Nuclear masses and binding energy: the liquid drop model and the semi-empirical mass formula. Alpha and beta decay. Fission. Resonances and compound nuclear reactions, the shell and collective models, the theory of nuclear matter, the quark model of nucleons.

## PHYS 6453 Quantum Mechanics III

Three credits. Three hours of lecture per week

Prerequisites: PHYS 6452, PHYS 6432

Relativistic quantum mechanics and elementary field theory. Dirac one-electron theory. Propagator theory. Application to scattering processes. Higher order processes and renormalization. The Kleinc3ordon equation.

## PHYS 6462 Quantum Field Theory I

Three credits. Three hours of lecture per week.

Prerequisites: PHYS 6453

General formalism: quantization of the free fields, symmetries and conservation laws. The Klein-Gordon field: quantization and particle interpretation, the Feynman propagator. Second quantization of the Dirac field: momentum expansions, relativistic covariance, the fermion propagator. Quantization of the electromagnetic field: covariance momentum expansions, the photon propagator, Wicks Theorem. Interacting theory: quantized electromagnetic field interacting with a classical source. Quatized Dirac field interacting with a classical potential. S matrix and asymptotic Compton effect.

#### PHYS 6463 Quantum Field Theory II Three

credits. Three hours of lecture per week.

Prerequisites: PHYS 6462

Perturbation theory. Interaction representation and Feynman rules: self-interaction scalar field, electron-electron, and electron-positron scattering. Spinor and scalar electrodynamics. Loopwise expansions. Euclidean Green functions. Analyticity: Landau equations, the Madelstam representation, Cutkosky rules. Radioactive corrections. Oneloop renormalization: vacuum polarization, the electron propagator, vertex function. Radioactive corrections to Coulomb scattering. Photon-photon scattering. Lamb shift. Types of regularization. Wick rotation in perturbation theory. Renormalization theory: power counting, convergence theorem, normalization conditions and structure of the counter terms. Renormalization and unitarity of QED. Path integrals: first and second quantization, integration over Grassmann variables.

## PHYS 6481 Theory of Groups and Quantum Mechanics Three

credits. Three hours of lecture per week.

Prerequisites: PHYS 6401, 6452

Groups and subgroups. Cossets. Invariant subgroups. Factor groups. Symmetry groups of regular polyhedral. Group representation. Criteria for irreducibility. Characters. The adjoin representation. Clebsch-Gordan coefficients. The symmetric group. Young tableaux. Continuous groups. Lie groups and Lie algebras. Irreducible representations. Rotation groups in two and three dimensions. Addition of angular momenta. Linear, unitary, orthogonal, and symplectic groups. Isomorphism. Traceless tensors. Applications to atomic and nuclear physics. Classification of states of identical particles. Paulie principle. Isotopic spin. Nuclear spectra in L-S coupling. Supermultiplets.

## PHYS 6483 Special Topics in Theoretical Physics I

Three credits. Three hours of lecture per week.

Prerequisites: Authorization from the Graduate Committee.

This is an advanced course on selected subjects of theoretical physics, based upon the interests and needs of the students.

## PHYS 6484 Special Topics in Theoretical Physics II

Three credits. Three hours of lecture per week.

Prerequisites: Authorization from the Graduate Committee.

This is an advanced course on selected subjects of theoretical physics, based upon the student's interests and needs.

#### PHYS 6485 Physics of Semiconductors

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6451

Prerequisites: Authorization from the Graduate Committee.

Crystal Growth and characterization. Quantum mechanical foundations of semiconductor devices. Semiconductor hetero-structures, p-n junctions, quantum wells. Metal semiconductor junctions, surface states, minority carriers, injection. Transistors light emitting and laser diodes. Device fabrication.

#### PHYS 6510 Advanced Topics in Physics

Three credits. Three hours of lecture per week.

Prerequisites: Authorization from the Graduate Committee.

This is an advanced course based on lectures, seminars and readings in advanced topics in Physics. May be taken a maximum of two times.

#### PHYS 6995 Research Seminar

One to three credits. Three seminar hours per week.

Prerequisite: PHYS 4032 (Methods of Mathematical Physics) or equivalent.

Advanced studies and formative discussions on specialized topics in Physics. It is focused on the discussion of frontier experimental theoretical methods, the discussion of original results obtained in research, and advanced readings of scientific literature.

## **PHYS 8105 Topics in Materials Sciences**

Three credits. Hours per agreement.

Prerequisite: PHYS 4057

Formulation of the physical properties of crystals in tensor notation, emphasizing the common mathematical basis of the properties and the thermodynamic relationships between these properties. Topics to be studied include tensors, paramagnetism, electric polarization, the stress tensor, thermal expansion and strain tensor, piezoelectricity, elasticity, transport properties, electro-optical effect.

#### PHYS 8115 Infrared and Raman Spectroscopy

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6452 or equivalent.

An advanced-level course on the theory of the interaction of radiation with matter and related experimental techniques, with emphasis on the interactions responsible for Raman scattering and the absorption and emission of infrared radiation.

## PHYS 8116 Advanced Electron Microscopy

Three credits. Three hours of lecture per week.

It includes high-resolution electron microscopy and Spectroscopy applied to the study of nanomaterials. Electron microscopy techniques are essential for the fine characterization of a diversity of materials and especially nanomaterials. This course is appropriate for graduate students who wish to improve their skills in the characterization of materials using high resolution electron microscopes. Previous experience in basic scanning and transmission electron microscopy is required. The course is designed to include significant exposure to high resolution instrumentation. Also, to use the available instrumentation optimally, students will acquire some theoretical and practical knowledge through short lectures. Topics include high-resolution scanning electron microscopy, high-resolution transmission electron microscopy, high-resolution imaging, high-resolution electron diffraction, high- resolution X-ray spectroscopy, and high-resolution electron energy loss spectroscopy.

#### PHYS 8135 Chemistry and Physics of Surfaces Three

credits. Hours per agreement.

Prerequisite: Professor's authorization.

Theory of surface states in metals. Adsorption Theory. Valence method. Linear responses. Charged surfaces. Experimental methods (auger). Properties of quasi-2dimensional systems. Adsorption and desorption. EID (Electron-Impact Desorption). PID (Photo Impact

Desorption). Photo and Field Emission Spectroscopy. Leed (Low Energy Electron Diffraction). Film formation techniques and their properties.

## PHYS 8145 Advanced Electrochemistry

Three credits. Three hours of lecture per week.

The structural basis of electrochemistry. Thermodynamic description of the electrified interface. Faradic and non-faradic current. Theory of electrochemical velocities. Mass transfer. Analytical methods with constant currents and constant voltages. Mechanistic applications of voltammetry. Coulometric methods and preparations in organic chemistry. Batteries and fuel cells.

# **PHYS 8992 Special Topics in Materials Science**

One to four credits.

Prerequisite: Authorization from the Physics Department Director.

Formulation of the physical properties of crystals in tensor notation; emphasizing the common mathematical basis of the properties and the thermodynamic relationships between these properties. Topics to be studied include tensors, paramagnetic, electric polarization, the stress tensor, thermal expansion and strain tensor, piezoelectricity, elasticity, transport properties, electro-optical effect, and optical activity.

## PHYS 8994 Special Topics in Solid State Physics One to

four credits. Hours per agreement. Prerequisite: Professor's authorization.

Study and discussion of various topics in the field of solid-state physics.

**Mailing** 

Mailing Address: Department of Physics, 17 University Ave., Ste. 1701, San Juan, Puerto Rico

00925-2537

**Telephone:** 787-764-0620, 787-764-0000, Ext. 88406

**Fax:** (787) 764-4063

E-mail: <u>ileana.desiderio@upr.edu</u>

**DEGREE:** 

## **Doctor of Philosophy in Physics-Chemistry**

#### **FACULTY:**

**Cersósimo**, **Juan C**., Ph.D., La Plata National University, Argentina, 1986, Professor. Astrophysics, binary stars, astrochemistry. UPR in Humacao, Department of Physics and Electronics.

Chen, Zhongfang, Ph.D., Nankai University, China, 2000, Professor. Computational chemistry, computational science of nanomaterials, physical and organic chemistry. UPR Río Piedras Campus, Department of Chemistry.

**Córdova-Figueroa**, **Ubaldo M.**, Ph.D., Chemical Engineering, 2008, California Institute of Technology, Professor. Directed movement of colloidal particles by chemical reactions: osmotic propulsion. UPR Mayagüez Campus, Department of Chemical Engineering.

**Esteban**, **Ernesto**, Ph.D., University of Notre Dame, 1983, Professor. Astrophysics; astrochemistry. UPR in Humacao, Department of Physics and Electronics.

**Fonseca**, **Luis F.,** Ph.D., University of Puerto Rico, Río Piedras Campus, 1985, Professor. Solid state physics; optical and electrical properties of crystalline and amorphous solids; semiconductor nanostructures; synthesis and optoelectronic properties. UPR Río Piedras Campus, Department of Physics.

**Furlan**, **Rogerio**, Ph.D., University of Sao Paulo, Brazil, 1990, Professor. Nanofibers for sensors, actuators and biological applications. UPR in Humacao, Department of Physics and Electronics.

**Griebenow**, **Kai H.**, Ph.D., University of Dusseldorf, Germany, 1992, Professor. Encapsulation of proteins aimed at preserving their structure; enzymology in non-aqueous media; protein formulations; protein stability; protein glycosylation; relationship between protein structural dynamics and enzymatic activity; protein modification with PEG, biofuel cells. UPR Río Piedras Campus, Department of Chemistry.

**Hernández-Maldonado**, **Arturo J.**, Ph.D., University of Michigan - Ann Arbor, 2004, Associate Professor. Nanoporous materials: design, synthesis, properties and applications. UPR Mayagüez Campus, Department of Chemical Engineering.



**Katiyar**, **Ram**, Ph.D., Indian Institute of Science, Bangalore, 1968, Professor. Raman and infrared spectroscopy; growth and characterization of ferroelectrics; transparent semiconductors; solid state ions in thin films and nanocrystals for optoelectronic applications; phonon dynamics. UPR Río Piedras Campus, Department of Physics.

**Lebrón Santos**, **Mayra E.**, Ph.D. in Astronomy, 2000, Assistant Professor, Institute of Astronomy, National Autonomous University of Mexico (UNAM). Study of the gases surrounding young high-density stars. UPR Río Piedras Campus, Department of Physics.

**Lutful Bari**, **Bhuiyan**, Ph.D, University of London, 1977, Professor. Statistical Mechanics; Chemical Physics; structure and thermodynamics of electrolytes; electric double layer (EDL); liquid theory. UPR Río Piedras Campus, Department of Physics.

**Marín**, **Carlos**, Ph.D., Autonomous University of Madrid, 1997; Rensselaer Polytechnic Institute, 2002, Professor. Production and characterization of nanostructured materials; heat and mass transfer related to materials processing on Earth and in space; electronic and thermophysical properties of solid and molten materials at high temperatures. UPR Mayagüez Campus, Department of General Engineering.

Martínez, Antonio, Ph.D., American University, 1990, Professor. Condensed matter physics; epitaxial growth and bandgap techniques in semiconductors; transport properties; surface physics. UPR Río Piedras Campus, Department of Physics.

**Morell**, **Gerardo**, Ph.D., University of Puerto Rico, Río Piedras Campus, 1995. Professor. Nanostructured materials for electronic and biomedical applications. UPR Río Piedras Campus, Department of Physics.

**Muller**, **Rafael J.**, Ph.D., Pennsylvania State University, 2002, Professor. Astrophysics; binary stars; astronomical instrumentation; astrochemistry. UPR in Humacao, Department of Physics and Electronics.

Nieves Vázquez, José F., Ph.D., University of Pennsylvania, 1980, Professor. Theoretical particle physics. UPR Rio Piedras Campus. Department of Physics.

**Otaño-Rivera**, **Wilfredo**, Ph.D., Pennsylvania State University, 1998, Professor. Nanolaminates, electrospinning, sputtering. UPR in Cayey, Department of Mathematics and Physics.

**Palai**, **Ratnakar**, Ph.D., University of Strathclyde, UK, 2004, Assistant Professor. Physics of nanostructured materials; spintronic devices. UPR Río Piedras Campus, Department of Physics.

**Pinto**, **Nicholas J.**, Ph.D., Montana State University, 1992, Professor. Polymers; functional nanofibers. UPR in Humacao, Department of Physics and Electronics.

**Rinaldi**, Carlos, Ph.D., Massachusetts Institute of Technology, 2002. Professor. Nanostructured materials; dispersed magnetic nanoparticles; synthesis and functionalization for sensor, energy and biomedical applications. UPR Mayagüez Campus.

**Rivera**, **José M**., Ph.D., Massachusetts Institute of Technology, 2000, Associate Professor. Supramolecular chemistry, molecular recognition, organic synthesis, nanotechnology, biorganic chemistry, medicinal chemistry. UPR Río Piedras Campus, Department of Chemistry.

**Rosa**, **Luis G.**, Ph.D., University of Nebraska-Lincoln, 2005, Assistant Professor. Interactions and properties between surfaces and nanostructures. UPR in Humacao, Department of Physics and Electronics.

**Selsby**, **Ronald G.**, Ph.D., Ohio State University, 1969, Professor. Chemical Physics; molecular ionization energies and electronic affinities. UPR Río Piedras Campus, Department of Physics.

**Vedrine-Pauleus**, **Josee**, Ph.D., University of Princeton, 2006, Professor. Fabrication and characterization of organic solar cells. UPR in Humacao, Department of Physics and Electronics

**Velev**, **Julian**, Ph.D., University of Illinois, Urbana-Champaign, 2002, Associate Professor. Condensed matter physics; electronic structures and transport properties. UPR Río Piedras Campus, Department of Physics.

Weiner, Brad R., Ph.D., University of California - Davis, 1986, Professor. Molecular reaction dynamics in the gaseous state; laser photochemistry and photophysics; kinetics of reactive intermediates in the gaseous state; nonlinear photoprocesses; molecular energy transfer; laser ablation mechanisms. UPR Río Piedras Campus, Department of Chemistry.

**Xianping**, **Feng**, Ph.D., La Trobe University, Australia, 2000, Professor. Performed experiments on materials-laser interactions using pulsed Nd:YAG lasers; synthesis and analysis of thin films; photoemission properties; studies of high energy plasma and density generated by laser radiation or plasma focus. UPR Río Piedras Campus, Department of Physics.

**Zimbovskaya**, **Natalya A.**, Ph.D., D.Sc, Russian Academy of Sciences, 1977-1994, Professor. Solid state physics; electronic structures and transport properties. UPR in Humacao, Department of Physics and Electronics.

#### **ADMISSION REQUIREMENTS:**

#### **General Requirements for the UPR Rio Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific requirements of the Doctoral Program in Chemical-Physics**

- 1. Application for Admission to Graduate Studies in electronic format through the link: https://solicitud.upr.edu
- 2. Possess a bachelor's degree in Physics, Chemistry, Materials Science, Engineering, or other equivalent, from an accredited institution in the United States or an equivalent degree from

a foreign university. If the student has completed graduate studies prior to entering the Doctoral Program in Chemical Physics, the corresponding academic transcript will also be considered for admission. In all cases, the complete academic record of accepted students will be evaluated to determine the need to compensate for any area of Physics or Chemistry; if necessary, specific undergraduate courses will be assigned to each case, during the first year of studies. These cases will be considered as conditional admission, and the undergraduate credits recommended by the program coordinator will be included in the nine credits required to be considered a full-time graduate student but will not be included in the total credits required to complete the doctoral degree.

- 3. Academic grade point average of 3.00 on a 4.00 scale, or equivalent.
- 4. Working knowledge of both oral and written English and Spanish to enrich the academic and cultural experience. It is advisable to take the TOEFL exam to demonstrate that you have a working knowledge of English. However, there are other ways to certify language proficiency. For example, coming from a university whose curriculum is in English demonstrates that you have a working knowledge of English. The program coordinator may also certify the candidate's working knowledge of English after conducting an interview in English.
- 5. Two letters of recommendation.

Contact: Ms. María L. Castro Romero, Graduate Admissions coordinatormaria.castro19@upr.edu,
DEGI UPRRP +1 (787) 764-0000, Ext. 86716

## **GRADUATION REQUIREMENTS:**

- 1. Completion of a minimum of 45 credits in graduate courses related to Chemical Physics. At least 9 of the 45 credits must be at the 8000 level. A minimum of 6 credits must be in Physics. A minimum of 6 credits must be in Chemistry. Up to 24 credits related to Physical Chemistry may be transferred from other programs.
- 2. Pass three written graduate examinations upon completion of the first academic year in the Ph.D. program: one in Physical Chemistry and two in Physics out Thermodynamics and Statistical Mechanics, Electromagnetism, Classical Mechanics, and Quantum Mechanics.
- 3. Complete two semesters in the Chemical-Physics Seminar and present a seminar in Chemical-Physics.
- 4. Present in writing and defend a research proposal, other than the thesis, before a thesis committee composed of at least three professors in the Chemical Physics Program, including at least one member of the Physics Department and one member of the Chemistry Department of the Río Piedras Campus.
- 5. Complete at least 24 credits of thesis research.
- 6. Publish at least one article related to the thesis research in a refereed journal, where the student is the main author.
- 7. Complete one year of residency.
- 8. Present in writing and publicly defend an original research thesis before a thesis committee composed of at least three professors of the Physical Chemistry Program, including at least one member of the Physics Department and one member of the Chemistry Department of the Río Piedras Campus.

9. Candidacy: Candidacy for the Ph.D. in Physics-Chemistry will be certified once the student passes the degree exams and maintains an academic index higher than 3.00 on a 4.00 scale. All students must pass the degree exams after completing their first academic year, otherwise, they will be dismissed from the Program. Extensions may be granted for maternity/paternity, medical reasons and for part-time students. Even so, no extension will exceed two academic years from the date of entry into the Program.

#### **PROGRAM OF STUDY:**

Courses are selected each semester with the assistance of a Chemical-Physics Program coordinator, taking into account the student's background and career goals.

## First Year

First semester		Second semester	
QUIM 6612	3 credits	QUIM 6611	3 credits
Two courses out of FISI 6401, FISI 6451, FISI 6412	6 credits	One course out of FISI 6431, FISI 6452, FISI 6454	3 credits
FISI 8995	1 credit	FISI 8XXX	3 credits
		FISI 8995	1 credit
	7 credits		10 credits

## ...... Comprehensive Exam......

#### **Second Year**

occona rear			
First semester		Second semester	
FISI 8991 (thesis)	6 credits	FISI 8991 (thesis)	6 credits
FISI 8XXX	3 credits	FISI 8XXX	3 credits
FISI 6XXXX or QUIM 6XXXX	3 credits	FISI 6XXX or QUIM 6XXX	3 credits
FISI 8995	1 credit		
	13 credits		12 credits

## **Third Year**

Time Tour			
First semester		Second semester	
FISI 8991 (thesis)	6 credits	FISI 8991 (thesis)	6 credits
FISI 8XXX	3 credits	FISI 6995	2 credits
FISI 6XXXX or QUIM 6XXXX	3 credits	FISI 8XXX or FISI 6XXX or QUIM 6XXX	3 credits
	12 credits		11 credits

#### **Fourth Year**

First semester		Second semester	
FISI 8991 (thesis)	1 credit	FISI 8991 (thesis)	1 credit
FISI 6995	2 credits	FISI 6995	2 credits
	3 credits		3 credits

It can continue in the fourth-year format until the thesis defense.

Total for graduation 69 credits, as follows

CURRICULAR COMPONENTS	CREDITS
Compulsory	21 credits
QUIM 6611, QUIM 6612	6 credits
FISI 6XXX	6 credits

CURRICULAR COMPONENTS	CREDITS
FISI8XXX	9 credits
Elective Any combination of FISI 6XXX, QUIM6XXX, FISI 8XXX	21 credits
Thesis FISI 8991	24 credits
Seminar FISI 8995	3 credits
То	tal 69 credits

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the latest ones registered in the Student Information System of the Rio Piedras Campus Registrar's Office as of November 30, 2023, to be included in the Graduate Catalog 2023-2024.

## **QUIM 6611 Chemical Physics I**

Three credits. Three lectures per week. Prerequisite: QUIM 4042 or equivalent.

Laws and principles of theoretical chemistry.

## **QUIM 6612 Chemical Physics II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent and QUIM 6611.

Laws and principles of theoretical chemistry.

#### **QUIM 8605 Physical Chemistry Seminar.**

2 credits.

Advanced level seminar on recent topics in physical chemistry.

## QUIM 8606 Seminar in Physical Chemistry.

Two credits.

Seminar at the advanced level on recent topics in Physical Chemistry.

## PHYS 6401 Methods of Theoretical Physics I

Three credits. Three hours of lecture per week.

Prerequisites: Authorization from the Graduate Committee.

Vector analysis. Curvilinear coordinates and tensor differential operators. Infinite series: Taylor expansion, power series. Functions of a complex variable. Conformal mapping. Calculus of residues. Special functions: Bessel functions, Legendre functions, Hermite functions, and Laguerre

functions. Spherical harmonics. Application of Green's functions to electrostatic boundary problems.

## FISI 6402 Theoretical Physics Methods II

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the Graduate Committee.

Functions of complex variables, partial differential equations of physics. General solutions, series, and integral representation. Boundary conditions and particular functions. Hilbert spaces, Green's functions, and generalized functions. Integral equations, perturbation methods, scattering theory. Complex energy and properties of angular momentum, principles of variation.

# FISI 6406 Advanced Laboratory I

Three credits. Three hours lecture and three hours laboratory per week.

Prerequisite: Professor's authorization.

Advanced level experiments in heat, optics, electromagnetics, electronics, atomic and nuclear physics with special focus on laboratory techniques used in research.

# FISI 6407 Advanced Laboratory II

Three credits. Three hours of lecture and three hours of laboratory per week.

Prerequisite: Professor's authorization.

Advanced level experiments in heat, optics, electromagnetics, electronics, atomic and nuclear physics with special emphasis on laboratory techniques used in research.

#### PHYS 6412 Advanced Mechanics I

Three credits. Three hours of lecture per week.

Prerequisite: Professor's authorization.

Generalized coordinates. Lagrange's equations. Examples of Lagrange's equations: Central forces, spherical coordinates, two-particle system, simple and compound pendulum Conservation laws. Motion in a central field. Collision of particles. Rutherford scattering. Small oscillations. Rotating coordinate systems. Inertial forces. Dynamics of a rigid body. General principles of mechanics; integral principles, the extremal property of action, Hamilton's equations. Poisson brackets. The action as a function of coordinates. Canonical transformations.

#### FISI 6413 Advanced Mechanics II

Three credits. Three hours of lecture per week.

Prerequisite: Professor's authorization.

Principles of variations; Lagrange, Hamilton and Hamilton-Jacobi theories, mechanistic-optical analogies. Theory of small oscillations. The wave equation in one, two and three dimensions. Perturbation theory. Scattering theory.



### FISI 6426 Solid State Physics.

Three credits. Three hours of lecture per week. Prerequisite: FISI 6451, 6454 (Concurrently).

Study of crystal structures, dislocations, crystal growth, and lattice binding energy. Discussion of the free electron model for electrical and thermal conduction in metals. Band theory for conductors and insulators. Excitons, optical absorption and luminescence.

## PHYS 6431 Electromagnetic Theory

Three credits. Three hours of lecture per week.

Prerequisites: PHYS 6401

Electrostatics: Boundary Value Problems, Green functions for the Poisson equation; Multiple expansions, Dielectrics. Magnetostatics and Time-varying Fields: Maxwell Equations and Conservation Laws, Propagation of plane waves in free space, dielectrics and conducting media, wave guides.

## FISI 6432 Classical Electrodynamics

Three credits. Three hours of lecture per week.

Prerequisite: FISI 6431

Maxwell's equations, conservation laws, gauge and potential transform, solution of homogeneous and inhomogeneous wave equation. Relativity. Radiation of an accelerated charge, radiation reaction. Properties of the electromagnetic field stress.

## FISI 6438 Basic Electron Microscopy.

Three credits. Three hours of lecture per week.

This is an introductory level course in electron microscopy for the study of materials. The course is designed to include significant exposure to instrumentation. Also, in order to use the available instrumentation optimally, students will acquire some theoretical and practical knowledge through short lectures. Topics include the basics of sample preparation, scanning electron microscopy, transmission electron microscopy and atomic structure determination.

#### FISI 6441 Nuclear Theory

Three credits. Three hours of lecture per week.

Structure and systematics of the nucleus. Properties of nuclear forces. The two-body problem. Nuclear models, nuclear reactions. Interaction with electromagnetic radiation. Beta decay. Introduction to Bruckner's theory of nuclear matter.

### PHYS 6451 Quantum Mechanics I

Three credits. Three hours of lecture per week.

Non-relativistic quantum mechanics. Development of the basic formalism including the various representations and 'pictures'. One-dimensional problems. Symmetries and constants of the



motion. Central forces and angular momentum. Spin 1/2 and two-level systems. Time independent and time dependent perturbation methods. Systems of identical particles: spin and statistics. Applications to atoms and molecules

### FISI 6452 Quantum Mechanics II

Three credits. Three hours of lecture per week.

Prerequisite: FISI 6451 or equivalent.

Potential scattering theory. Irreducible representations of the 3rd rotation group. The Clebsch-Gordan series. Addition or angular momenta. Irreducible tensors and applications. The occupation number representation of identical particles and second quantization. Applications: phonons, liquid He and superconductivity. Nonrelativistic radiation theory. Special topics: The measurement problem, Bell inequalities, geometric phases,

.

## FISI 6453 Quantum Mechanics III

Three hours of lecture per week.

Prerequisite: FISI 6451 or equivalent.

Matrices and operators, Hilbert spaces and transformation theory. Angular momentum and spin. Many-particle systems. Perturbation theory. Symmetry properties and applications. Dirac electron theory and introduction to quantum electrodynamics.

#### PHYS 6454 Statistical Mechanics

Three credits. Three hours of lecture per week.

Prerequisite: PHYS 6451, 6412.

Microcanonical, canonical and grand-canonical ensembles. Boltzmann statistics. Density matrix. Bose and Fermi-Dirac statistics. Ideal gases: photons and bosons. Fermi ideal gas. Virial coefficients, fluids, distribution functions. Phase transitions.

### FISI 6462 Quantum Field Theory I

Three credits. Three hours of lecture per week.

Classical fields and relativistic wave equations. Quantization of wave fields. Green's functions. Feynmann position theory. S-matrix theory and elementary applications. Renormalization theory. Lee's model. The nuclear force problem. The axiomatic approach. Dispersion relations. Regge poles.

## FISI 6463 Quantum Field Theory II.

Three credits. Three hours of lecture per week.

Classical fields and relativistic wave equations. Quantization of wave fields. Green's functions. Feynmann position theory. S-matrix theory and elementary applications. Renormalization theory. Lee's model. The nuclear force problem. The axiomatic approach. Dispersion relations. Regge poles.

# FISI 6481 Group Theory and Quantum Mechanics.

Three credits. Three hours of lecture per week.

Prerequisite: FISI 6452

Elements of group theory. Space groups and their representation. Invariance of kinematic and dynamical relations of quantum mechanics on permutation and Lorentz groups. Block functions and Brillouin zones. Elementary excitations.

## FISI 6483 Special Topics in Theoretical Physics

Three credits. Three hours of lecture per week.

Topics selected according to the needs and preparation of the student.

## FISI 6484 Special Topics in Theoretical Physics

Three credits. Three hours of lecture per week.

Topics selected according to student needs and preparation.

### FISI 6485 Physics of Semiconductors

Three credits. Three hours of lecture per week.

Prerequisite: FISI 6451

Fundamentals of semiconductors in quantum mechanics, theory of. Bands, emission, metal-semiconductor contact, p-n junctions, minority carriers, trapping, injections, diodes, tunneling, transistors, luminescence, photoconductivity, electrical noise in semiconductors.

## PHYS 6500 Colloquium I and II

Zero to one credit. Weekly meetings.

Lectures by visitors or faculty members on research in various areas of hysics Students will participate in a weekly presentation offered by visiting and local faculty nd graduated students in the various research areas of Physics.

### FISI 6510 Advanced Topics in Physics

Three credits. Three hours of lecture per week.

Prerequisite: permission of department chair.

Lectures, discussions, and readings on advanced topics in physics. (May be repeated up to a maximum of 6 credits if topics are different).

#### FISI 6991 Research

One to six credits.

Research work supervised by a member of the department for those submitting their thesis for accreditation.

#### FISI 6995 Research Seminar

Credits: 1-3 One to three credits. Three hours of seminar per week.

Prerequisite: FISI 4032 (Methods of Mathematical Physics) or equivalent.

Advanced study and formative discussions in specialized topics in physics. It is centered on discussion of frontier experimental theoretical methods, discussion of original results obtained in research, and advanced readings in the scientific literature.

## **FISI 8105 Topics in Materials Sciences**

Credits: Three credits. Hours by arrangement.

Prerequisite: FISI 4057

Formulation of the physical properties of crystals in tensor notation, emphasizing the common mathematical basis of the properties and the thermodynamic relationships between these properties. Topics to be studied include: tensors, paramagnetism, electric polarization, the stress tensor, thermal expansion and strain tensor, piezoelectricity, elasticity, transport properties, electro-optical effect.

### FISI 8115 Infrared and Raman Spectroscopy

Three credits. Three lecture hours per week.

Prerequisite: FISI 6451 or equivalent.

An advanced level course in the theory of the interaction of radiation with matter and related experimental techniques. With emphasis on the interactions responsible for Raman scattering and the absorption and emission of infrared radiation.

### FISI 8116 Advanced Electron Microscopy

Three credits. Three hours of lecture per week.

Includes high resolution electron microscopy and spectroscopy techniques applied to the study of nanomaterials. Electron microscopy techniques are essential for the fine characterization of a variety of materials and especially nanomaterials. This course is appropriate for graduate students who wish to improve their skills in the characterization of materials using high resolution electron microscopes. Previous experience in basic scanning and transmission electron microscopy is required. The course is designed to include significant exposure to high resolution instrumentation. Also, in order to use the available instrumentation optimally, students will acquire some theoretical and practical knowledge through short lectures. Topics include high resolution scanning electron microscopy, high resolution transmission electron microscopy, high resolution imaging, high resolution electron diffraction, high resolution X-ray spectroscopy and high resolution electron energy loss spectroscopy.

## FISI 8135 Chemistry and Physics of Surfaces

Three credits. Hours by arrangement. Prerequisite: Director's authorization.

Theory of surface states on metals. Adsorption theory. Valence method. Linear responses. Charged surfaces. Experimental methods (auger). Properties of quasi-2-dimensional systems. Adsorption and desorption. Eid (Electron-Impact Desorption). Pid (Photo Impact Desorption). Photo-emission and field emission spectroscopy. Leed (Low Energy Electron Diffraction). Film formation techniques and their properties.

### FISI 8145 Advanced Electrochemistry.

Three credits. Three hours of lecture per week.

The structural basis of electrochemistry. Thermodynamic description of the electrified interface. Faradic and nonfaradic current. Theory of electrochemical velocities. Mass transfer. Analytical methods with constant currents and constant voltages. Mechanistic applications of voltammetry. Coulometric methods and preparations in organic chemistry. Batteries and fuel cells.

### FISI 8991 Thesis research in Chemical-Physics.

Credits: One to twelve credits.

Research work toward the doctoral dissertation under the advisement of a faculty member.

## FISI 8992 Special Topics in Materials Science

Credits: One to four credits.

Prerequisite: Permission of the chair of the Physics Department.

Formulation of the physical properties of crystals in tensor notation; emphasizing the common mathematical basis of the properties and the thermodynamic relationships between these properties. Topics to be studied include tensors, paramagnetism, electric polarization, the stress tensor, thermal expansion and strain tensor, piezoelectricity, elasticity, transport properties, electro-optical effect and optical activity.

### FISI 8994 Special Topics in Solid State Physics.

Credits: One to four credits. Hours by arrangement.

Prerequisite: Director's authorization.

Study and discussion of various topics in the field of solid-state physics.

## FISI 8995 Seminar in Chemical-Physics

Credits: One to four credits. Two hours of lecture per week.

Prerequisite: Student in the doctoral program in Chemical-Physics.

Seminars presented by students under the supervision of a faculty member and with assistance from part of the department faculty. The course may be repeated for up to a maximum of 3 credits.

## FISI 8996 Specialized Topics in Chemical-Physics

Credits: One to four credits. By arrangement.

Prerequisite: Director's authorization

An advanced course covering special topics in the general area of Chemical-Physics. The specific content in each offering will be determined by the need for instruction in a specialized topic to accommodate the research interests of students and faculty in the physics-chemistry doctoral program.



Mailing Address: 17 University Ave., Ste. 1701, San Juan, Puerto Rico 00925-2537

**Telephone**: (787) 764-0000, extensions 88241, 88242, 88249

Fax: (787) 281-0651 Email: <a href="mailto:lin.shan@upr.edu">lin.shan@upr.edu</a> Website: <a href="http://math.uprrp.edu">http://math.uprrp.edu</a>

**DEGREE:** 

#### **Master of Science in Mathematics**

#### **FACULTY:**

**Cardona, Iván,** Ph.D., Florida State University, 1987, Professor. Geometric Topology; manifolds and three-dimensional knot theory. <a href="mailto:ivan.cardona1@upr.edu">ivan.cardona1@upr.edu</a>.

**Emamy Khansary, Mohamad Reza,** Ph.D., University of California at Berkeley, 1981, Professor. Convex and discrete geometry; polytopes; threshold logic; hypercube optimization. mreza.emamy@upr.edu.

**Figueroa**, **Raúl**, Ph.D., University of Iowa, 1988, Professor. Geometries; finite geometries; finite fields; combinatorics; algebraic geometry. <a href="mailto:raul.figueroa3@upr.edu">raul.figueroa3@upr.edu</a>.

Gong, Guihua, Ph.D., State University of New York at Stony Brook, 1990, Professor. Functional analysis; operator algebras; index theory; global analysis; non-commutative differential geometry. guihua.gong@upr.edu.

**Janwa, Heeralal,** Ph.D., Syracuse University, 1986, Professor. Coding theory; cryptography; applied algebra; algebraic geometry on finite fields; related computational problems. <a href="https://heeralal.janwa@upr.edu">heeralal.janwa@upr.edu</a>

**Keyantuo, Valentín,** Ph.D., Université de Franche-Comté, Besançon (France), 1992, Professor. Functional analysis; operator semigroups; evolution equations; partial differential equations; control theory. <a href="mailto:valentin.keyantuo1@upr.edu">valentin.keyantuo1@upr.edu</a>.

**Li, Liangqing,** Ph.D., University of Toronto, 1995, Professor. Functional Analysis; operator algebras. <a href="mailto:li.liangquing@upr.edu">li.liangquing@upr.edu</a>.

**Medina, Luis A.,** Ph.D., Tulane University, 2008, Professor. Experimental Mathematics, number theory, special functions. <a href="mailto:luis.medina17@upr.edu">luis.medina17@upr.edu</a>.

**Pérez, María Eglée,** Ph.D., Central University of Venezuela (Venezuela),1994, Professor and Chairwoman. Bayesian Statistics; biostatistics. <a href="mailto:maria.perez34@upr.edu">maria.perez34@upr.edu</a>.

**Pericchi, Luis Raúl,** Ph.D., University of London (England), 1981, Professor. Mathematical statistics; applications of Bayesian statistical analysis; computational statistics. <a href="mailto:luis.pericchi@upr.edu">luis.pericchi@upr.edu</a>.



**Quintero, Ana H.,** Ph.D., Massachusetts Institute of Technology, 1980, Professor. Mathematics education. ana.quintero1@upr.edu.

**Shan, Lin,** Ph.D., Vanderbilt University, 2007, Associate Professor. Index theory; geometric analysis. <a href="mailto:lin.shan@upr.edu">lin.shan@upr.edu</a>.

**Vélez Santiago**, **Alejandro**, Ph.D., University of Puerto Rico, Río Piedras, 2010, Associate Professor. Elliptic and parabolic boundary value problems in non-differentiable domains, operator semigroups, potential theory, fractal analysis, operator theory. <a href="mailto:alejandro.velez@upr.edu">alejandro.velez@upr.edu</a>.

#### **AFFILIATED FACULTY:**

**Corrada Bravo, Carlos J.,** (Professor, Department of Computer Science-UPRRP), PhD, University of Southern California, 2002. Machine Learning Applications for Ecology, Software Development, Databases. <a href="mailto:carlos.corrada2@upr.edu">carlos.corrada2@upr.edu</a>.

**Mégret, Rémi,** (Associate Professor, Department of Computer Science-UPRRP), PhD, National Institute of Applied Sciences – Lyon (France), 2003. Computer Vision; Machine learning. <a href="mailto:remi.megret@upr.edu">remi.megret@upr.edu</a>.

**Negrón, Pablo,** (Professor, UPR-Humacao), PhD, University of Maryland, College Park, 1985. Numerical Methods, Bifurcation Theory, Partial Differential Equations and their applications. <a href="mailto:pablo.negron1@upr.edu">pablo.negron1@upr.edu</a>.

**Nieves, Aniel,** (Associate Professor, College of Business and Administration-UPRRP), Ph.D., State University of New York, Stony Brook, 2010. Mathematical/computational models of complex systems, applied dynamical systems and bifurcation theory, power spectral analysis and wavelets. Parallel computing. <a href="mailto:aniel.nieves@upr.edu">aniel.nieves@upr.edu</a>.

**Orozco Salcedo, Edusmildo,** (Professor, Department of Computer Science-UPRRP), PhD, University of Puerto Rico, Mayagüez Campus, 2005. Finite fields, Parallel Computing, Computer Science Education. <a href="mailto:edusmildo.orozco1@upr.edu">edusmildo.orozco1@upr.edu</a>.

Ortiz Zuázaga, Humberto, (Professor, Department of Computer Science-UPRRP), PhD, University of Puerto Rico, Mayagüez Campus, 2008. Bioinformatics, Cybersecurity. <a href="https://humberto.ortiz@upr.edu">humberto.ortiz@upr.edu</a>.

**Piñero, Fernando,** (Associate Professor, UPR-Ponce), PhD, Technical University of Denmark (Denmark), 2015, Coding Theory, Information Theory, Cryptography, Computational Algebra. <a href="mailto:fernando.pinero1@upr.edu">fernando.pinero1@upr.edu</a>.

**Rubio**, **Ivelisse**, (Professor, Department of Computer Science-UPRRP), PhD, Cornell University, 1998, Professor. Finite Fields, Number Theory. ivelisse.rubio@upr.edu.

## **ADMISSION REQUIREMENTS:**

# **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Requirements for the Master's Program**

Students must meet the following specific requirements:

- 1. Application for Admission to Graduate Studies in electronic format through the platform <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. Three copies of official academic records that include all university-level courses.
- 3. Three letters of recommendation, at least two from professors with knowledge of the candidate's mathematics skills, using the provided electronic form or on paper.
- 4. Official evidence of a bachelor's degree in mathematics or its equivalent. Applicants must have approved (or will be required to take) courses in Algebra and Analysis, including Linear Algebra, Modern Algebra, and Advanced Calculus. Computer Programming and Probability and Statistics courses are recommended for the Applied Mathematics study option.
- 5. Minimum general academic index at graduation of 3.00 points on a scale of 4.00.
- 6. Optional GRE (Graduate Record Examination) Subject Test)- The Graduate Committee will consider good results when recommending and granting teaching and research assistantships. Conditional admission may be granted to a candidate who does not satisfy all the required requirements if the Graduate Committee believes that the candidate has the aptitude to obtain a postgraduate degree once the admission conditions have been met within a period determined by the Committee.

## **GRADUATION REQUIREMENTS:**

- 1. Complete the 30-credit program requirements with a minimum average of 3.00 points.
- 2. Pass a qualifying examination.
- 3. Successfully complete and defend the master's Thesis.

#### STUDY PROGRAM:

On the date designated by the Graduate Committee, a placement exam will be offered in two areas, Algebra, including Linear Algebra, and Analysis (Advanced Calculus, including Functions of Several Variables). It is recommended that all students take the exam, particularly those contemplating studies toward the Doctor of Philosophy degree with a specialty in Mathematics.

Requirements of the Pure Mathematics Master's Program	Credits
Required courses	18
MATE 6201 Modern Algebra I	3
MATE 6261 Functions of Real Variables I	3
MATE 6301 Functions of a Complex Variable	3

Requirements of the Pure Mathematics Master's Program	Credits
MATE 6540 Introduction to Topology	3
MATE 6202 Modern Algebra II or	
MATE 6262 Functions of Real Variables II or MATE 6551	
Algebraic Topology I	3
(At least one of the following two-semester sequences must be	
completed: MATE 6201-6202, MATE 6261-6262, MATE 6540-	
6551)	
MATE 6800 Graduate Seminar	3
Directed selection elective courses	9
Qualifying Exam	0
Thesis	3
MATE 6996 Master's Thesis	3
MATE 6896 Continuation of Thesis	0
Total Credits	30

Requirements of the Applied Mathematics Master's Program	Credits
Required courses	15
MATE 6601 Probability and Statistics I	3
MATE 6681 Data Structures I	3
MATE 6680 Computational Analysis I or MATE 6881 Linear Programming or MATE 6882 Optimization	3
MATE 6602 Probability and Statistics II, MATE 6682 Algorithms,  (At least one of the following two-semester sequences must be completed: MATE 6601-6602,  MATE 6881-6882)	3
MATE 6700 Projects in Applied Mathematics	3
Directed selection elective courses	12
Qualifying Exam	0
Thesis	3
MATE 6996 Master's Thesis	3
MATE 6896 Continuation of Thesis	0
Total Credits	30

# **COURSE DESCRIPTION:**

The course descriptions below are based on the most recent information available in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **MATH 6101 Number Theory I**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 3040, MATH 4032

Fundamental non-analytic theory. Theory of congruences. Wilson and Euler theorems and applications. Sums of two squares. Primitive roots. Quadratic reciprocity law.

## MATH 6102 Analytic Number Theory

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6101

Introduction to analytic number theory. Selberg and Erdös methods. The Prime Number Theorem.

# MATH 6150 Linear Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4031

Vector spaces over arbitrary fields. Bases. Linear transformations. Matrices. Dual space. Complex vector spaces. Elementary canonical forms. The Rational and Jordan canonical forms. Spectra of transformations. Tensor products. Bilinear forms.

# MATH 6180 Introduction to Homological Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6202 or equivalent.

Exact sequences. Projective, injective, and flat modules. Categories. Abelian categories. Functors. Resolutions. Homology. Homological dimension and applications.

### **MATH 6200 Group Theory**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4033 or equivalent.

Fundamental properties of groups. Invariant subgroups. Isomorphism and homomorphism. Free groups. Direct and free products of groups. Permutation groups. Transformation groups.

### MATH 6201 Modern Algebra I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4033 or equivalent.

A survey of abstract algebra. Groups, rings, and fields. Introduction to Galois theory.

### MATH 6202 Modern Algebra II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6201

Rings and ideals. Quotient rings. Ring homomorphism. Prime and maximal ideals. Nil radical and Jacobson radical. Modules, submodules, and quotient modules. Module homomorphisms. Finitely



generated modules. Exact sequences. Tensor products of modules. Rings and modules of fractions. Primary decomposition. Integral domains.

### MATH 6261 Functions of a Real Variable I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Overview of the following topics: set theory, real numbers, completeness of the real numbers, sequences and series, limits and continuity. Metric and topological spaces. Compactness, connectedness, and completeness. Sequences of functions. Uniform continuity and uniform convergence. Differentiation. Riemann-Stieltjes integration. Lebesgue measure and integration on the real line.

#### MATH 6262 Functions of Real Variables II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6261

Measure theory on sigma-algebras. Inner and outer measure. Measurable functions. Convergence in measure. The Lebesgue integral for real functions of a real variable. The Radon-Nikodym theorem. Multiple integrals. Fubini's Theorem. Lebesgue's Theorem. Lp spaces. Convergence in the mean.

## MATH 6271 Mathematical Analysis I

Three credits. Three hours of lecture per week.

Prerequisite: Advanced Calculus II (MATH 5205).

Introduction to logic and set theory. Vector spaces. Affine subspaces. Bilinearity. Differential calculus in n-dimensional Euclidean space. Implicit function theorem. Taylor's formula. Compactness and completeness. Metric spaces. Spaces with scalar product. Orthogonal transformations. Compact transformations. Differential equations.

#### MATH 6272 Mathematical Analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6271

Multilinear functions. The exterior algebra. Integration in n-dimensional Euclidean space. The change of variable formula. Integral calculus on manifolds. Exterior calculus. Differential forms. Stokes' theorem.

### MATH 6301 Functions of a Complex Variable

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Differentiation and integration of complex functions. Infinite series. Analytic functions. Analytic continuation. Multi-valued functions. Conformal mappings.



## **MATH 6400 Series**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

The study of series. Tests for convergence and divergence. Operations with series. Bernoulli and Euler numbers. Fourier series.

# **MATH 6460 Introduction to Functional Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6540 and professor's authorization.

Fundamental concepts of normed spaces and Banach spaces. Hilbert spaces. Weak convergence and closed transformations. Riesz-Schauder theory. Functions in Banach algebras. Spectral analysis in Hilbert spaces.

### MATH 6530 Metric Differential Geometry.

Three credits. Three hours of lecture per week. Prerequisites: MATH 4031, MATH 5201

Elementary theory of curves and surfaces. Frénet formulas. Regular surfaces. Fundamental forms. Curvature. Euler's theorem. Codazzi-Mainardi equations. Conformal maps and isometries. Minimal and ruled surfaces. Fundamental theorem of surfaces. Covariant derivatives. Geodesics. Gauss-Bonnet theorem.

## **MATH 6540 Introduction to Topology**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Topology of the line and plane. Abstract topological spaces. Subspaces. Relative topology. Bases and subbases. Continuity. Topological equivalence. Metric spaces. Product topology. Quotient spaces. Separation axioms. Hausdorff spaces. Compact spaces. Connected spaces. Complete metric spaces. Function spaces.

#### MATH 6545 Advanced Point-Set Topology

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6540

The Urysohn metrization theorem. The Tychonoff theorem. Completely regular spaces. The Stone-Čech compactification. Local finiteness. The Nagata-Smirnov metrization theorem. Paracompactness. Complete metric spaces. Compactness in metric spaces. Pointwise and compact convergence. The compact open topology. Ascoli's theorem. Homotopy of paths. The fundamental group.

#### MATH 6551 Algebraic Topology I

Three credits. Three hours of lecture per week. Prerequisites: MATH 6540 and MATH 6201



Study of topological problems using algebraic methods. Introduction to the theory of categories and functors, homological algebra, and homotopy.

### MATH 6552 Algebraic Topology II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6551 or professor's authorization.

Tensor products. Kunneth relations. Cohomological products. Fixed point theorems. Duality theorems for geometric varieties.

## MATH 6601 Probability and Statistics I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5001

Sample spaces, axioms, and elementary theorems of probability. Combinatorics. Conditional probability and Bayes theorem. Random variables and probability distributions. Mathematical expectation. Mean, variance, and moments of a random variable. Moment-generating functions. Chebyshev's inequality, types of convergence, and the laws of large numbers. The central limit theorem. Introduction to a statistical programming tool. Simulations and programming for statistics and transformations will be used. Introduction to elementary stochastic processes.

## MATH 6602 Probability and Statistics II

Three credits. Three hours of lecture per week.

Prerequisites: MATH 5002 and 6601.

Principles of Statistical Sufficiency and the Likelihood Principle. Point estimation. Moments, Maximum Likelihood Estimators, Bayesian estimation. Methods for evaluating estimators based on loss functions and the risk function. Hypothesis testing. Type I and Type II errors. Power function. Bayes factors. Optimal tests. P-values. Confidence intervals and probability estimation. Approximation methods and asymptotic evaluations. Introduction to Linear Models. Use of a statistical programming tool for data analysis.

### **MATH 6605 Applied Stochastic Models**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6601

Applications of stochastic processes in areas such as queuing theory, reliability, inventory theory, decision theory, ecology, and population dynamics.

#### MATH 6606 Applied Stochastic Processes II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6605

Queueing theory. Single and multiserver queues. Fundamentals of reliability theory. Renewal processes. Semi-Markov processes. Regenerative processes. Applications to reliability theory.

## **MATH 6610 Sampling Theory**

Three credits. Three hours of conference a week.

Prerequisite: MATH 6602

Sample survey theory and design. Simple random, stratified, systematic, and cluster samples. Probability proportional to size sampling. Estimation of population parameters. Ratio, difference and regression type estimators. Use of auxiliary information. Confidence intervals. Optimum choice of sample size. Strata allocation. Selection probabilities. Double sampling and repetitive surveys. Non-sampling errors, randomized response. Sufficiency principle in sample survey model. Superpopulation models.

### **MATH 6611 Linear Models I**

Three credits. Three hours of lecture per week.

Prerequisites: MATH 4031, MATH 5202

Linear statistical models with emphasis on the mathematical foundations of the underlying theory. Linear algebra will be used particularly in the discussion of the main topics: regression and analysis of variance.

#### MATH 6612 Linear Models II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6611

Completely randomized block and Latin square designs. Fixed, random, and mixed models. Factorial experiments and confounding. Incomplete block designs. Response surfaces and analysis of covariance. Applications to data analysis.

## MATH 6615 Decision Theory and Bayesian Analysis

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6601

Elements of statistical decisions. Frequentist and Bayesian decision theory. Bayesian analysis: estimation, hypothesis testing, model selection, informative and non-informative priors. Approximations and Bayesian computations. Markov Chain Monte Carlo Methods. Introduction to Hierarchical Linear, Dynamic Linear, and Generalized Linear Models.

#### MATH 6650 Applied Linear Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4031 or equivalent.

Finite dimensional vector spaces. Matrix algebra. Systems of linear equations. Rank. Inverses. Eigenvalues. Linear programming. Canonical forms. Applications.

## MATH 6656 Applied Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4033 or equivalent.

Introduction to concepts of the theory of semigroups, groups, rings, fields, and Boolean algebras. Applications to coding theory. Symmetry groups. Polya's theory of counting. The theory of machines.

# **MATH 6680 Computational Analysis**

Three credits. Three hours of lecture per week.

Prerequisites: MATH 4009, MATH 4031, MATH 5201, or authorization from the department's director.

Introduction to the derivation and analysis of numerical methods. Numerical integration. Approximation of functions. Solution of equations. Eigenvalue problems. Solution of differential equations. Optimization problems.

### MATH 6681 Data Structures I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5100 or equivalent.

Data structures from a combinatorial viewpoint. Linear, circular, and linked lists. Trees. Binary trees. Applications to computer graphics. Operations on polynomials. Dynamic storage allocation and compilers.

## MATH 6682 Algorithms

Three credits. Three hours of lecture per week.

Prerequisite: MATH 3034 or equivalent.

Advanced methods for designing efficient algorithms: divide and conquer, dynamic programming, greedy methods, randomized algorithms. Introduction to algorithm analysis: asymptotic notation and amortized analysis. Algorithms for graphs. Applications. Introduction to parallel algorithms. NP-completeness.

#### MATH 6686 Advanced Data Analysis and Experimental Design

Three credits. Three lecture hours and two laboratory hours per week.

Prerequisite: MATH 3026

This course will introduce students to commonly used methods in the areas of Experimental Design and Statistical Data Analysis applied to disciplines such as Biology, Chemistry, Environmental sciences, and Nutrition, among others. Students will use statistical programming languages to conduct data analysis following the techniques studied in the course. This course will be offered in-person, hybrid, and online modalities.

## MATH 6690 Computational Analysis II

Three credits. Three hours of lecture per week.



Prerequisite: MATH 6680

Approximation of functions. Numerical differentiation and integration. Numerical methods for ordinary differential equations: initial value problems and boundary value problems. Numerical methods for partial differential equations.

# **MATH 6700 Projects in Applied Mathematics**

Three credits. Three hours per week.

Prerequisite: Authorization from the department's director.

Introduction to research in Applied Mathematics. Emphasis on formulating and solving problems from the real world using mathematical models and interpreting those solutions in the context of the original problems.

#### **MATH 6800 Graduate Seminar**

Three credits. Three hours per week.

Research seminar at an introductory level; Students will present material under the supervision of a faculty member. The choice of topic will be determined by the interests of the participants.

## MATH 6881 Linear programming

Three credits. Three hours of lecture per week. Prerequisites: MATH 4031 and MATH 5201

Classic examples of linear programming. Elements of convex sets. Affine and linear spaces; dimension; affine and convex hulls; linear, affine, and projective transformations. Extreme subsets of closed convex sets. Linear programming problem, the feasible solution set, and the correspondence between basic solutions and extrema. The fundamental theorem of linear programming. Two-phase simplex method. Duality, strong and weak duality theorems. Variants of the simplex method, revised simplex method, and dual simplex. Transportation problem and base triangulation. Transportation algorithm and applications of linear programming.

#### **MATH 6882 Optimization**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Non-linear optimization problems, both unconstrained and constrained. We will study the optimality conditions and the basic numerical optimization methods with their convergence analysis. Numerical methods include basic descent methods, conjugate direction methods, quasi-Newton algorithms, reduced gradient methods, gradient projection methods, penalty and barrier methods, duality, and Lagrange methods.

#### **MATH 6896 Continuation of Thesis**

0 credit.

Prerequisite: Completion of all credit requirements in courses and research corresponding to the master's degree.



This course will permit master's degree students who have completed all course and research credit requirements to maintain active student status while completing their thesis work.

## **MATH 6990 Independent Studies**

One to three credits. May be taken up to a maximum of three credits.

Research into some topic of interest by means of informal seminars, lectures, and independent research under the supervision of a member of the Department of Mathematics.

#### MATH 6996 Thesis

One to six credits.

Prerequisite: Advisor's authorization.

Research in some topic of interest by means of informal seminars, lectures, and independent research under the supervision of a faculty member of the Mathematics Department.

# MATH 8001 Graph Theory I

Three credits. Three hours of lecture per week.

Review of elementary graph theory. Trees. Matrix-tree theorem. Enumerating spanning trees of a graph. Graph decompositions. Connectivity and k-connectivity of graphs. Disjoint paths and connectivity of graphs. Menger's and Whitney's theorems. Graph assembling and disassembling of 3-connected and quasi-4-connected graphs. Various Euler problems. Hamiltonian cycles. The k-closure of a graph. Bondy-Chvátal's theorem. Long cycles in a graph. Dirac's theorem. Factors. Maximum and perfect matchings. Tutte's and Edmonds-Gallai's theorems. Berge-Tutte duality theorem. Perfect graphs. Lovász' theorem. Edge colorings. Vizing's theorem. Independent sets and cliques. Vertex colorings. Brook's theorem. Embeddings of graphs in the plane. Kuratowski's, Whitney's, MacLane's, and Kelmans' planarity criteria. Five-color and four-color theorems on planar graphs. On the hamiltonicity of planar graphs.

#### **MATH 8005 Enumerative Combinatorics I**

Three credits. Three hours of lecture per week.

Review of elementary combinatorics. Outline of the main problems and approaches of enumerative combinatorics. Enumerating trees. Matrix-tree theorem. Coding of trees. Counting Euler cycles in a digraph. Counting and listing of non-isomorphic trees of different types. Generating function method in enumerative combinatorics. Enumerating graphs of different types. Pólya's counting theory of non-isomorphic objects. Enumerating non-isomorphic graphs of different types. Principle of inclusion and exclusion. Lattices, their Möbius functions, and Möbius algebras. Asymptotic results in enumerative combinatorics.

## **MATH 8015 Discrete Algorithms**

Three credits. Three hours of lecture per week.

Prerequisite: Graph Theory

Efficient algorithms are sought for solving problems in discrete mathematics. Different algorithms and applications to various problems are studied through special reading assignments, lecture presentations, and group discussions. Branch and bound strategy. Dynamic programming principle. Optimal paths in graphs. Optimal spanning trees in graphs. 2-coloring and odd cycles in a graph. Depth-first search in a graph and its applications. Properties of depth-first search tree. Graph decomposition algorithms. Graph assembling algorithms. Graph planarity algorithms. Euler problems. Hamiltonian problems. Some packing and covering problems for graphs. Metric problems on graphs. Set transformation algorithms. Search trees of different types. Various sorting algorithms. The main ideas of the NP-theory (the theory of problem complexity).

# MATH 8021 Algebraic Combinatorics I

Three credits. Three hours of lecture per week. Prerequisites: MATH 6202 and MATH 8001.

Linear codes. t-error correcting binary codes and finite fields. Cyclic codes. Perfect codes. Block designs. Latin squares. Pairwise balanced designs. Hadamard matrices. Difference sets. Symmetric designs. Finite geometries. Singer's theorem. Transversal designs. Group divisible designs. Steiner triple systems. Kirkman triple systems. Strongly regular graphs. Association schemes. Distance-regular graphs. Distance transitivity.

## MATH 8031 Combinatorial Optimization I

Three credits. Three hours of lecture per week. Prerequisites: MATH 6881 and MATH 8001.

Elements of linear and integer programming: branch and bound methods and their application to combinatorial optimization problems. Network flow theory and its generalizations: statistical maximal flow, feasibility theorems and combinatorial applications, minimal cost flow problems, multi-terminal maximal flows, and multi-commodity flows. Matching theory and its generalizations: matchings in bipartite graphs, size, and structure of maximum matchings, bipartite graphs with perfect matchings, general graphs with perfect matchings, some graph-theoretical problems related to matchings, matchings and linear programming, matching algorithms, the f-factor problem, vertex packing and covering, some generalizations of matching problems.

### **MATH 8041 Matroid Theory I**

Three credits. Three hours of lecture per week. Prerequisites: MATH 6150 and MATH 8001.

Fundamental concepts and axioms of matroid theory. Duality in matroid and matroid operations. Vector representation of matroids. The matroid of a graph and graph planarity. Greedy algorithms on matroids. The union of matroids and its rank function. Efficient algorithms for some combinatorial optimization problems (packing, covering, intersection, etc.) on matroids with applications to a variety of combinatorial objects (e.g. graphs, matrices, algebraic dependencies, transversals).

## MATH 8051 Convex Polytopes I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6150

The basic concepts of linear and affine geometry. Convex sets and their support properties. Supporting hyperplanes. The theorems of Radon, Helly, and Caratheodory. Convex polytopes and their faces. Polarity and duality in convex polytopes. Cell-complexes and Schlegel diagrams. Shelling the boundary complexes. The cubical complexes. The graph of a d-polytope and its properties. 3-polytopes and Steinitz' theorem. Affine and projective transformations. The fundamental theorem of projective geometry. Simplicial and simple polytopes. Euler's theorem and the Dehn-Sommerville equations. Lower bound and upper bound theorems for convex polytopes.

# MATH 8309 Complex Analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6301

Analytic continuation. Algebraic functions. Elliptic functions. Entire and meromorphic functions. Normal families. Conformal mappings.

### MATH 8465 Spectral Theory and Differential Equations

Three credits. Three hours of lecture per week. Prerequisites: MATH 6460 and MATH 8469.

Unbounded operators. Graphs and symmetric operators. Self-adjointness. Cayley transforms. Extensions of symmetric operators. Resolutions of the identity and the spectral theorem. Stone's theorem. Introduction to distributions. Sobolev spaces. Variational methods. The Laplace operator. The heat equation.

#### MATH 8469 Functional analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6460

Banach algebras. Commutative Banach algebras. Bounded operators on Hilbert space. Unbounded operators. Topological vector spaces. Duality. Compact operators. Distributions and their applications to the theory of partial differential equations.

## MATH 8605 Simulation and the Monte Carlo Method

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6606

Random number generation. Random variate generation. Monte Carlo integration. Variance reduction techniques. Simulation of stochastic processes. Regenerative methods for simulation analysis. Simulation of queueing systems. Monte Carlo optimization. Simulation languages. Statistical evaluation of simulation results. Markov Chain Monte Carlo Methods (MCMC). Gibbs Sampler. Metropolis-Hastings Algorithm. Applications.

#### MATH 8680 Iterative Solution of Systems of Nonlinear Equations

Three credits. Three hours of lecture per week. Prerequisites: MATH 6680 and MATH 6690.

Gâteaux and Féchet derivaties. Mean value theorems and second derivatives Contractons. Investe and implicit function theorems. Sard's theorem. Monotone operators. Degree theory. Properties of the degree and basic existence theorems. General iterative methods. Newton and secant methods and generalizations. Continuation methods. Predictor-corrector methods. Numerical bifurcation theory.

# MATH 8685 Parallel Algorithms-

## **Design and Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6682

Parallel architecture classifications. Parallel computational models. Network models such as arrays, trees, and hypercubes. Efficiency and scalability measures for parallel algorithms. Techniques of parallel algorithm design. Primitives for parallel algorithm design. Efficient parallel algorithms for integer and matrix computations, fast Fourier transform, sorting and graph problems. Algorithm mappings for network models. Data routing algorithms.

#### MATH 8800 Doctoral Seminar

Three credits. Three hours per week.

Advanced seminar in research areas related to the doctoral program.

#### MATH 8899 Continuation of Doctoral Dissertation

Credits: 0

This course will allow students in the doctoral program who have completed credit requirements in coursework and research to remain active students while completing dissertation work.

#### **MATH 8980 Topics in Pure Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

#### **MATH 8985 Topics in Pure Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

# **MATH 8986 Topics in Discrete Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

## **MATH 8990 Topics in Applied Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

# **MATH 8995 Topics in Computational Mathematics**

One to three credits.

Prerequisite: Professor's authorization or of the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

#### **MATH 8999 Doctoral Dissertation**

One to three credits.

Prerequisite: Authorization from the Graduate Program Coordinator.

Study and research leading to the preparation of the doctoral dissertation.

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**DEGREE:** 

# **Doctor of Philosophy in Mathematics**

#### **FACULTY:**

**Cardona, Iván,** Ph.D., Florida State University, 1987, Professor. Geometric Topology; manifolds and three-dimensional knot theory. <a href="mailto:ivan.cardona1@upr.edu">ivan.cardona1@upr.edu</a>

**Emamy-Khansary, Mohamad Reza,** Ph.D., University of California at Berkeley, 1981, Professor. Convex and discrete geometry; polytopes; threshold logic; hypercube optimization. mreza.emamy@upr.edu

**Figueroa, Raúl,** Ph.D., University of Iowa, 1988, Professor. Geometries; finite geometries; finite fields; combinatorics; algebraic geometry. <a href="mailto:raul.figueroa3@upr.edu">raul.figueroa3@upr.edu</a>

**Gong, Guihua,** Ph.D., State University of New York at Stony Brook, 1990, Professor. Functional analysis; operator algebras; index theory; global analysis; non-commutative differential geometry. <a href="mailto:guihua.gong@upr.edu">guihua.gong@upr.edu</a>

**Janwa, Heeralal,** Ph.D., Syracuse University, 1986, Professor. Coding theory; cryptography; applied algebra; algebraic geometry on finite fields; related computational problems. heeralal.janwa@upr.edu

**Keyantuo, Valentín,** Ph.D., Université de Franche-Comté, Besançon (France), 1992, Professor. Functional analysis; operator semigroups; evolution equations; partial differential equations; control theory. <a href="mailto:valentin.keyantuo1@upr.edu">valentin.keyantuo1@upr.edu</a>

**Li, Liangqing,** Ph.D., University of Toronto, 1995, Professor. Functional Analysis; operator algebras. <a href="mailto:li.liangquing@upr.edu">li.liangquing@upr.edu</a>

**Medina, Luis A.,** Ph.D., Tulane University, 2008, Professor. Experimental mathematics, number theory, special functions. <a href="mailto:luis.medina17@upr.edu">luis.medina17@upr.edu</a>

**Pérez, María Eglée,** Ph.D., Central University of Venezuela (Venezuela),1994, Professor and Chairwoman. Bayesian Statistics; biostatistics. <a href="mailto:maria.perez34@upr.edu">maria.perez34@upr.edu</a>

**Pericchi, Luis Raúl,** Ph.D., University of London (England), 1981, Professor. Mathematical statistics; applications of Bayesian statistical analysis; computational statistics.

# luis.pericchi@upr.edu

**Quintero, Ana H.,** Ph.D., Massachusetts Institute of Technology, 1980, Professor. Mathematics education. <a href="mailto:ana.quintero1@upr.edu">ana.quintero1@upr.edu</a>

**Shan, Lin,** Ph.D., Vanderbilt University, 2007, Associate Professor. Index theory; geometric analysis. <a href="mailto:lin.shan@upr.edu">lin.shan@upr.edu</a>

**Vélez Santiago**, **Alejandro**, Ph.D., University of Puerto Rico, Río Piedras, 2010, Associate Professor. Elliptic and parabolic boundary value problems in non-differentiable domains, operator semigroups, potential theory, fractal analysis, operator theory. <a href="mailto:alejandro.velez1@upr.edu">alejandro.velez1@upr.edu</a>

### **AFFILIATED FACULTY:**

Corrada Bravo, Carlos J., (Professor, Department of Computer Science-UPRRP), Ph.D., University of Southern California, 2002. Machine Learning Applications for Ecology, Software Development, Databases. <a href="mailto:corrada2@upr.edu">carlos.corrada2@upr.edu</a>

**Mégret, Rémi,** (Associate Professor, Department of Computer Science-UPRRP), Ph.D., Computational Sciences, National Institute of Applied Sciences – Lyon (France), 2003. Computer Vision; Machine learning. <a href="mailto:remi.megret@upr.edu">remi.megret@upr.edu</a>

**Negrón, Pablo,** (Professor, UPR-Humacao), Ph.D., University of Maryland, College Park, 1985. Numerical Methods, Bifurcation Theory, Partial Differential Equations and their applications. pablo.negron1@upr.edu

**Nieves, Aniel,** (Associate Professor, College of Business and Administration-UPRRP), Ph.D., State University of New York, Stony Brook, 2010. Mathematical/computational models of complex systems, applied dynamical systems and bifurcation theory, power spectral analysis and wavelets. Parallel computing. aniel.nieves@upr.edu

**Orozco Salcedo, Edusmildo,** (Professor, Department of Computer Science-UPRRP), Ph.D., University of Puerto Rico, Mayagüez Campus, 2005. Finite fields, Parallel Computing, Computer Science Education. edusmildo.orozco1@upr.edu

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**Piñero, Fernando,** (Associate Professor, UPR-Ponce), Ph.D., Technical University of Denmark (Denmark), 2015, Coding Theory, Information Theory, Cryptography, Computational Algebra. <a href="mailto:fernando.pinero1@upr.edu">fernando.pinero1@upr.edu</a>

**Rubio, Ivelisse,** (Professor, Department of Computer Science-UPRRP), Ph.D., Cornell University, 1998, Professor. Finite Fields, Number Theory. <a href="mailto:ivelisse.rubio@upr.edu">ivelisse.rubio@upr.edu</a>



## **ADMISSION REQUIREMENTS:**

# **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Requirements of the Doctoral Program**

Students must meet the following specific requirements:

- 1. Application for Admission to Graduate Studies in electronic format through the platform <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. Three official copies of academic records that include all university-level courses.
- 3. Three letters of recommendation, at least two from professors with knowledge of the candidate's mathematics skills, using the provided electronic form or on paper.
- 4. Official evidence of a bachelor's degree in mathematics or its equivalent. Applicants must have passed or will be required to pass the equivalent of at least one semester of Linear Algebra, two semesters of Modern Algebra, and two semesters of Advanced Calculus. Aptitudes are demonstrated by passing a placement exam or passing the corresponding Algebra sequence (MATE 5101-5102) and the Analysis sequence (MATE 5301-5302) with a grade of A or B.
- 5. Minimum general academic index of 3.00 points on a scale of 4.00.
- 6. Official results of the GRE (Graduate Record Examination) Subject Test in mathematics.

# **GRADUATION REQUIREMENTS:**

- 1. Comply with the general requirements for graduation of the Río Piedras Campus.
- 2. Pass all required courses totaling a minimum of 69 credit hours (54 credits in required and directed elective courses, 6 credits in electives related to the doctoral dissertation, 3 credits in a Master's seminar, 3 credits in a doctoral seminar, and 3 credits in the doctoral dissertation) with a minimum average of 3.00 points.
- 3. Pass the doctoral level degree exam in three areas: Analysis, Algebra and in the student's area of specialization.
- 4. Pass the oral exam for candidacy for the doctoral degree.
- 5. Be admitted as candidate for the degree of Doctor of Philosophy. Prior to applying for candidacy, students must demonstrate their aptitude and knowledge of Spanish and English, maintain a minimum average of 3.00 points on a 4.00-point scale, pass the doctoral level degree exam and pass the oral candidacy exam for the doctoral degree.
- 6. Write an original research dissertation, which must be defended publicly.
- 7. Deliver the approved official dissertation to the Department of Mathematics.

#### STUDY PROGRAM:

Program Requirements	Credits
Core courses	15
Specialty courses	39

Program Requirements	Credits
Elective specialty courses	6
Master's Seminar	3
MATE 8800 Doctoral Seminar	3
Candidacy Exam	0
Qualifying Exam	0
MATE 8999 Doctoral Dissertation	3
MATE 8899 Continuation of Doctoral Dissertation	0
Total Credits	69

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the latest ones registered in the Student Information System of the Rio Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# MATH 6101 Number Theory I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 3040, MATH 4032

Fundamental non-analytic theory. Theory of congruences. Wilson and Euler theorems and applications. Sums of two squares. Primitive roots. Quadratic reciprocity law.

## **MATH 6102 Analytic Number Theory**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6101

Introduction to analytic number theory. Selberg and Erdös methods. The Prime Number Theorem.

## MATH 6150 Linear Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4031

Vector spaces over arbitrary fields. Bases. Linear transformations. Matrices. Dual space. Complex vector spaces. Elementary canonical forms. The Rational and Jordan canonical forms. Spectra of transformations. Tensor products. Bilinear forms.

# MATH 6180 Introduction to Homological Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6202 or equivalent.

Exact sequences. Projective, injective, and flat modules. Categories. Abelian categories. Functors. Resolutions. Homology. Homological dimension and applications.

# **MATH 6200 Group Theory**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4033 or equivalent.

Fundamental properties of groups. Invariant subgroups. Isomorphism and homomorphism. Free groups. Direct and free products of groups. Permutation groups. Transformation groups.

# MATH 6201 Modern Algebra I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4033 or equivalent.

A survey of abstract algebra. Groups, rings, and fields. Introduction to Galois theory.

## MATH 6202 Modern Algebra II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6201

Rings and ideals. Quotient rings. Ring homomorphism. Prime and maximal ideals. Nil radical and Jacobson radical. Modules, submodules, and quotient modules. Module homomorphisms. Finitely generated modules. Exact sequences. Tensor products of modules. Rings and modules of fractions. Primary decomposition. Integral domains.

#### MATH 6261 Functions of a Real Variable I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Overview of the following topics: set theory, real numbers, completeness of the real numbers, sequences, and series, limits, and continuity. Metric and topological spaces. Compactness, connectedness, and completeness. Sequences of functions. Uniform continuity and uniform convergence. Differentiation. Riemann-Stieltjes integration. Lebesgue measure and integration on the real line.

#### **MATH 6262 Functions of Real Variables II**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6261

Measure theory on sigma-algebras. Inner and outer measure. Measurable functions. Convergence in measure. The Lebesgue integral for real functions of a real variable. The Radon-Nikodym theorem. Multiple integrals. Fubini's Theorem. Lebesgue's Theorem. Lp spaces. Convergence in the mean.

## MATH 6271 Mathematical Analysis I

Three credits. Three hours of lecture per week.

Prerequisite: Advanced Calculus II (MATH 5205).

Introduction to logic and set theory. Vector spaces. Affine subspaces. Bilinearity. Differential calculus in n-dimensional Euclidean space. Implicit function theorem. Taylor's formula. Compactness and completeness. Metric spaces. Spaces with scalar product. Orthogonal transformations. Compact transformations. Differential equations.

# MATH 6272 Mathematical Analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6271

Multilinear functions. The exterior algebra. Integration in n-dimensional Euclidean space. The change of variable formula. Integral calculus on manifolds. Exterior calculus. Differential forms. Stokes' theorem.

### MATH 6301 Functions of a Complex Variable

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Differentiation and integration of complex functions. Infinite series. Analytic functions. Analytic continuation. Multi-valued functions. Conformal mappings.

#### MATH 6400 Series

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

The study of series. Tests for convergence and divergence. Operations with series. Bernoulli and Euler numbers. Fourier series.

#### **MATH 6460 Introduction to Functional Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6540 and authorization from the professor.

Fundamental concepts of normed spaces and Banach spaces. Hilbert spaces. Weak convergence and closed transformations. Riesz-Schauder theory. Functions in Banach algebras. Spectral analysis in Hilbert spaces.

### MATH 6530 Metric Differential Geometry.

Three credits. Three hours of lecture per week.

Prerequisites: MATH 4031, MATH 5201.

Elementary theory of curves and surfaces. Frénet formulas. Regular surfaces. Fundamental forms. Curvature. Euler's theorem. Codazzi-Mainardi equations. Conformal maps and isometries. Minimal and ruled surfaces. Fundamental theorem of surfaces. Covariant derivatives. Geodesics. Gauss-Bonnet theorem.

## **MATH 6540 Introduction to Topology**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Topology of the line and plane. Abstract topological spaces. Subspaces. Relative topology. Bases and subbases. Continuity. Topological equivalence. Metric spaces. Product topology. Quotient spaces. Separation axioms. Hausdorff spaces. Compact spaces. Connected spaces. Complete metric spaces. Function spaces.

## MATH 6545 Advanced Point-Set Topology

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6540

The Urysohn metrization theorem. The Tychonoff theorem. Completely regular spaces. The Stone-Čech compactification. Local finiteness. The Nagata-Smirnov metrization theorem. Paracompactness. Complete metric spaces. Compactness in metric spaces. Pointwise and compact convergence. The compact open topology. Ascoli's theorem. Homotopy of paths. The fundamental group.

### MATH 6551 Algebraic Topology I

Three credits. Three hours of lecture per week. Prerequisites: MATH 6540 and MATH 620.

Study of topological problems using algebraic methods. Introduction to the theory of categories and functors, homological algebra, and homotopy.

#### MATH 6552 Algebraic Topology II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6551 or professor's authorization.

Tensor products. Kunneth relations. Cohomological products. Fixed point theorems. Duality theorems for geometric varieties.

#### MATH 6601 Probability and Statistics I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5001

Sample spaces, axioms, and elementary theorems of probability. Combinatorics. Conditional probability and Bayes theorem. Random variables and probability distributions. Mathematical expectation. Mean, variance, and moments of a random variable. Moment-generating functions. Chebyshev's inequality, types of convergence, and the laws of large numbers. The central limit theorem. Introduction to a statistical programming tool. Simulations and programming for statistics and transformations will be used. Introduction to elementary stochastic processes.

### MATH 6602 Probability and Statistics II

Three credits. Three hours of lecture per week.

Prerequisites: MATH 5002 and 6601

Principles of Statistical Sufficiency and the Likelihood Principle. Point estimation. Moments, Maximum Likelihood Estimators, Bayesian estimation. Methods for evaluating estimators based on loss functions and the risk function. Hypothesis testing. Type I and Type II errors. Power function. Bayes factors. Optimal tests. P-values. Confidence intervals and probability estimation. Approximation methods and asymptotic evaluations. Introduction to Linear Models. Use of a statistical programming tool for data analysis.

# **MATH 6605 Applied Stochastic Models**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6601

Applications of stochastic processes in areas such as queuing theory, reliability, inventory theory, decision theory, ecology, and population dynamics.

### MATH 6606 Applied Stochastic Processes II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6605

Queueing theory. Single and multiserver queues. Fundamentals of reliability theory. Renewal processes. Semi-Markov processes. Regenerative processes. Applications to reliability theory.

#### **MATH 6610 Sampling Theory**

Three credits. Three hours of conference a week.

Prerequisite: MATH 6602

Sample survey theory and design. Simple random, stratified, systematic, and cluster samples. Probability proportional to size sampling. Estimation of population parameters. Ratio, difference, and regression type estimators. Use of auxiliary information. Confidence intervals. Optimum choice of sample size. Strata allocation. Selection probabilities. Double sampling and repetitive surveys. Non-sampling errors, randomized response. Sufficiency principle in sample survey model. Superpopulation models.

#### **MATH 6611 Linear Models I**

Three credits. Three hours of lecture per week.

Prerequisites: MATH 4031, MATH 5202.

Linear statistical models with emphasis on the mathematical foundations of the underlying theory. Linear algebra will be used particularly in the discussion of the main topics: regression and analysis of variance.

## **MATH 6612 Linear Models II**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6611

Completely randomized block and Latin square designs. Fixed, random, and mixed models. Factorial experiments and confounding. Incomplete block designs. Response surfaces and analysis of covariance. Applications to data analysis.

### MATH 6615 Decision Theory and Bayesian Analysis

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6601

Elements of statistical decisions. Frequentist and Bayesian decision theory. Bayesian analysis: estimation, hypothesis testing, model selection, informative and non-informative priors. Approximations and Bayesian computations. Markov Chain Monte Carlo Methods. Introduction to Hierarchical Linear, Dynamic Linear, and Generalized Linear Models.

### MATH 6650 Applied Linear Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4031 or equivalent.

Finite dimensional vector spaces. Matrix algebra. Systems of linear equations. Rank. Inverses. Eigenvalues. Linear programming. Canonical forms. Applications.

# MATH 6656 Applied Algebra

Three credits. Three hours of lecture per week.

Prerequisite: MATH 4033 or equivalent.

Introduction to concepts of the theory of semigroups, groups, rings, fields, and Boolean algebras. Applications to coding theory. Symmetry groups. Polya's theory of counting. The theory of machines.

### MATH 6680 Computational Analysis

Three credits. Three hours of lecture per week.

Prerequisites: MATH 4009, MATH 4031, MATH 5201, or permission of the director of the department.

Introduction to the derivation and analysis of numerical methods. Numerical integration. Approximation of functions. Solution of equations. Eigenvalue problems. Solution of differential equations. Optimization problems.

#### MATH 6681 Data Structures I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5100 or equivalent.

Data structures from a combinatorial viewpoint. Linear, circular, and linked lists. Trees. Binary trees. Applications to computer graphics. Operations on polynomials. Dynamic storage allocation and compilers.

# **MATH 6682 Algorithms**

Three credits. Three hours of lecture per week.

Prerequisite: MATH 3034 or equivalent.

Advanced methods for designing efficient algorithms: divide and conquer, dynamic programming, greedy methods, randomized algorithms. Introduction to algorithm analysis: asymptotic notation and amortized analysis. Algorithms for graphs. Applications. Introduction to parallel algorithms. NP-completeness.

# MATH 6686 Advanced Data Analysis and Experimental Design

Three credits. Three lecture hours and two laboratory hours per week.

Prerequisite: MATH 3026

This course will introduce students to commonly used methods in the areas of Experimental Design and Statistical Data Analysis applied to disciplines such as Biology, Chemistry, Environmental sciences, Nutrition, among others. Students will use statistical programming languages to conduct data analysis following the techniques studied in the course. This course will be offered in-person, hybrid, and online modalities.A

## MATH 6690 Computational Analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6680

Approximation of functions. Numerical differentiation and integration. Numerical methods for ordinary differential equations: initial value problems and boundary value problems. Numerical methods for partial differential equations.

# **MATH 6700 Projects in Applied Mathematics**

Three credits. Three hours per week.

Prerequisite: Authorization from the director of the Department.

Introduction to research in Applied Mathematics. Emphasis on formulating and solving problems from the real world using mathematical models and interpreting those solutions in the context of the original problems.

#### **MATH 6800 Graduate Seminar**

Three credits. Three hours per week.

Research seminar at an introductory level; Students will present material under the supervision of a faculty member. The choice of topic will be determined by the interests of the participants.

## MATH 6881 Linear programming

Three credits. Three hours of lecture per week. Prerequisites: MATH 4031 and MATH 5201.

Classic examples of linear programming. Elements of convex sets. Affine and linear spaces; dimension; affine and convex hulls; linear, affine, and projective transformations. Extreme subsets of closed convex sets. Linear programming problem, the feasible solution set, and the correspondence between basic solutions and extrema. The fundamental theorem of linear programming. Two-phase simplex method. Duality, strong and weak duality theorems. Variants of the simplex method, revised simplex method, and dual simplex. Transportation problem and base triangulation. Transportation algorithm and applications of linear programming.

# MATH 6882 Optimization

Three credits. Three hours of lecture per week.

Prerequisite: MATH 5201

Non-linear optimization problems, both unconstrained and constrained. We will study the optimality conditions and the basic numerical optimization methods with their convergence analysis. Numerical methods include basic descent methods, conjugate direction methods, quasi-Newton algorithms, reduced gradient methods, gradient projection methods, penalty and barrier methods, duality, and Lagrange methods.

#### MATH 6896 Continuation of Thesis

0 credit.

Prerequisite: Completion of all credit requirements in courses and research corresponding to the master's degree.

This course will permit master's degree students who have completed all course and research credit requirements to maintain active student status while completing their thesis work.

## MATH 6990 Independent Studies

One to three credits. May be taken up to a maximum of three credits.

Research into some topics of interest through informal seminars, lectures, and independent research under the supervision of a member of the Mathematics Department.

#### MATH 6996 Thesis

One to six credits.

Prerequisite: Advisor's authorization.

Research in some topics of interest through informal seminars, lectures, and independent research under the supervision of a faculty member of the Department of Mathematics.

# MATH 8001 Graph Theory I

Three credits. Three hours of lecture per week.

Review of elementary graph theory. Trees. Matrix-tree theorem. Enumerating spanning trees of a graph. Graph decompositions. Connectivity and k-connectivity of graphs. Disjoint paths and connectivity of graphs. Menger's and Whitney's theorems. Graph assembling and disassembling of 3-connected and quasi 4-connected graphs. Various Euler problems. Hamiltonian cycles. The

k-closure of a graph. Bondy-Chvátal's theorem. Long cycles in a graph. Dirac's theorem. Factors. Maximum and perfect matchings. Tutte's and Edmonds-Gallai's theorems. Berge-Tutte duality theorem. Perfect graphs. Lovász' theorem. Edge colorings. Vizing's theorem. Independent sets and cliques. Vertex colorings. Brook's theorem. Embeddings of graphs in the plane. Kuratowski's, Whitney's, MacLane's, and Kelmans' planarity criteria. Five-colour and four-colour theorems on planar graphs. On the hamiltonicity of planar graphs.

#### **MATH 8005 Enumerative Combinatorics I**

Three credits. Three hours of lecture per week.

Review of elementary combinatorics. Outline of the main problems and approaches of enumerative combinatorics. Enumerating trees. Matrix-tree theorem. Coding of trees. Counting Euler cycles in a digraph. Counting and listing of non-isomorphic trees of different types. Generating function method in enumerative combinatorics. Enumerating graphs of different types. Pólya's counting theory of non-isomorphic objects. Enumerating non-isomorphic graphs of different types. Principle of inclusion and exclusion. Lattices, their Möbius functions, and Möbius algebras. Asymptotic results in enumerative combinatorics.

## MATH 8015 Discrete Algorithms

Three credits. Three hours of lecture per week.

Prerequisite: Graph Theory

Efficient algorithms are sought for solving problems in discrete mathematics. Different algorithms and applications to various problems are studied through special reading assignments, lecture presentations, and group discussions. Branch and bound strategy. Dynamic programming principle. Optimal paths in graphs. Optimal spanning trees in graphs. 2-coloring and odd cycles in a graph. Depth-first search in a graph and its applications. Properties of depth-first search tree. Graph decomposition algorithms. Graph assembling algorithms. Graph planarity algorithms. Euler problems. Hamiltonian problems. Some packing and covering problems for graphs. Metric problems on graphs. Set transformation algorithms. Search trees of different types. Various sorting algorithms. The main ideas of the NP-theory (the theory of problem complexity).

# MATH 8021 Algebraic Combinatorics I

Three credits. Three hours of lecture per week. Prerequisites: MATH 6202 and MATH 8001.

Linear codes. t-error correcting binary codes and finite fields. Cyclic codes. Perfect codes. Block designs. Latin squares. Pairwise balanced designs. Hadamard matrices. Difference sets. Symmetric designs. Finite geometries. Singer's theorem. Transversal designs. Group divisible designs. Steiner triple systems. Kirkman triple systems. Strongly regular graphs. Association schemes. Distance-regular graphs. Distance transitivity.

# MATH 8031 Combinatorial Optimization I

Three credits. Three hours of lecture per week. Prerequisites: MATH 6881 and MATH 8001.



Elements of linear and integer programming: branch and bound methods and their application to combinatorial optimization problems. Network flow theory and its generalizations: statistical maximal flow, feasibility theorems and combinatorial applications, minimal cost flow problems, multi-terminal maximal flows, multi-commodity flows. Matching theory and its generalizations: matchings in bipartite graphs, size, and structure of maximum matchings, bipartite graphs with perfect matchings, general graphs with perfect matchings, some graph-theoretical problems related to matchings, matchings and linear programming, matching algorithms, the f-factor problem, vertex packing and covering, some generalizations of matching problems.

# **MATH 8041 Matroid Theory I**

Three credits. Three hours of lecture per week. Prerequisites: MATH 6150 and MATH 8001.

Fundamental concepts and axioms of matroid theory. Duality in matroid and matroid operations. Vector representation of matroids. The matroid of a graph and graph planarity. Greedy algorithms on matroids. The union of matroids and its rank function. Efficient algorithms for some combinatorial optimization problems (packing, covering, intersection, etc.) on matroids with applications to a variety of combinatorial objects (e.g. graphs, matrices, algebraic dependencies, transversals).

# MATH 8051 Convex Polytopes I

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6150

The basic concepts of linear and affine geometry. Convex sets and their support properties. Supporting hyperplanes. The theorems of Radon, Helly, and Caratheodory. Convex polytopes and their faces. Polarity and duality in convex polytopes. Cell-complexes and Schlegel diagrams. Shelling the boundary complexes. The cubical complexes. The graph of a d-polytope and its properties. 3-polytopes and Steinitz' theorem. Affine and projective transformations. The fundamental theorem of projective geometry. Simplicial and simple polytopes. Euler's theorem and the Dehn-Sommerville equations. Lower bound and upper bound theorems for convex polytopes.

## MATH 8309 Complex Analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6301

Analytic continuation. Algebraic functions. Elliptic functions. Entire and meromorphic functions. Normal families. Conformal mappings.

# MATH 8465 Spectral Theory and Differential Equations

Three credits. Three hours of lecture per week. Prerequisites: MATH 6460 and MATH 8469.

Unbounded operators. Graphs and symmetric operators. Self-adjointness. Cayley transforms.

Extensions of symmetric operators. Resolutions of the identity and the spectral theorem. Stone's theorem. Introduction to distributions. Sobolev spaces. Variational methods. The Laplace operator. The heat equation.

# MATH 8469 Functional analysis II

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6460

Banach algebras. Commutative Banach algebras. Bounded operators on Hilbert space. Unbounded operators. Topological vector spaces. Duality. Compact operators. Distributions and their applications to the theory of partial differential equations.

#### MATH 8605 Simulation and the Monte Carlo Method

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6606

Random number generation. Random variate generation. Monte Carlo integration. Variance reduction techniques. Simulation of stochastic processes. Regenerative methods for simulation analysis. Simulation of queueing systems. Monte Carlo optimization. Simulation languages. Statistical evaluation of simulation results. Markov Chain Monte Carlo Methods (MCMC). Gibbs Sampler. Metropolis-Hastings Algorithm. Applications.

# MATH 8680 Iterative Solution of Systems of Nonlinear Equations

Three credits. Three hours of lecture per week.

Prerequisites: MATH 6680 and MATH 6690.

Gâteaux and Fréchet derivatives. Mean value theorems and second derivatives. Contractions. Inverse and implicit function theorems. Sard's theorem. Monotone operators. Degree theory. Properties of the degree and basic existence theorems. General iterative methods. Newton and secant methods and generalizations. Continuation methods. Predictor-corrector methods. Numerical bifurcation theory.

# MATH 8685 Parallel Algorithms-Design and Analysis

Three credits. Three hours of lecture per week.

Prerequisite: MATH 6682

Parallel architecture classifications. Parallel computational models. Network models such as arrays, trees, and hypercubes. Efficiency and scalability measures for parallel algorithms. Techniques of parallel algorithm design. Primitives for parallel algorithm design. Efficient parallel algorithms for integer and matrix computations, fast Fourier transform, sorting and graph problems. Algorithm mappings for network models. Data routing algorithms.

# **MATH 8800 Doctoral Seminar**

Three credits. Three hours per week.

Advanced seminar in research areas related to the doctoral program.

# **MATH 8899 Continuation of Doctoral Dissertation**

Credits: 0

This course will allow students in the doctoral program who have completed credit requirements in coursework and research to remain active students while completing dissertation work.

## **MATH 8980 Topics in Pure Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

# **MATH 8985 Topics in Pure Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

# **MATH 8986 Topics in Discrete Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

## **MATH 8990 Topics in Applied Mathematics**

One to three credits.

Prerequisite: Authorization from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

# **MATH 8995 Topics in Computational Mathematics**

One to three credits.

Prerequisite: Professor's authorization or from the director of the Department.

Topics will be selected based on the interest and availability of faculty and students.

#### **MATH 8999 Doctoral Dissertation**

One to three credits.

Prerequisite: Authorization from the Graduate Program Coordinator.

Study and research leading to the preparation of the doctoral dissertation.



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E-mail: kai.griebenow@upr.edu Website: http://chemistry.uprrp.edu

**DEGREE:** 

# **Master of Science in Chemistry**

#### **FACULTY:**

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**Abimael Rodríguez,** Ph.D. Johns Hopkins University, 1983, Professor. Organic, Bioorganic, and Analytical Chemistry; Marine Natural Products. <a href="mailto:abimael.rodriguez1@upr.edu">abimael.rodriguez1@upr.edu</a>

**Raúl Rodríguez,** Ph.D. University of Puerto Rico - Río Piedras, 2010, Associate Professor. Educational Chemistry in Organic Chemistry and Biochemistry; Synthesis of Fullerene Derivatives. <a href="mailto:raulr.rodriguez@upr.edu">raulr.rodriguez@upr.edu</a>

**Arthur Tinoco,** Ph.D. Yale University, 2007, Professor. Bioinorganic Chemistry. Proteomics, Anti-Cancer Research, Metal-Based Therapeutics. <a href="mailto:arthur.tinoco@upr.edu">arthur.tinoco@upr.edu</a>

**Brad R. Weiner,** Ph.D. University of California, Davis, 1986, Professor. Physical Chemistry; Environmental and Materials Chemistry; Reaction Dynamics, Photochemistry, Laser Photo Physics. <a href="mailto:brad.weiner@upr.edu">brad.weiner@upr.edu</a>

**Xianyong Wu,** Ph.D. Wuhan University, 2016, Associate Professor. Analytical Chemistry. Energy Storage, Batteries, and Electrochemistry. xianyong.wu@upr.edu

# **ADMISSION REQUIREMENTS:**

#### **General Requirements for Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# SPECIFIC REQUIREMENTS FOR THE MASTER'S PROGRAM IN CHEMISTRY:

- 1. Application for admission to the Chemistry Graduate Program at: http://solicitud.upr.edu
- 2. Transfer, readmission, or reclassification forms as necessary.
- 3. Two (2) official credit transcripts, including the degree certification.
- 4. TOEFL results (for international students).
- 5. Two (2) letters of recommendation from professors at the university where the master's or bachelor's degree was obtained.
- 6. A statement of purpose essay indicating the student's interests in pursuing graduate studies.
- 7. Attend an interview (optional, upon the request of the Admissions Committee).

# **GRADUATION REQUIREMENTS:**

1. Fulfill the general graduation requirements in effect at the Río Piedras Campus.



- 2. Courses: complete a minimum of 30 credits in graduate courses distributed as follows: 9 credits in core graduate courses, 9 credits in 8000-level electives, 2 credits in the chemistry program seminar, 4 credits in research seminar, and 6 credits in research.
- 3. Master Thesis Proposal: present a plan of your research work to your Thesis Committee, which will eventually become your thesis.
- 4. Research progress reports.
- 5. Specialized research seminar: enroll in and attend seminars from your research group each academic semester. These credits are in addition to the 30 required for the degree. You must pass a minimum of 4 credits in the course corresponding to your research area.
- 6. Graduate Research: take a minimum of 6 credits in graduate research. Based on this work, you must write and defend a master's thesis acceptable to the Chemistry Department.
- 7. Seminar: A graduate seminar on the oral presentation of the student's master's thesis must be presented to the Graduate Faculty and approved satisfactorily.
- 8. Maintain a GPA of 3.00 or higher.

# PROGRAM OF STUDIES:

Program Requirements	Credits
Core Courses	9
Elective Courses (6000 or 8000 level)	9
QUIM 6905-6906 Principles and Practices in Chemistry *It is not a requirement for the degree, but it is a requirement if you participate in the Teaching Assistantship program.	6*
QUIM 6999 Rotation	0
Master Thesis Proposal	0
QUIM 8901-8902 Graduate Seminar I and II	2
QUIM 8xxx Research Seminar in the Area of Specialization	4
QUIM 6999 Master Thesis Research (6 credits maximum)	6
QUIM 8896 Continuation of Master Thesis	0
Total Credits	30

## **COURSE DESCRIPTIONS:**

The following are the latest course descriptions recorded in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **QUIM 6905 Practices and Principles of Chemistry**

Three Credits. One hour of discussion and at least three hours of contact with graduate students per week.

Prerequisite: Limited to graduate students in the Chemistry Department.

Discussion of chemical principles with a special emphasis on their application in laboratory work and evaluation.

# **QUIM 6906 Practices and Principles of Chemistry**

Three Credits. One hour of discussion and at least three hours of contact with undergraduate students per week.

Prerequisite: Limited to graduate students in the Chemistry Department.

Discussion of chemical principles with a special emphasis on their application in laboratory work and evaluation.

# **QUIM 8901 Graduate Seminar**

One credit. One to two hours weekly.

Seminars on current and broadly interesting topics in chemistry, drawn from recent chemical literature and/or research results presented by students, faculty members, and invited scientists.

# **QUIM 8902 Graduate Seminar**

One credit. One to two hours weekly.

Seminars on current and broadly interesting topics in chemistry, drawn from recent chemical literature and/or research results presented by students, faculty members, and invited scientists.

# **QUIM 8999 Research for Doctoral Thesis**

From one to twelve credits.

The student will conduct their work under the guidance of their advisor. The dissertation presentation is a requirement to obtain credit.

#### **QUIM 8896 Continuation of Doctoral Thesis**

Credits: 0Completion of all credit requirements in courses and research corresponding to the doctoral degree.

This course allows doctoral program students who have completed credit requirements in courses and research to remain active students at the Campus while completing their thesis work.

# QUIM 6011 Inorganic Chemistry Theory I

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent.

Atomic structure and electronic configuration of elements in relation to the periodic system; theory of chemical bonding, theory of acids and bases, crystalline solid state, main group chemistry, and complex compounds.

# **QUIM 6012 Inorganic Chemistry Theory II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent and QUIM 6011.

Atomic structure and electronic configuration of elements in relation to the periodic system; theory of chemical bonding, theory of acids and bases, crystalline solid state, main group chemistry, and complex compounds.

# **QUIM 6215 Theory of Analytical Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 3025, QUIM 4042 or their equivalents.

Theoretical study of chemical equilibrium, separations, and electrochemical methods. Discussion of statistical methods in measurement and experimental work.

# **QUIM 6225 Theory of Instrumental Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 3025, and QUIM 4041 or their equivalents.

Theory of methods and techniques of instrumental analysis including discussion of visible and ultraviolet spectroscopy, infrared, atomic absorption and nuclear magnetic resonance spectroscopy, mass spectrometry, gas chromatography, high-performance liquid chromatography, potentiometry, polarography, voltammetry, surface analysis, and automated analysis.

# **QUIM 6235 Instrumental Analysis Laboratory**

Two credits. Six hours of laboratory work per week.

Prerequisite: Director's authorization and QUIM 6225.

Techniques and analytical methods. Series of experiments illustrating methods whose theoretical foundations have been discussed in QUIM 6225.

## QUIM 6411 Organic Chemistry Theory I

Three credits. Three lectures per week.

Prerequisite: QUIM 3032 or its equivalent.

Electronic theory and concept of molecular structure; configuration and conformation; important reactions and their mechanisms.

# **QUIM 6412 Organic Chemistry Theory II**

Three credits. Three lectures per week.

Prerequisite: QUIM 3032 or its equivalent and QUIM 6411.

Electronic theory and concept of molecular structure; configuration and conformation; important reactions and their mechanisms.



# QUIM 6611 Advanced Physical Chemistry I

Three credits. Three lectures per week.

Prerequisite: QUIM 4042 or its equivalent.

Laws and principles of theoretical chemistry.

# **QUIM 6611 Advanced Physical Chemistry II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent and QUIM 6611.

Laws and principles of theoretical chemistry.

# QUIM 6811 Advanced Biochemistry I

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042, department director's authorization.

Study of the chemistry and reactions of constituents of living matter and the mechanisms and regulation of major biological processes.

# **QUIM 6812 Advanced Biochemistry II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042, department director's authorization and QUIM 6811.

Study of the chemistry and reactions of constituents of living matter and the mechanisms and regulation of major biological processes.

# **QUIM 6813 Biochemistry Techniques**

Three credits. One hour of discussion and three hours of laboratory work per week.

Discussion and application of fundamental techniques in the field of biochemistry.

# **QUIM 6825 Biochemistry of Organized Systems**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4041 (QUIM 4055 recommended and authorization).

Chemical and physical properties of macromolecules and their interactions in biological systems. Kinetics and reaction mechanisms in biochemical systems. Metabolic pathways will not be discussed.

#### **QUIM 6896 Master's Thesis Continuation**

Credits: 0

Prerequisite: Completion of all credit requirements in courses and research corresponding to the master's degree. This course allows master's program students who have completed credit



requirements in courses and research to remain as active students at the Campus while completing their thesis work.

## **QUIM 6999 Research for Master Thesis**

From one to six credits.

The student will conduct their research work under the guidance of their advisor. The presentation of a thesis is a requirement to obtain credit.

# QUIM 8005 Seminar in Inorganic Chemistry I

Two credits.

Advanced seminar on recent topics in inorganic chemistry.

# **QUIM 8006 Seminar in Inorganic Chemistry II**

Two credits.

Advanced seminar on recent topics in inorganic chemistry.

# **QUIM 8015 Inorganic Physical Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6012.

Reaction mechanisms in inorganic systems, with an emphasis on coordination compounds.

#### **QUIM 8025 Ligand Field Theory**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6612 and 6012.

Theory of bonding and spectra in coordination compounds.

# **QUIM 8035 Structural Methods in Inorganic Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6011.

Discussion of structural methods in inorganic chemistry.

# QUIM 8045 Chemistry of Organometallic Compounds of Main Group Elements

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6012 and 6412.

Study of structures, synthesis, and reactions of organometallic compounds.

# **QUIM 8046 Organometallic Compounds of Transition Metals**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6011 and 6411.

Study of the structures, synthesis, and reactions of organometallic compounds of transition metals.

# **QUIM 8205 Seminar in Analytical Chemistry**

Two Credits

Advanced seminar on recent topics in analytical chemistry.

# **QUIM 8206 Seminar in Analytical Chemistry**

Two credits.

Advanced seminar on recent topics in analytical chemistry.

## **QUIM 8211 Advanced Analytical Chemistry I**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6225.

Study of the applications of chemical and instrumental methods to the analysis of chemical problems.

# **QUIM 8212 Advanced Analytical Chemistry II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6225.

Study of the applications of chemical and instrumental methods to the analysis of chemical problems.

# QUIM 8405 Seminar in Organic Chemistry I

Two credits.

Advanced seminar on current topics in organic chemistry.

## **QUIM 8406 Seminar in Organic Chemistry II**

Two credits.

Discussion of recent advances in organic chemistry. Advanced seminar on current topics in organic chemistry.

# **QUIM 8415 Physical Organic Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6412 and 6612.

Methods of thermodynamics, kinetics, and quantum chemistry are treated in detail and applied to mechanisms of organic reactions. These include linear free energy relationships, substituent effects, isotopic effects, surface energy, electronic structure of reaction intermediates, and symmetry arguments for molecular orbitals.

# **QUIM 8425 Synthetic Organic Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6411-6412.

Review of classic and modern synthetic methods and their application to organic synthesis problems. Detailed examples of substitution, addition, elimination, condensation, and rearrangement reactions will be covered. Special attention is given to homogeneous and heterogeneous catalysis and photochemical reactions.

## **QUIM 8435 Natural Products**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6412

Elucidation of structures, partial and total synthesis, and biogenesis of natural products. Specific examples include terpenes, steroids, alkaloids, carbohydrates, proteins, lipids, and pigments. Structure elucidation involves classical methods as well as modern spectroscopic methods.

# **QUIM 8445 Structural Problems in Organic Chemistry**

Three credits.

Prerequisite: QUIM 6411-6412, 6611-6612.

Elucidation of structures of organic compounds and reaction intermediates. Spectroscopic methods including ultraviolet and visible, infrared, nuclear magnetic and electronic resonance, mass spectroscopy, and diffraction methods are discussed with applications to specific examples.

# QUIM 8605 Seminar in Physical Chemistry I

Two credits.

Advanced seminar on recent topics in physical chemistry.

# QUIM 8606 Seminar in Physical Chemistry II

Two credits.

Advanced seminar on recent topics in physical chemistry.

# **QUIM 8615 Chemical Kinetics**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042, department director's authorization.

Theory and applications of kinetics of chemical reactions in gaseous and liquid phases.

# **QUIM 8625 Introduction to Molecular Spectroscopy**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6611-6612.

Molecular spectroscopy and quantum mechanics; special attention will be given to molecular structure and symmetry obtained from spectra and vibrations of rotation. Includes calculations of thermodynamic functions from spectroscopic measurements.

# **QUIM 8635 Statistical Thermodynamics**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6611-6612.

Introduction to statistical mechanics. Study of relationships between thermodynamic functions of gases, liquids, and solids and their molecular structures.

# **QUIM 8645 Quantum Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6611-6612.

Basic principles of quantum mechanics and their applications to chemical problems. Includes wave motion, matrices, structure and spectra of atomic and molecular, quantum valence theory, and the resonance phenomenon.

# **QUIM 8801 Seminar in Biochemistry I**

Two Credits. Independent courses (can be taken separately).

Advanced seminar on recent topics in biochemistry.

# **QUIM 8802 Seminar in Biochemistry II**

Two credits. Independent courses (can be taken separately).

Advanced seminar on recent topics in biochemistry.

#### **QUIM 8885 Enzymatic Catalysis**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6812.

Study of protein chemistry, with emphasis on conformation and its importance in the control of enzymatic catalysis. Includes enzymatic catalysis, inhibition, modification, and mechanisms.

# **QUIM 8900 Candidacy Exam**

Zero credit.

# **QUIM 8990 Special Topics in Inorganic Chemistry**

From one to four credits.

Discussion and advanced study of specialized topics in the area of inorganic chemistry such as the chemistry of lanthanide elements, bioinorganic, symmetry rules in inorganic reactions.

# **QUIM 8992 Special Topics in Analytical Chemistry**

From one to thirteen credits.

Discussion and advanced study of specialized topics in the area of analytical chemistry such as signal processing, interface, methods of analysis of environmental contaminants, electrode processes.

# **QUIM 8994 Special Topics in Organic Chemistry**

From one to four credits.

Discussion and advanced study of specialized topics in the area of organic chemistry such as biosynthesis of natural products, use of organomercury compounds in organic synthesis, chemiluminescence of organic compounds.

# **QUIM 8996 Special Topics in Physical Chemistry**

From one to four credits.

Discussion and advanced study of specialized topics in the area of physical chemistry such as photochemical and photophysical processes, nuclear magnetic resonance.

# **QUIM 8998 Special Topics in Biochemistry**

From one to four credits.

Discussion and advanced study of specialized topics in biochemistry such as membrane structure, protein synthesis, bioenergetics.

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**DEGREE:** 

# **Doctor of Philosophy in Chemistry**

#### **FACULTY:**

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**Kai H. Griebenow,** Ph.D. Max Planck Institute-Düsseldorf University, 1992, Professor. Biochemistry; Bioorganic Chemistry and Biophysics. kai.griebenow@upr.edu

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**Dalice Piñero,** Ph.D. University of Puerto Rico-Río Piedras, 2009, Associate Professor, Inorganic Chemistry, Bioinorganic and Biophysics; Chemistry of Materials; Synthesis of paramagnetic metal complexes and multidimensional networks for their application in Materials Science and Nanomedicine. dalice.pinero@upr.edu

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**Raul Rodriguez.** Ph.D. University of Puerto Rico - Río Piedras, 2010, Assistant Professor. Educational chemistry in organic chemistry and biochemistry; Studies of the function of mitochondria in different cell lines to evaluate possible drugs; Synthesis of fullerene derivatives and functionality as a steroid. raulr.rodriguez@upr.edu

**Arthur Tinoco,** Ph.D. Yale University, 2007, Professor. Bioinorganic Chemistry. Bioinorganic Chemistry, Proteomics, anticancer research, Metal-based therapeutics. <a href="mailto:arthur.tinoco@upr.edu">arthur.tinoco@upr.edu</a>

**Brad R. Weiner,** Ph.D. University of California, Davis, 1986, Professor. Chemical Physics; Environmental and Physical Chemistry; Materials Chemistry. Reaction dynamics of gas-phase molecules, photochemistry and photophysics of lasers, kinetics of gas-phase reactive intermediates, nonlinear photoprocesses, molecular energy transfer. brad.weiner@upr.edu

**Xianyong Wu.** Ph.D. Wuhan University, 2016, Assistant Professor. Analytical Chemistry. Energy storage, batteries and electrochemistry. xianyong.wu@upr.edu

# **ADMISSION REQUIREMENTS:**

#### **General Requirements for Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# SPECIFIC REQUIREMENTS FOR THE DOCTORAL PROGRAM IN CHEMISTRY:

- 1. Application for admission to the Chemistry Graduate Program at: http://solicitud.upr.edu
- 2. Transfer, readmission, or reclassification forms as necessary.
- 3. Two (2) official credit transcripts, including the degree certification.
- 4. TOEFL results (for international students).
- 5. Two (2) letters of recommendation from professors at the university where the master's or bachelor's degree was obtained.
- 6. A statement of purpose essay indicating the student's interests in pursuing graduate studies.
- 7. Attend an interview (optional, upon the request of the Admissions Committee).

# **GRADUATION REQUIREMENTS:**

- 1. Meet the general graduation requirements applicable at the Río Piedras Campus.
- 2. Courses: Complete a minimum of 59 credits in graduate courses, distributed as follows: 15 credits in core graduate courses, 6 credits in 8000-level electives, 2 credits in the chemistry



- program seminar, 6 credits in teaching assistantship, 12 credits in research seminar, and 18 credits in research.
- 3. Candidate Exam: Complete at the end of the first year of graduate studies.
- 4. Seminars: Present two approved graduate seminars satisfactorily to the Graduate Faculty. One of these seminars will be the oral presentation of the student's dissertation.
- 5. Dissertation Proposal: Present a plan of your research work to your Dissertation Committee, which will eventually become your dissertation.
- 6. Original Research Proposal and Oral Comprehensive Exam: Present and defend an original research proposal to your committee. This requirement also serves as an oral comprehensive exam.
- 7. Specialty Research Seminar: Enroll in and attend seminars in your research group every academic semester. These credits are in addition to the 30 required for the degree. You must pass a minimum of 12 credits in the course corresponding to your research area.
- 8. Graduate Research: Take a minimum of 18 credits in graduate research. Based on this work, you must write and defend an acceptable dissertation to the Chemistry Department.
- 9. Teaching Assistantship: Fulfill the minimum requirement of one year as a teaching assistant. You must enroll in the course QUIM 6905-6906 Principles and Practices of Chemistry and meet its requirements.
- 10. Maintain a GPA of 3.00 or higher.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Core Courses	15
Elective Courses (8000 level)	6
QUIM 6905-6906 Principles and Practices of Chemistry (Teaching Assistantship)	6
QUIM 8999 Laboratory Rotation	0
Thesis Proposal	0
QUIM 8901-8902 Graduate Seminar I and II	2
QUIM 8XXX Research Seminar in Area of Specialization	12
QUIM 8999 Doctoral Thesis Research (18 credits maximum)	18
QUIM 8896 Continuation of Doctoral Thesis	0
Total Credits	59

#### **COURSE DESCRIPTIONS:**

The following are the latest course descriptions recorded in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog

# **QUIM 6905 Practices and Principles of Chemistry**

Three Credits. One hour of discussion and at least three hours of contact with graduate students per week.

Prerequisite: Limited to graduate students in the Chemistry Department.

Discussion of chemical principles with a special emphasis on their application in laboratory work and evaluation.

# **QUIM 6906 Practices and Principles of Chemistry**

Three Credits. One hour of discussion and at least three hours of contact with undergraduate students per week.

Prerequisite: Limited to graduate students in the Chemistry Department.

Discussion of chemical principles with a special emphasis on their application in laboratory work and evaluation.

## **QUIM 8901 Graduate Seminar**

One credit. One to two hours weekly.

Seminars on current and broadly interesting topics in chemistry, drawn from recent chemical literature and/or research results presented by students, faculty members, and guest scientists.

# **QUIM 8902 Graduate Seminar**

One credit. One to two hours weekly.

Seminars on current and broadly interesting topics in chemistry, drawn from recent chemical literature and/or research results presented by students, faculty members, and guest scientists.

# **QUIM 8999 Research for Doctoral Thesis**

From one to twelve credits.

The student will conduct their work under the guidance of their advisor. The dissertation presentation is a requirement to obtain credit.

# **QUIM 8896 Continuation of Doctoral Thesis**

Credits: 0Completion of all credit requirements in courses and research corresponding to the doctoral degree.

This course allows doctoral program students who have completed credit requirements in courses and research to remain as active students at the Campus while completing their thesis work.

# **QUIM 6011 Inorganic Chemistry Theory I**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent.

Atomic structure and electronic configuration of elements in relation to the periodic system; theory of chemical bonding, theory of acids and bases, crystalline solid state, main group chemistry and complex compounds.

# **QUIM 6012 Inorganic Chemistry Theory II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent and QUIM 6011.

Atomic structure and electronic configuration of elements in relation to the periodic system; theory of chemical bonding, theory of acids and bases, crystalline solid state, main group chemistry, and complex compounds.

# **QUIM 6215 Theory of Analytical Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 3025, QUIM 4042 or their equivalents.

Theoretical study of chemical equilibrium, separations, and electrochemical methods. Discussion of statistical methods in measurement and experimental work.

## **QUIM 6225 Theory of Instrumental Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 3025 and QUIM 4041 or their equivalents.

Theory of methods and techniques of instrumental analysis including discussion of visible and ultraviolet spectroscopy, infrared, atomic absorption and nuclear magnetic resonance spectroscopy, mass spectrometry, gas chromatography, high-performance liquid chromatography, potentiometry, polarography, voltammetry, surface analysis, and automated analysis.

# **QUIM 6235 Instrumental Analysis Laboratory**

Two credits. Six hours of laboratory work per week.

Prerequisite: Director's authorization and QUIM 6225.

Techniques and analytical methods. Series of experiments illustrating methods whose theoretical foundations have been discussed in QUIM 6225.

# **QUIM 6411 Organic Chemistry Theory I**

Three credits. Three lectures per week.

Prerequisite: QUIM 3032 or its equivalent.

Electronic theory and concept of molecular structure; configuration and conformation; important reactions and their mechanisms.

# **QUIM 6412 Organic Chemistry Theory II**

Three credits. Three lectures per week.

Prerequisite: QUIM 3032 or its equivalent and QUIM 6411.

Electronic theory and concept of molecular structure; configuration and conformation; important reactions and their mechanisms.

#### **QUIM 6611 Advanced Physical Chemistry I**



Three credits. Three lectures per week. Prerequisite: QUIM 4042 or its equivalent.

Laws and principles of theoretical chemistry.

# **QUIM 6611 Advanced Physical Chemistry II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042 or its equivalent and QUIM 6611.

Laws and principles of theoretical chemistry.

# QUIM 6811 Advanced Biochemistry I

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042, department director's authorization.

Study of the chemistry and reactions of constituents of living matter and the mechanisms and regulation of major biological processes.

# **QUIM 6812 Advanced Biochemistry II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042, department director's authorization, and QUIM 6811.

Study of the chemistry and reactions of constituents of living matter and the mechanisms and regulation of major biological processes.

#### **QUIM 6813 Biochemistry Techniques**

Three credits. One hour of discussion and three hours of laboratory work per week.

Discussion and application of fundamental techniques in the field of biochemistry.

# **QUIM 6825 Biochemistry of Organized Systems**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4041 (QUIM 4055 recommended and authorized).

Chemical and physical properties of macromolecules and their interactions in biological systems. Kinetics and reaction mechanisms in biochemical systems. Metabolic pathways will not be discussed.

#### **QUIM 6896 Master's Thesis Continuation**

Credits: 0

Prerequisite: Completion of all credit requirements in courses and research corresponding to the master's degree.



This course allows master's program students who have completed credit requirements in courses and research to remain as active students at the Campus while completing their thesis work.

## **QUIM 6999 Research for Master Thesis**

From one to six credits.

The student will conduct their research work under the guidance of their advisor. The presentation of a thesis is a requirement to obtain credit.

# QUIM 8005 Seminar in Inorganic Chemistry I

Two credits.

Advanced seminar on recent topics in inorganic chemistry.

# **QUIM 8006 Seminar in Inorganic Chemistry II**

Two credits.

Advanced seminar on recent topics in inorganic chemistry.

# **QUIM 8015 Inorganic Physical Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6012.

Reaction mechanisms in inorganic systems, with an emphasis on coordination compounds.

#### **QUIM 8025 Ligand Field Theory**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6612 and 6012.

Theory of bonding and spectra in coordination compounds.

# **QUIM 8035 Structural Methods in Inorganic Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6011.

Discussion of structural methods in inorganic chemistry.

# QUIM 8045 Chemistry of Organometallic Compounds of Main Group Elements

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6012 and 6412.

Study of structures, synthesis, and reactions of organometallic compounds.

# **QUIM 8046 Organometallic Compounds of Transition Metals**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6011 and 6411.

Study of the structures, synthesis, and reactions of organometallic compounds of transition metals.

# **QUIM 8205 Seminar in Analytical Chemistry**

Two Credits

Advanced seminar on recent topics in analytical chemistry.

# **QUIM 8206 Seminar in Analytical Chemistry**

Two credits.

Advanced seminar on recent topics in analytical chemistry.

# QUIM 8211 Advanced Analytical Chemistry I

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6225.

Study of the applications of chemical and instrumental methods to the analysis of chemical problems.

# **QUIM 8212 Advanced Analytical Chemistry II**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6225.

Study of the applications of chemical and instrumental methods to the analysis of chemical problems.

#### **QUIM 8405 Seminar in Organic Chemistry I**

Two credits.

Advanced seminar on current topics in organic chemistry.

# **QUIM 8406 Seminar in Organic Chemistry II**

Two credits.

Discussion of recent advances in organic chemistry. Advanced seminar on current topics in organic chemistry.

# **QUIM 8415 Physical Organic Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6412 and 6612.

Methods of thermodynamics, kinetics, and quantum chemistry are treated in detail and applied to mechanisms of organic reactions. These include linear free energy relationships, substituent effects, isotopic effects, surface energy, electronic structure of reaction intermediates, and symmetry arguments for molecular orbitals.

# **QUIM 8425 Synthetic Organic Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6411-6412.

Review of classic and modern synthetic methods and their application to organic synthesis problems. Detailed examples of substitution, addition, elimination, condensation, and rearrangement reactions will be covered. Special attention is given to homogeneous and heterogeneous catalysis and photochemical reactions.

## **QUIM 8435 Natural Products**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6412.

Elucidation of structures, partial and total synthesis, and biogenesis of natural products. Specific examples include terpenes, steroids, alkaloids, carbohydrates, proteins, lipids, and pigments. Structure elucidation involves classical methods as well as modern spectroscopic methods.

# **QUIM 8445 Structural Problems in Organic Chemistry**

Three credits.

Prerequisite: QUIM 6411-6412, 6611-6612.

Elucidation of structures of organic compounds and reaction intermediates. Spectroscopic methods including ultraviolet and visible, infrared, nuclear magnetic and electronic resonance, mass spectroscopy, and diffraction methods are discussed with applications to specific examples.

# QUIM 8605 Seminar in Physical Chemistry I

Two credits.

Advanced seminar on recent topics in physical chemistry.

# QUIM 8606 Seminar in Physical Chemistry II

Two credits.

Advanced seminar on recent topics in physical chemistry.

## **QUIM 8615 Chemical Kinetics**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 4042, department director's authorization.

Theory and applications of kinetics of chemical reactions in gaseous and liquid phases.

# **QUIM 8625 Introduction to Molecular Spectroscopy**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6611-6612.

Molecular spectroscopy and quantum mechanics; special attention will be given to molecular structure and symmetry obtained from spectra and vibrations of rotation. Includes calculations of thermodynamic functions from spectroscopic measurements.

# **QUIM 8635 Statistical Thermodynamics**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6611-6612.

Introduction to statistical mechanics. Study of relationships between thermodynamic functions of gases, liquids and solids and their molecular structures.

## **QUIM 8645 Quantum Chemistry**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6611-6612.

Basic principles of quantum mechanics and their applications to chemical problems. Includes wave motion, matrices, structure and spectra of atomic and molecular, quantum valence theory, and the resonance phenomenon.

# QUIM 8801 Seminar in Biochemistry I

Two Credits. Independent courses (can be taken separately).

Advanced seminar on recent topics in biochemistry.

#### **QUIM 8802 Seminar in Biochemistry II**

Two credits. Independent courses (can be taken separately).

Advanced seminar on recent topics in biochemistry.

#### **QUIM 8885 Enzymatic Catalysis**

Three credits. Three hours of lecture per week.

Prerequisite: QUIM 6812.

Study of protein chemistry, with emphasis on conformation and its importance in the control of enzymatic catalysis. Includes enzymatic catalysis, inhibition, modification, and mechanisms.

#### **QUIM 8900 Candidacy Exam**

Zero credit.

# **QUIM 8990 Special Topics in Inorganic Chemistry**

From one to four credits.

Discussion and advanced study of specialized topics in the area of inorganic chemistry such as the chemistry of lanthanide elements, bioinorganic, symmetry rules in inorganic reactions.

# **QUIM 8992 Special Topics in Analytical Chemistry**

From one to thirteen credits.

Discussion and advanced study of specialized topics in the area of analytical chemistry such as signal processing, interface, methods of analysis of environmental contaminants, electrode processes.

# **QUIM 8994 Special Topics in Organic Chemistry**

From one to four credits.

Discussion and advanced study of specialized topics in the area of organic chemistry such as biosynthesis of natural products, use of organomercury compounds in organic synthesis, chemiluminescence of organic compounds.



Mailing Address: 17 University Ave., STE 1701, San Juan, Puerto Rico 00925-2537

**Phone**: 787-764-0000 ext. 88581

**Email:** 

Director, Nutrition and Dietetics Program Brenda Toro Enríquez, Ph.D., LND

brenda.toro1@upr.edu

Coordinator, Graduate Program Nivia A. Fernández Hernández, Ed.D., RDN, LND, CFCS nivia.fernandez1@upr.edu

Website: https://natsci.uprrp.edu/nutricion/prospective-msnd-students/

#### **DEGREE:**

Master of Science in Nutrition and Dietetics with a Supervised Experiential Learning

**OFFERING MODALITY:** Distance Program

#### **ACCREDITATION:**

The Accreditation Council for Education in Nutrition and Dietetics (ACEND®) is the Academy of Nutrition and Dietetics' (AND) accrediting agency for education programs preparing students for careers as registered dietitian nutritionists.

# **FACULTY:**

Colón Morales, Edgardo, Ph. D., Catedático Auxiliar (Contrato)

Correa Matos, Nancy Ph.D., RDN, Associate Professor

Fernández Hernández, Nivia A., Ed.D., RDN, LND, CFCS, Full Professor

Mir Franqui, Celia, Ed.D., RDN, LND, Full Professor

Pérez Hernández, María Eglee, Ph.D., Full Professor

Pérez Velázquez, Carmen M., DrPH, RDN, LND, Assistant Professor (Contract)

Pinto López, Elsa, Ph.D., RDN, LND, Full Professor

Rivera Sánchez, Sasha M., Ph.D., Assistant Professor

Toro Enríquez, Brenda, Ph.D., LND, Full Professor

# **ADMISSION REQUIREMENTS:**

# UPR Río Piedras Campus general admission criteria for graduate programs.

- 1. Bachelor's degree (or its equivalent) from an accredited or recognized university or college.
- 2. General Grade Point Average (GPA) equal or greater than 3.00 on a scale of 4.00. Each program will address exceptional cases according to each applicant's merits.
- 3. Be able to communicate orally and in writing in two languages, one of which should be Spanish or English.

# Specific Admission criteria for the MSND-SEL program

Admission criteria for students with an undergraduate degree in nutrition and dietetics, a degree in science-related fields and a degree in a field not related to science are detailed below.

## **Students with a bachelor's degree in Nutrition and Dietetics:**

- 1. Bachelor's degree in Nutrition and Dietetics from an authorized and accredited higher education institution in the US.
  - a. If the degree is ACEND-accredited, a Verification Statement must be presented; if foreign and accredited, the Foreign Dietitian Education (FDE) Verification Statement.
  - b. Non accredited foreign degrees must be evaluated by an approved Foreign Degree Evaluation Agency. International Students Foreign Degree Evaluation Agencies.
- 2. Minimum 3.00 Grade Point Average on a 4.00 point scale.
- 3. Minimum 3.00 Grade Point Average in science and math courses on a 4.00 point scale
- 4. Three letters of recommendation, two from university professors.
- 5. Short essay (500 words) indicating how pursuing graduate studies will contribute to your development.
- 6. Spanish and English proficiency
- 7. Students whose English is a second language must obtain a minimum score in TOEFL exam of 550 (paper-based) or 213 (computer-based). Exam must have been taken no more than five years prior.

# Students with a bachelor's degree in other science-related fields:

<u>In addition</u> to the requirements for a student with a bachelor's degree in Nutrition and Dietetics, students in this pathway must have approved with C or more the following undergraduate courses or their equivalent:

Code	Course title
BIOL 3101-3102	General Biology I-II
BIOL 3705	Microbiology



Code	Course title
QUIM 3001-3002	General Chemistry I-II
QUIM 3015	Organic Chemistry
NUTR 4031	Food Science
NUTR 4041	Human Nutrition I
NUTR 4042	Human Nutrition II
NUTR 4045	Applied Human Nutrition ()
NUTR 4055	Food Purchasing
NUTR 4068	Layout, Design and Equipment Purchasing for Foodservices Systems
NUTR 4086	Menu for Foodservice Systems
NUTR 4169	Applied Dietetics

# Students with a bachelor's degree in fields not related to science:

<u>In addition</u> to the requirements for a student with a bachelor's degree in other science related fields, students in this pathway must have approved with C or more the following undergraduate courses or their equivalent:

Code	Course title
MATE 3171-3172	Pre-calculus I-II
NUTR 4158	Human Biochemistry
NUTR 4159	Human Biochemistry Lab.

# **Language Proficiencies**

It is a requirement for admission that all applicants be proficient in both, Spanish and English.

# DOCUMENTS REQUIRED FOR ADMISSION APPLICATION:

- 1. Application for Admission to Graduate Studies, electronic format.
- 2. Three letters of recommendation, two from university professors.
- 3. Three official transcripts with conferred degrees. Initially, students may submit a copy to open the application file.
- 4. One personal statement (500 words) of how pursing graduate studies will contribute to your professional development.
- 5. Official results of the TOEFL exam, taken no more than five years prior to application date.

# **GRADUATION REQUIREMENTS:**



At the UPR Río Piedras Campus, to qualify as a degree candidate, students must comply with the following requirements:

- 1. Satisfactory completion of program's coursework with minimum Grade Point Average (GPA) of 3.00 in a 4.00 scale.
- 2. Complete graduation requirements within the length of time established by the University.
- 3. Not debts with the institution.
- 4. Official submission of the Graduation Request to the Registrar's Office during the semester in which the student is expected to complete program's requirements and, in any case, later than the stipulated date established in the Academic Calendar for the specific semester. These requests become official once graduation fee is paid, which is non-reimbursable.
- 5. Degree recommendation by the College-specific program and the institutional administration.

Students who complete the 45 credits with a minimum grade point average of 3.0 or more and complete a minimum of 1,000 hours of supervised experiential learning will be recommended to the Office of the Registrar to be granted the degree. After the degree is conferred by the University of Puerto Rico, Rio Piedras Campus, the Verification Statement will be provided to program graduates by the MSND-SEL Program director, which verifies completion of requirements necessary to sit for the Commission on Dietetic Registration (CDR) credentialing exam.

# **PROGRAM OF STUDY:**

Curricular Con	mponents	
<b>Core Courses</b>		
Course code	Course Title	Credits
MATH 6686	Advanced Data Analysis and Experimental Design	3
NUTR 6002	Research Methods in Nutrition and Dietetics	3
NUTR 6003	Nutrient Metabolism	3
NUTR 6004	Ethics and Professionalism	1
	Subtotal	10
	Specialty Courses	
Course code	Course Title	Credits
NUTR 6010	Medical Nutrition Therapy and Pathophysiology	3
NUTR 6011	Pathophysiology of Life Span	3
NUTR 6012	Nutrition Education and Counseling	3
NUTR 6013	Nutrition Assessment Diagnosis	3

Curricular Co	mponents		
NUTR 6111	Global Nutrition		3
NUTR 6112 Foodservice Management		3	
NUTR 6113	6113 Advanced Concepts in Nutrition		3
		Subtotal	21
Research Proj	ect		
Course code	Course Title		Credits
NUTR 6110	Research Project		3
NUTR 6110	Research Project (Continuation)		0
		Subtotal	3
Supervised Ex	periential Learning (SEL)		
Course code	Course Title	Contact hours (Each semester)	Credits
Course code NUTR 6014	Clinical Nutrition Supervised Experiential		Credits 3
	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised	(Each semester)	
NUTR 6014	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised Experiential Learning Foodservice Management Supervised	(Each semester) 270	3
NUTR 6014 NUTR 6115	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised Experiential Learning	(Each semester) 270 180	3
NUTR 6014 NUTR 6115	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised Experiential Learning Foodservice Management Supervised	(Each semester) 270 180 270	3 2 3
NUTR 6014 NUTR 6115 NUTR 6116	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised Experiential Learning Foodservice Management Supervised	(Each semester) 270 180 270	3 2 3
NUTR 6014  NUTR 6115  NUTR 6116  Electives	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised Experiential Learning Foodservice Management Supervised Experiential Learning	(Each semester) 270 180 270	3 2 3 8
NUTR 6014  NUTR 6115  NUTR 6116  Electives  Course code	Clinical Nutrition Supervised Experiential Learning Community Nutrition Supervised Experiential Learning Foodservice Management Supervised Experiential Learning  Course Title	(Each semester) 270 180 270	3 2 3 8 Credits

# **COURSES DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# MATH 6686 Advanced Data Analysis and Experimental Design Three credits.

This course will introduce the student to commonly used methods in Experimental Design and 356 | GRADUATE CATALOG



Statistical Data Analysis, with applications in Biology, Chemistry, Environmental Sciences, Nutrition, etc. The student will use statistical programming languages for performing the analysis of data sets using the techniques studied in the course. This course may be offered face-to-face, hybrid and online modalities.

#### **NUTR 6002** Research Methods in Nutrition and Dietetics

Three credits

Discussion of study design, research concepts, and terminology associated with nutrition research. Emphasis is given to the interpretation of research and a thorough understanding of the role of research in nutrition and dietetics practice. Discussion of the validity and reliability of instruments and the use of biomarkers. Students are expected to develop a research proposal to serve as part of their research project requirement. This course may be offered in face-to-face, hybrid, and online modalities. Courses can be offered in Spanish or English.

# **NUTR 6003: Nutrient Metabolism**

Three credits

The course focuses on the biochemical function and metabolism of macronutrients, micronutrients and bioactive components in foods in different tissues and organs and its impact in health and disease states. Recent research in nutrient deficiency and excess and its implications in prevention and treatment of different health and disease states will be reviewed. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# **NUTR 6004: Ethics and Professionalism**

One credit

This course discusses the various components of professionalism in Nutrition and Dietetics with special emphasis on practice according to ethical and legal frameworks. Includes the discussion of personal attributes that comprise professionalism such as effective communication, interpersonal relations, commitment to lifelong learning and cultural competence. Analysis of the Standards of Practice in various practice settings and of the Scope of Practice for the nutrition and dietetics professional. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# NUTR 6010: Medical Nutrition Therapy and Pathophysiology

Three credits

The course focuses on the integration of the theories and principles of medical nutrition therapy into clinical practice. Case studies will be used to integrate and apply knowledge of nutrition, dietetics, metabolism, and physiology, with the goal of preparing students who can effectively plan and manage the nutritional care of a variety of patients using a critical thinking approach to evidence-based medical nutrition therapy. This course can be offered in face-to-face, hybrid, and online modalities. Courses can be offered in Spanish or English.

# **NUTR 6011: Pathophysiology of Life Span**

Three credits

The course discusses the life stages of infancy, childhood, adolescence, pregnancy, and older adulthood from physiological, environmental, and behavioral perspectives. Focuses on the nutritional needs of each life stage to promote overall health and wellbeing of these populations. Nutritional care in the prevention and treatment of different nutrition-related conditions across the lifespan will be discussed. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# **NUTR 6012: Nutrition Education and Counseling**

Three credits

This course discusses evidence-based communication strategies, following the principles of cultural sensitivity, used for group and individual practice settings. Includes hands-on practice activities to develop interviewing skills and application of education and behavior change theories in educational interventions and written materials. Emphasis on how to present complex information to diverse groups, to identify barriers to learning and adjustments of educational interventions. Methods to evaluate effectiveness of counseling and education interventions are discussed. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# **NUTR: 6013 Nutrition Assessment Diagnosis**

Three credits

The course focuses on the analysis of advanced skills and methods of nutritional assessment for individuals and in the community. Measurement and interpretation of nutrition-focused physical examination, medication interactions and laboratory parameters will be assessed. Diagnosing malnutrition and nutrient deficiencies, including clinical characteristics used to identify and determine the degree of malnutrition will be discussed. This course may be offered face-to-face, hybrid and online. Courses can be offered in Spanish or English.

## **NUTR 6110: Research Project**

Three credits

The course focuses on designing and carrying out a research project, presentation of the results and its application in the practice of nutrition and dietetics. Opportunities for students will be provided to gain experience conducting research in nutrition and dietetics. Students will develop and carry out a research project that will be disseminated in an oral presentation. Research experience will be under the supervision of a faculty member. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English. Constitutes a full-time

academic load for the student.

#### **NUTR 6111: Global Nutrition**

Three credits

Fundamentals of health promotion and disease prevention using food and nutrition for individuals and communities, with emphasis on global food systems, international populations, their cultures, and geopolitical contexts. Concepts and methods for community-based screening and research programs as evidence for developing, implementing, and evaluating public health nutrition policy through skill-building and participatory activities, as well as developing critical thinking through the evaluation of community nutrition case studies in different contexts around the globe. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# **NUTR 6112: Foodservice Management**

Three credits

Discussion of the processes of each of the subsystems in a foodservice. Emphasis on transforming resources into food quality and quantity, customer and employee satisfaction, and financial accountability. Discussion of management principles to achieve projects goals and objectives in an effective and efficient way. The course focuses on the competencies of the professional in nutrition and dietetics working in the institutional or commercial foodservice sector. Through emphasis on teamwork, case studies, and projects, students will demonstrate their competency in applying dietetic skills in a foodservice system. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# **NUTR 6113: Advanced Concepts in Nutrition**

Three credits

Discussion of contemporary issues in food and nutrition. Critical analysis of scientific literature and the impact each topic may have on the population. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English.

# **NUTR 6014: Clinical Nutrition Supervised Experiential Learning**

Three credits

This course will provide 270 hours of supervised experiential learning experiences in clinical of institutionalized patients and outpatient clinics. The purpose of the course is to provide the student with the opportunity to apply knowledge and skills in the clinical area in a real scenario. Learning experiences are offered off campus under the supervision of a preceptor or licensed nutritionist and dietitian. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English. Constitutes a full-time academic load for the student.

# **NUTR 6115: Community Nutrition Supervised Experiential Learning** Two credits

This course will provide 180 hours of supervised experiential learning experiences in the facilities that serve the community. The purpose of the course is to provide the student with the opportunity to apply knowledge and skills in the community area in a real scenario. Learning experiences are offered in practice sites off campus under the supervision of preceptors or licensed Nutritionists and Dietitians. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English. Constitutes a full-time academic load for the student.

# **NUTR 6116: Foodservice Management Supervised Experiential Learning**Three credits

This course will provide 270 hours of supervised experiential learning experiences in foodservice management. The purpose of the learning activities and assignments is to provide the student with the opportunity to apply knowledge and skills in food service management in a health care setting. Experiences are offered in practice sites that may be off campus, under the supervision of preceptors or a licensed Nutritionist and Dietitian. This course may be offered face-to-face, hybrid, and online. Courses can be offered in Spanish or English. Constitutes a full-time academic load for the student.

# **College of Social Sciences**



**Mailing Address**: 9 University Ave., STE 901 San Juan PR 00925-2529 **Physical Address**: Edificio Carmen Rivera Alvarado (CRA) Tercer Piso

**Phone extensions**: (787) 764-0000, extensions 87428, 87431

Email: admi.public@upr.edu

Website: http://sociales.uprrp.edu/egap/

#### **DEGREE:**

Master of Public Administration in Human Resources Management and Labor Relations

#### **ACCREDITATIONS:**

Network of Schools of Public Policy, Affairs and Administration (NASPAA), 2010-2024

#### **Academic Affiliations:**

Inter-American Network for Education in Public Administration (INPAE) Latin American Center for Development Administration (CLAD). Midwest Political Science Association (MPSA) American Society for Public Administration (ASPA) International Society for Third-Sector Research (ISTR)

#### **FACULTY:**

**Luz Mairym López Rodríguez,** Ph.D., Walden University, 2010, Associate Professor. Evaluation of public policies; program evaluation; non-profit organizations; applied research; Design of distance courses.

**Liz Johanna Ortiz Laureano,** Ph.D., University of Costa Rica, Rodrigo Facio Campus, 2020. Assistant Professor. Government and public policy; social policies; health systems assessment; human rights and social justice; community work; Methodology for the systematization of experiences.

**Víctor Rivera Hernández,** J.D., Interamerican University of Puerto Rico, 1994, Master's Degree in Current and Comparative Spanish Law, Complutense University of Madrid, 2022 and Master's Degree in Public Administration, University of Puerto Rico, Río Piedras Campus, 1993. Assistant Professor. Government law; labor law; collective bargaining; public service ethics; supervision and leadership.

**Deliz Rodríguez Carrasquillo,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2018. Assistant Professor. Human resources; classification and remuneration; performance management; evaluation and training; gender and employment; Workburn Syndrome.

**Urayoán Jordán Salivia**, Ph.D., University of Baltimore, 2020. Assistant Professor. Strategic alliances, citizen participation, empowerment of groups and citizens, co-production, non-profit organizations (especially cooperatives) and education.

### **ADMISSION REQUIREMENTS:**

### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific master's Program Requirements**

- 1. Bachelor's degree from a recognized university or its equivalent.
- 2. Spanish and English Proficiency.
- 3. Overall academic index of 3.00 on a scale of 4.00.

### **Required Documents for the Application for Admission**

- 1. Application for Admission to Graduate Studies in electronic format through the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a> platform.
- 2. Payment for the application fee.
- 3. Two official academic transcripts.
- 4. Essay of 500 to 600 words, about your interest in Public Administration related to one of the following values promoted by the school: ethics, diversity, equity, transparency and merit.
- 5. Curriculum vitae or resume (maximum of 2 pages). It must include, at a minimum, academic history, professional experience and others (internships, volunteer work, memberships in professional organizations).
- 6. Example of a written assignment done in a university course.
- 7. Two letters of recommendation (one of them from a professor).
- 8. Graduate School Admission Test Results (GRE). You are waived if you meet one of these:
  - a. 5 years of work experience (administrative/managerial) in government, NPO or private sector.
  - b. Minimum GPA of 3.5 in the bachelor's degree
  - c. Master's, Ph.D., or J.D., with a minimum GPA of 3.0, from an accredited program. International students must provide evidence of accreditation of their programs.
- 9. Interview (if necessary). To be determined by the Admissions Committee.
- 10. Those students who do not have the B.A./B.S. when applying, if admitted, must file the official academic transcripts with a degree.

Note: An internship or supervised internship (3 additional credits) will be required for applicants who do not have at least one year of administrative/managerial work experience. This requirement will be included in the admission letter and further guidance will be offered in academic advising.

### **GRADUATION REQUIREMENTS:**

Meet the general graduation requirements established by the Río Piedras Campus and the program's specific requirements:

- 1. Pass 13 credits of core courses, 15 credits of specialty, 6 credits of free electives.
- 2. All courses must be passed with a grade of C or higher.
- 3. Approve the Research Seminar.
- 4. Complete 37 credits.

### **CURRICULUM: Specialization in Human Resources Management and Labor Relations**

This specialty contains two thematic orientations: (1) Human Resource Management and (2) Labor Relations in the Public Service. The former is aimed at training specialists, consultants and professionals in the administration of human resources systems, while the latter trains specialists, consultants and professionals in labor relations, collective bargaining and administration of collective agreements for the public sector.

#### **PROGRAM OF STUDY:**

	Core Courses	Credits
ADPU 6005	Government and Administration Public	3
ADPU 6006	Research Methods in Public Administration	3
ADPU 6008	Ethics, Law and Public Administration	3
ADPU 6009	Budget in the Public Administration	3
ADPU 6895	Professional Development Practicum in Public Administration	1
	Subtotal	13
	Specialty Courses	Credits
ADPU 6015	Human Resources Management and Labor Relations	3
ADPU 6020	Research Seminar on Human Resources and Labor Relations	3
ADPU 6025	Recruitment and Selection of Public Personnel	3
ADPU 6267	Labor Relations in the Public Sector	3
ADPU 6703	Evaluation, Training & Development	3
	Subtotal	15
	Electives directed in the specialty or Free electives (Two courses among the following - 6 credits)	Credits
ADPU 6019	Settlement Administration and Arbitration of Complaints and Torts	3
ADPU 6266	Labor Legislation in the Public Sector	3
ADPU 6701	Work Analysis and Remuneration	3
ADPU 6706	Conflict Management and Resolution	3
ADPU 6705	Human Resources and Government Transformation	3
	Subtotal	6
	Other Required Course	Credits
ADPU 6896	Research Seminar	3

Subtotal	3
Total	37

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **ADPU 6005 Government and Public Administration**

Three credits. Three hours of lecture a week.

Analysis of the development of the discipline of Public Administration and the redefinition of the field of study. The categories used in interdisciplinary analysis and the nature of the concepts that serve to propel the synthesis of knowledge. The use of ideal models and types. Systems analysis and modern organization theory. The study of theories of public policy in their relationship with public administration. Special attention is given to the issues of ethics, diversity, accountability, and merit in public service as core values of the program. Face-to-face and hybrid modality.

#### **ADPU 6006 Research Methods in Public Administration**

Three credits. Three hours of lecture a week.

Social research techniques and designs applied to the analysis, organization and evaluation of data specific to public administration. The emphasis of the course will be to promote ethics in research through qualitative and quantitative methodological designs appropriate to the objectives set. Special attention will be given to the discussion of methodological tools for decision-making on programs and policies.

#### ADPU 6008 Ethics, Law and Public Administration

Three credits. Three hours of lecture a week.

Public interest, ethics, and public values on which laws and public policies are based in a democracy. Legal principles that govern and control bureaucratic authorities in Puerto Rico and the United States, including basic political and constitutional theories, techniques and procedures used by administrative and judicial bodies, the relations of administrative bodies to each other with legislative chambers, and judicial review of administrative acts. It discusses the work of investigation, supervision, prosecution, deposition, counselling and informal adjudication, as well as: the regulation and adjudication process, the right to be heard, and review methods and procedures within the administrative framework. It also studies the legislation and jurisprudence around government ethics.

### **ADPU 6009 Budget in Public Administration**

Three credits. Three hours of lecture a week.

The course analyzes the economic, theoretical, and legal aspects of public sector budgeting. Financial aspects of efficiency in the allocation of resources are discussed. It examines the



government's budget process at the state, federal, and municipal levels and the organization of the document. The budget of the Commonwealth of Puerto Rico is also discussed.

### **ADPU 6895 Professional Development Practicum in Public Administration**

One credit. One hour of lecture per week.

Core course. It is a preparatory course for students during their first year of master's degree. Students acquire a series of skills that are essential for their successful performance as a graduate student and as a public administrator. Short workshops are included in the use of technological tools with application to research and administration. It also exposes the student to the ethical aspects of research, the correct use of reference sources, and professional written expression.

### **ADPU 6015 Human Resource Management and Labor Relations**

Three credits. Three hours of lecture a week.

Required course in the specialty of human resource management and labor relations. Study of the fundamentals of human resources management in the public service; merit systems, their methods and techniques. Discussion and analysis of public service reform trends in Puerto Rico and other democratic governments during the last decade. Study of the development of human resources management in the Public Service of Puerto Rico and its coexistence with collective bargaining systems and processes.

#### ADPU 6020 Research Seminar on Human Resources and Labor Relations

Three credits. Three hours of seminar per week.

Requirement of the specialty of human resources administration and labor relations aimed at the development of research on contemporary issues and controversies of the public service. The course offers the opportunity to delve into current issues related to ethics and corruption; productivity, work environment, merit, job security, and acquired rights, among others.

#### ADPU 6025 Recruitment and Selection of Public Personnel

Three credits. Three hours of lecture a week.

Concepts of the closed race and the open race, and their implications for the social philosophy of a government. Study and analysis of the forms of recruitment and their effectiveness; determination of minimum requirements as a means of continuing income and raising the overall level of public service; exams and their administration, certifications; strict ranking vs. full certification; notification to those eligible and review and appeal processes. Study of regulated professions, the concept of guarantee of minimum knowledge vs. competence.

#### **ADPU 6267 Labor Relations in the Public Sector**

Three credits. Three hours of lecture a week.

Historical development of labor relations in the public service in Puerto Rico, the United States, and Latin America. Legal basis and doctrine on the right to form and join a trade union. Fundamentals of the collective bargaining process: the parties, the rules, the policy, the strategies

and the fiscal aspects. Problems of sovereignty, representation, interpretation and resolution of complaints and grievances.

### ADPU 6703 Evaluation, Training and Development

Three credits. Three hours of lecture a week.

The course introduces the concepts, theories and methods related to the individual performance of the employee with special attention to public organizations. The relationship between performance appraisal, training, and development with employee productivity, motivation, and job satisfaction is discussed.

# ADPU 6019 Settlement Administration and Arbitration of Complaints and Grievances

Three credits. Three hours of lecture a week.

Legal doctrines governing the administration of collective agreements, arbitration processes, and grievance and grievance mechanisms in the context of public service. Special attention is given to the administration of collective agreements by supervisors and labor relations personnel. It also discusses the arbitration practices used in Puerto Rico to settle disputes; and the procedural and legal aspects of administering grievance and grievance processes.

### ADPU 6266 Labor Legislation in the Public Sector

Three credits. Three hours of lecture a week.

Historical background. Nature and basis of the employer's liability; the protection of workers in various societies. Social and economic problems faced by workers in Puerto Rico. Philosophy and policy on state and federal labor protection legislation: daily and weekly working hours, minimum wages, Christmas bonuses, vacations, sick leave, holidays, development and feeding periods, protection of working mothers against unjustified dismissals, against illegal discrimination, prevention of occupational accidents and diseases. Workers' insurance for unemployment, work accidents, non-occupational disability, old age and permanent disability and driver insurance. Employment Service; Protection of migrants.

### ADPU 6701 Analysis of Work and Remuneration

Three credits. Three hours of lecture a week.

Study of the organization of work in the public service based on organizational design and its job structure. The provisions of job classification and remuneration contained in the law for the administration of human resources in the public service are studied, as well as the remuneration principles of equal pay for equal work, salary or ethics, minimum wage and pay equity.

### **ADPU 6706 Conflict Management and Resolution**

Three credits. Three hours of lecture a week.

The course presents the theoretical and practical aspects of labor conflict and the methods and techniques for its management and resolution. The course is designed from the employer's perspective of public administration and based on ethics and the public interest.

#### ADPU 6705 Human Resources and Government Transformation

Three credits. Two hours of lecture and one hour of discussion per week.

Theories of development and organizational change are discussed, and the concepts are applied to government scenarios. The student acquires a greater understanding of the elements that affect the adoption of innovation, change, and transformation and learns some techniques that can be applied to promote innovation and change.

#### **ADPU 6896 Research Seminar**

Three credits. Three hours of seminar per week. Prerequisites: ADPU 6005, 6006, 6008, 6009, 6895

This seminar discusses the most important elements of academic research. Students present their ideas and discuss their arguments to develop a critical monograph on a contemporary problem of public administration. The product is expected to be of a publishable quality level. The student integrates the values of public administration into their work and incorporates international perspectives in the analysis of the study problem. It can be repeated up to a maximum of 6 credits.



Mailing Address: 9 University Ave., Ste. 901 San Juan PR 00925-2529 **Physical Address:** Carmen Rivera Alvarado (CRA) Building, Third floor

**Telephone**: (787) 764-0000, extensions 87428, 87431

Email: admi.public@upr.edu

Website: <a href="http://sociales.uprrp.edu/egap/">http://sociales.uprrp.edu/egap/</a>

**DEGREE:** 

### Master of Public Administration in Public Management

#### **ACCREDITATIONS:**

Network of Schools of Public Policy, Affairs and Administration (NASPAA), 2010-2024

#### **Academic Affiliations:**

Inter-American Network for Education in Public Administration (INPAE) Latin American Center for Development Administration (CLAD) Midwest Political Science Association (MPSA) American Society for Public Administration (ASPA) International Society for Third-Sector Research (ISTR)

#### **FACULTY:**

**Luz Mairym López Rodríguez,** Ph.D., Walden University, 2010, Associate Professor. Evaluation of public policies; program evaluation; non-profit organizations; applied research; Design of distance courses.

**Liz Johanna Ortiz Laureano,** Ph.D., University of Costa Rica, Rodrigo Facio Campus, 2020. Assistant Professor. Government and public policy; social policies; health systems assessment; human rights and social justice; community work; Methodology for the systematization of experiences.

**Víctor Rivera Hernández,** JD, Interamerican University of Puerto Rico, 1994, Master's Degree in Current and Comparative Spanish Law, Complutense University of Madrid, 2022 and Master's Degree in Public Administration, University of Puerto Rico, Río Piedras Campus, 1993. Assistant Professor. Government law; labor law; collective bargaining; public service ethics; supervision and leadership.

**Deliz Rodríguez Carrasquillo,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2018. Assistant Professor. Human resources; classification and remuneration; performance management; evaluation and training; gender and employment; Workburn Syndrome.

**Urayoan Jordán Salivia,** Ph.D., University of Baltimore, 2020. Assistant Professor. Strategic alliances, citizen participation, empowerment of groups and citizens, co-production, non-profit organizations (especially cooperatives) and education.



#### **ADMISSION REQUIREMENTS:**

### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific master's Program Requirements**

- 1. Bachelor's degree from a recognized university or its equivalent.
- 2. Spanish and English Proficiency.
- 3. Overall academic index of 3.00 on a scale of 4.00.

### **Required Documents for the Application for Admission**

- 1. Application for Admission to Graduate Studies in electronic format through the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a> platform.
- 2. Payment for the application fee.
- 3. Two official academic transcripts.
- 4. A 500 to 600 words essay, about your interest in Public Administration related to one of the following values promoted by the School: ethics, diversity, equity, transparency, and merit.
- 5. Curriculum vitae or resume (maximum of 2 pages). It must include, at a minimum, academic history, professional experience and others (internships, volunteer work, memberships in professional organizations).
- 6. Example of a written assignment done in a university course.
- 7. Two letters of recommendation (one of them from a professor).
- 8. Graduate School Admission Test Results (GRE). You are waived if you meet <u>one</u> of the following:
  - a. 5 years of work experience (administrative/managerial) in government, NPO or private sector.
  - b. Minimum GPA of 3.50 in the bachelor's degree
  - c. Master's, PhD, or JD, with a minimum GPA of 3.00, from an accredited program. International students must provide evidence of accreditation of their programs.
- 9. Interview (if necessary). To be determined by the Admissions Committee.
- 10. Those students who do not have the B.A./B.S. when applying, if admitted, must file the official academic transcripts with a degree.

Note: An internship or supervised internship (3 additional credits) will be required for applicants who do not have at least one year of administrative/managerial work experience. This requirement will be included in the admission letter and further guidance will be offered in academic advising.

### **GRADUATION REQUIREMENTS:**

Meet the general graduation requirements established by the Río Piedras Campus and the specific requirements of the program:

- 1. Pass 13 credits of core courses, 15 credits of specialty, and 6 credits of free electives.
- 2. All courses must be passed with a grade of C or higher.
- 3. Approve the Research Seminar.
- 4. Complete 37 credits.

### **CURRICULUM: Specialization in Public Management**

This specialty integrates the topics of (1) Management and Analysis of Public Finances and (2) Project Management. In Management and Analysis of Public Finances, the aim is to train a professional with a broad understanding of the fiscal issues and problems faced by national and municipal governments. In addition, students will be able to acquire the technical knowledge and basic skills necessary to work as analysts of budget, finance, legislation, and related areas in government or non-profit organizations. For its part, Project Management offers students the opportunity to acquire technical knowledge and basic skills to design, organize and execute work plans that consider the external and internal factors that affect the results of public projects. The academic requirements for this major are as follows:

#### **PROGRAM OF STUDY:**

	Core Courses	Credits
ADPU 6005	Government & Public Administration	3
ADPU 6006	Research Methods in Public Administration	3
ADPU 6008	Ethics, Law and Public Administration	3
ADPU 6009	Budget in the Public Administration	3
ADPU 6895	Professional Development Practicum in Public Administration	1
	Subtotal	13
	Specialty Courses	Credits
ADPU 6017	Leadership & Supervision	3
ADPU 6310	Seminar on Problems of Budget Management and Financial Policy	3
ADPU 6409	Government Systems and Procedures	3
ADPU 6506	Strategic Project Planning and Management I	3
ADPU 6704	Governance in Public Management	3
	Subtotal	15
	Electives directed in the specialty or Free electives (Two courses among the following - 6 credits)	Credits
ADPU 6309	Public finance	3
ADPU 6405	Organization Theory	3
ADPU 6408	Information Processing	3
ADPU 6410	Seminar on Public Management	3
ADPU 6560	Information and Knowledge Technology	3
ADPU 6708	Strategic Project Planning and Management II	3

	Subtotal	6
	Other Required Course	Credits
ADPU 6896	Research Seminar	3
	Subtotal	3
	Total	37

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **ADPU 6005 Government and Public Administration**

Three credits. Three hours of lecture a week.

Analysis of the development of the discipline of Public Administration and the redefinition of the field of study. The categories used in interdisciplinary analysis and the nature of the concepts that serve to propel the synthesis of knowledge. The use of ideal models and types. Systems analysis and modern organization theory. The study of theories of public policy in their relationship with public administration. Special attention is given to the issues of ethics, diversity, accountability, and merit in public service as core values of the program. The course can be offered face-to-face and hybrid modality.

#### **ADPU 6006 Research Methods in Public Administration**

Three credits. Three hours of lecture a week.

Social research techniques and designs applied to the analysis, organization and evaluation of data specific to public administration. The emphasis of the course will be to promote ethics in research through qualitative and quantitative methodological designs appropriate to the objectives set. Special attention will be given to the discussion of methodological tools for decision-making on programs and policies.

#### ADPU 6008 Ethics, Law and Public Administration

Three credits. Three hours of lecture a week.

Public interest, ethics, and public values on which laws and public policies are based in a democracy. Legal principles governing and controlling bureaucratic authorities in Puerto Rico and the United States, including basic political and constitutional theories, techniques and procedures used by administrative and judicial bodies, the relations of administrative bodies to each other with legislative chambers, and judicial review of administrative acts. It discusses the work of investigation, supervision, prosecution, deposition, counseling, and informal adjudication, as well as: the regulation and adjudication process, the right to be heard, and review methods and procedures within the administrative framework. It also studies the legislation and jurisprudence around government ethics.

### **ADPU 6009 Budget in Public Administration**

Three credits. Two hours of lecture and one hour of discussion per week.

The course analyzes the economic, theoretical, and legal aspects of public sector budgeting. Financial aspects of efficiency in the allocation of resources are discussed. It examines the government's budget process at the state, federal, and municipal levels and the organization of the document and the budget of the Commonwealth of Puerto Rico.

### **ADPU 6895 Professional Development Practicum in Public Administration**

A credit. One hour of lecture per week.

Core course. It is a preparatory course for students during their first year of master's degree. Students acquire a series of skills essential for their successful performance as a graduate student and as public administrators. Short workshops are included in the use of technological tools with application to research and administration. It also exposes the student to the ethical aspects of research, the correct use of reference sources, and professional written expression.

### **ADPU 6017 Leadership and Supervision**

Three credits. Three hours of lecture a week.

Requirement of the specialty in public management. The course provides the fundamental foundations necessary for the understanding of human behavior in government organizations. Emphasis is placed on the study of the role of the supervisor and the leader within work organizations and their responsibility to the organization, employees and society.

### ADPU 6310 Seminar on Problems of Budget Administration and Financial Policy

Three credits. Three hours of lecture a week.

The course is aimed at the analysis and research of specific topics on the budgeting process and the determination of public policy regarding priorities in the use of public resources. Contemporary topics of application to Puerto Rico, Latin America or the United States are selected offering the student the opportunity to observe the impact of the financial policies of the states on the institutional capacity of the countries to achieve sustainable development and quality of life. Requirement of the specialty in public management.

#### **ADPU 6409 Government Systems and Procedures**

Three credits. Three hours of lecture a week.

This course is aimed at the critical analysis of the fundamental elements of the design of public organizations, in particular, of work structures, systems and procedures. The discussion revolves around the methods and techniques that allow internal changes and transformations to be made to increase the efficiency, effectiveness, and quality of government programs and services. Requirement of the specialty in public management.

### ADPU 6506 Strategic Project Planning and Management I

Three credits. Three hours of lecture a week.

An introduction to the topic of planning is provided. The modern historical basis of planning and the importance of social and economic planning in the well-being of countries are discussed. The second part of the course emphasizes the discussion of planning applied to government management. Theories of planning, strategic planning, and strategic management are discussed. In addition, human, fiscal, and infrastructure resources and their qualities, possibilities and limitations within the public administration are analyzed. It includes a general discussion of the methods and techniques of government project planning and management, including data collection, plan formulation, and selection of indicators of achievement and results. Some political dangers of project planning and management in the government scenario are discussed. Requirement of the specialty in Public Management.

# **ADPU 6704 Governance in Public Management**

Three credits. Three hours of lecture a week.

Required course for the Public Management major. The concepts of citizen participation, transparency, accountability, and quality of service are applied to public management. The theory is discussed, as well as the techniques developed by governments to open government processes, decisions, and deliberations to citizens. Special attention is given to minorities and other disadvantaged sectors of society.

#### **ADPU 6309 Public Finance**

Three credits. Three hours of lecture a week.

A general analysis of the process of determining public revenues and expenditures; public debt; tax policy and the effects of government programs on income distribution, from the point of view of various economic theories.

#### **ADPU 6405 Organization Theory**

Three credits. Three hours of lecture a week.

The objective of this course is to apply the most relevant theoretical knowledge about organizations to contemporary governmental problems, essential elements of organizational functioning are studied, such as decision-making, strategy development, leadership, and transformation management. It also analyzes and contrasts the different schools of thought and models developed to understand them, especially within the public sphere. It analyzes and investigates the impact of the internal and external environment and the power relations within organizations. Attention is given to the innovative design of administrative systems, organizational culture, and change.

### **ADPU 6410: Seminar on Public Management**

Three credits. Three hours of seminar per week.

Research course on the problems of public management. Theoretical and practical approaches to topics such as work design, the establishment and reorganization of work structures, the determination of the necessary human, fiscal and physical resources; the quality of services provided and citizens' confidence in the government's ability to deliver them; as well as organizational capacity to respond to national emergencies, among other contemporary issues.

### ADPU 6560 Information and Knowledge Technology

Three credits. Three hours of seminar per week.

Seminar in which the impact of information and communication technologies for the management of information and knowledge is discussed. The role of information and communication technologies (ICTs) as tools to strengthen democratic governance is investigated.

### ADPU 6708 Strategic Project Planning and Management II

Three credits. Three hours of seminar per week.

Prerequisite: ADPU 6506

Seminar in which the methods and techniques of planning and management of government projects are applied in the development of a project and the preparation of the documentation and final report. The course offers the student the opportunity to actively participate in the design of projects of varying complexity related to the study of problems or the implementation of solutions.

#### **ADPU 6896 Research Seminar**

Three credits. Three hours of seminar per week. Prerequisite ADPU6005, 6006, 6008, 6009, 6895.

This seminar discusses the most important elements of academic research. Students present their ideas and discuss their arguments to develop a critical monograph on a contemporary problem of public administration. The product is expected to be of a publishable quality level. The student integrates the values of public administration into their work and incorporates international perspectives in the analysis of the study problem. It can be repeated up to a maximum of 6 credits.



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Website: http://sociales.uprrp.edu/egap/

#### **DEGREE:**

### Master of Public Administration in Government and Public Policy

#### **ACCREDITATIONS:**

Network of Schools of Public Policy, Affairs and Administration (NASPAA), 2010-2024

#### **Academic Affiliations:**

Inter-American Network for Education in Public Administration (INPAE) Latin American Center for Development Administration (CLAD) Midwest Political Science Association (MPSA) American Society for Public Administration (ASPA) International Society for Third-Sector Research (ISTR)

#### **FACULTY:**

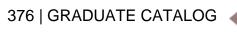
**Luz Mairym López Rodríguez,** Ph.D., Walden University, 2010, Associate Professor. Evaluation of public policies; program evaluation; non-profit organizations; applied research; Design of distance courses.

**Liz Johanna Ortiz Laureano,** Ph.D., University of Costa Rica, Rodrigo Facio Campus, 2020. Assistant Professor. Government and public policy; social policies; health systems assessment; human rights and social justice; community work; Methodology for the systematization of experiences.

**Víctor Rivera Hernández,** JD, Interamerican University of Puerto Rico, 1994, Master's Degree in Current and Comparative Spanish Law, Complutense University of Madrid, 2022 and Master's Degree in Public Administration, University of Puerto Rico, Río Piedras Campus, 1993. Assistant Professor. Government law; labor law; collective bargaining; public service ethics; supervision and leadership.

**Deliz Rodríguez Carrasquillo,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2018. Assistant Professor. Human resources; classification and remuneration; performance management; evaluation and training; gender and employment; Workburn Syndrome.

**Urayoan Jordán Salivia**, Ph.D., University of Baltimore, 2020. Assistant Professor. Strategic alliances, citizen participation, empowerment of groups and citizens, co-production, non-profit organizations (especially cooperatives) and education.



### **ADMISSION REQUIREMENTS:**

### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific master's Program Requirements**

- 1. Bachelor's degree from a recognized university or its equivalent.
- 2. Spanish and English Proficiency.
- 3. Overall academic index of 3.00 on a scale of 4.00.

### **Required Documents for the Application for Admission**

- 1. Application for Admission to Graduate Studies in electronic format through the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a> platform.
- 2. Payment for the application fee.
- 3. Two official academic transcripts.
- 4. A 500-to-600-word essay, about your interest in Public Administration, related to one of the following values promoted by the School: ethics, diversity, equity, and merit.
- 5. Curriculum vitae or resume (maximum of 2 pages). It must include, at a minimum, academic history, professional experience and others (internships, volunteer work, memberships in professional organizations).
- 6. Example of a written assignment done in a university course.
- 7. Two letters of recommendation (one of them from a professor).
- 8. Graduate School Admission Test Results (GRE). You are waived if you meet <u>one</u> of these:
  - a. 5 years of work experience (administrative/managerial) in government, NPO or private sector.
  - b. Minimum GPA of 3.50 in the bachelor's degree
  - c. Master's, PhD, or JD, with a minimum GPA of 3.00, from an accredited program. International students must provide evidence of accreditation of their programs.
- 9. Interview (if necessary). To be determined by the Admissions Committee.
- 10. Those students who do not have the B.A./B.S. when applying, if admitted, must file the official academic transcripts with a degree.

Note: An internship or supervised internship (3 additional credits) will be required for applicants who do not have at least one year of administrative/managerial work experience. This requirement will be included in the admission letter and further guidance will be offered in academic advising.

#### **GRADUATION REQUIREMENTS:**

Meet the general graduation requirements established by the Río Piedras Campus and the specific requirements of the program:

- 1. Pass 13 credits of core courses, 15 credits of specialty, 6 credits of free electives.
- 2. All courses must be passed with a grade of C or higher.
- 3. Approve the Research Seminar.
- 4. Complete 37 credits.

### **CURRICULUM: Specialization in Government and Public Policy**

This specialty integrates the processes of creation, formulation, and evaluation of public policy and the relationship between government and society in the context of our democratic system. This is complemented by integrating the themes of (1) Government and Society and (2) Public Policy Analysis and Evaluation. The first theme of Government and Society aims to train government leaders and prepare students who are interested in continuing doctoral studies in the areas of government and public affairs, law, and education, among others. The curricular content seeks to deepen the study of the contexts in which government is administered and the implications that public management has for society. Public Policy Analysis and Evaluation is aimed at training advisors, consultants, and specialists in the evaluation of government policies and programs.

#### **PROGRAM OF STUDY:**

	Core Courses	Credits
ADPU 6005	Government and Administration Public	3
ADPU 6006	Research Methods in Public Administration	3
ADPU 6008	Ethics, Law and Public Administration	3
ADPU 6009	Budget in the Public Administration	3
ADPU 6895	Professional Development Practicum in Public Administration	1
	Subtotal	13
	Specialty Courses	Credits
ADPU 6505	Government & Politics	3
ADPU 6507	Public Policy and Sustainable Development	3
ADPU 6510	Seminar on Government and Democracy	3
ADPU 6707	Social Perspective of Public Policy	3
ADPU 6702	Evaluation of Government Programs	3
	Subtotal	15
	Electives directed in the specialty or Free electives (Two courses among the following - 6 credits)	Credits

ADPU 6407	Quantitative Methods for Public Policy Analysis	3
ADPU 6508	Qualitative Methods for Public Policy Analysis	3
ADPU 6520	Seminar on State Reform and Modernization	3
ADPU 6550	Comparative Public Administration	3
ADPU 6897	Seminar on Public Affairs	3
	Subtotal	6
	Other Required Course	6 Credits
ADPU 6896		
ADPU 6896	Other Required Course	Credits

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **ADPU 6005 Government and Public Administration**

Three credits. Three hours of seminar per week.

Analysis of the development of the discipline of public administration and the redefinition of the field of study. The categories used in interdisciplinary analysis and the nature of the concepts that serve to propel the synthesis of knowledge. The use of ideal models and types. Systems analysis and modern organization theory. The study of theories of public policy in their relationship with public administration. Special attention is given to the themes of ethics, diversity, accountability, and merit in public service as core values of the program. The course can be offered face-to-face and hybrid modalities.

#### **ADPU 6006 Research Methods in Public Administration**

Three credits. Three hours of lecture a week.

Social research techniques and designs applied to the analysis, organization and evaluation of data specific to public administration. The emphasis of the course will be to promote ethics in research through qualitative and quantitative methodological designs appropriate to the objectives set. Special attention will be given to the discussion of methodological tools for decision-making on programs and policies.

### ADPU 6008 Ethics, Law and Public Administration

Three credits. Three hours of lecture a week.



Public interest, ethics, and public values on which laws and public policies are based in a democracy. Legal principles governing and controlling bureaucratic authorities in Puerto Rico and the United States, including basic political and constitutional theories, techniques, and procedures used by administrative and judicial bodies. The relations of administrative bodies with each other with the legislative chambers and the judicial review of administrative acts. It discusses the work of investigation, supervision, prosecution, deposition, advice, and informal adjudication, as well as: regulation and the informal adjudication process, as well as: regulation and adjudication process, the right to be heard, and review methods and procedures within the administrative framework. It also studies the legislation and jurisprudence around government ethics.

### **ADPU 6009 Budget in Public Administration**

Three credits. Two hours of lecture and one hour of discussion per week.

The course analyzes the economic, technical, and legal aspects of public sector budgeting. Financial aspects of efficiency in the allocation of resources are discussed. It examines the government's budget process at the state, federal, and municipal levels and the organization of the document. The budget of the Commonwealth of Puerto Rico.

### **ADPU 6895 Professional Development Practicum in Public Administration**

One credit. One hour of lecture per week.

Core course. It is a preparatory course for students during their first year of master's degree. The student acquires a series of skills indispensable for his or her successful performance as a graduate student and as a public administrator. Short workshops are included in the use of technological tools with application to research and administration. It also exposes the student to the ethical aspects of research, the correct use of reference sources, and professional written expression.

#### **ADPU 6505 Government & Policy**

Three credits. Three hours of lecture a week.

Analysis of the process of political and governmental action based on the institutions and groups that influence the determination of public policy. It includes a review of the process of monitoring such political and governmental action through the representative process; government structures; political parties and special groups. Exposition and analysis of modernized bureaucracies and their role in the entire process of formulation and implementation of public policy.

### **ADPU 6507 Public Policy and Sustainable Development**

Three credits. Three hours of lecture a week.

Required course of the specialty in government and public policy. The study of public administration in the contemporary state as a basic factor for the achievement of a productive society. The role of public policies in fiscal health, employment, industry, and the environment is analyzed. Some international standards and programs designed to achieve them are discussed.

### **ADPU 6510 Seminar on Government and Democracy**

Three credits. Three hours of seminar per week.

This seminar will discuss and investigate the organization, structure, and functioning of democratic governments. Interest will be given to the problems of human rights, politicization, and ethics in the exercise of governing the state and administering government. The student will have the opportunity to deepen the application of democratic principles in the administration and formulation of public policy in Puerto Rico through research work. Requirement of the specialty in government and public policy.

### **ADPU 6707 Social Perspective of Public Policy**

Three credits. Two hours of lecture and one hour of discussion per week.

Required course for the specialty of government and public policy. Introduction to the theory and practice of social policies in democratic countries, with emphasis on Puerto Rico. It discusses some of the ideological approaches to social welfare, such as neoliberalism, social democratic, feminist, and anti-racial approaches, and the way in which these take shape through social public policies.

#### **ADPU 6702 Evaluation of Government Programs**

Three credits. Two hours of lecture and one hour of discussion per week.

Study of different evaluative research designs, both qualitative, quantitative and mixed. Design of indicators and identification of variables for the evaluation of government programs to know their effectiveness, effectiveness, and efficiency.

### ADPU 6407 Quantitative Methods for Public Policy Analysis

Three credits. Three hours of lecture a week.

Introduction to the use of mathematical methods in public administration: application of linear programming, simulation, statistical decision theory, input-output analysis and research operation problems.

### ADPU 6508 Qualitative Methods for Public Policy Analysis

Three credits. Three hours of seminar per week.

Introduction to the use of qualitative methods for the analysis of public policy. Students are exposed to the paradigm of qualitative and mixed research that allows them to make decisions and inform public administration and policy decisions.

#### ADPU 6520 Seminar on State Reform and Modernization

Three credits. Three hours of seminar per week.

This seminar will be aimed at studying the opportunities and constraints offered by models of transformation of state structures and organization. Specifically, the dimensions of organizational action that affect good governance policies are investigated, such as: the promotion of citizen

participation in public governance; transparency and accountability, as well as the relevance and quality of public management products for society.

# **ADPU 6550 Comparative Public Administration**

Three credits. Three hours of lecture a week.

Comparative analysis of the public bureaucracy in its international environment. The primary emphasis will be on the United States, Latin America and Europe.

#### **ADPU 6897 Seminar on Public Affairs**

Three credits. Three hours of seminar per week.

This seminar discusses and debates, from various perspectives, the role of citizens in a democratic society in relation to public affairs. The citizen is understood as an individual, as a member of a group, or as part of civil society. The course allows the study and reflection on contemporary public issues with repercussions on government and public administration reflected in the student's research work.

#### ADPU 6896 Research Seminar

Three credits. Three hours of seminar per week. Prerequisites: ADPU 6005, 6006, 6008, 6009, 6895.

This seminar discusses the most important elements of academic research. Students present their ideas and discuss their arguments to develop a critical monograph on a contemporary problem of public administration. The product is expected to be of a publishable quality level. The student integrates the values of public administration into their work and incorporates international perspectives in the analysis of the study problem. It can be repeated up to a maximum of 6 credits.

#### OTHER COURSE DESCRIPTIONS:

#### **ADPU 6045 Communication and Citizen Relations**

Three credits. Three hours of lecture a week.

Critical discussion of the methods and techniques of communication and public relations with citizens, the methods of communication control, the expression of public interests and the effect of these interests on government action are discussed and analyzed. The issue is addressed from a democratic governance perspective with an emphasis on government transparency, access to information and citizen participation.

### ADPU 6046 Propaganda and Public Opinion

Three credits. Three hours of lecture a week.

Concepts of public opinion and propaganda, their formation and their role in contemporary democracy; methods for measuring public opinion; surveys; analysis of results; Analysis of mass media and their impact on the political-administrative process.

#### ADPU 6047 Seminar on Local Government Administration.

Three credits. Three hours of seminar per week.

The course requires the development of research on the topics selected by the professor. Class discussions focus on the structures, legal basis, and development of municipal governments in Puerto Rico, Latin America, and the United States. Specifically, it examines and contrasts the roles of mayors, municipal assemblies, city councilors, and city administrators, among others. The second part deals with the administrative and operational aspects of municipal governments. Attention will be given to management issues such as: executive leadership, availability and use of human, financial and physical resources. The discussion highlights the issue of the capacities of local governments in their political, social and economic role and their relationship with the central and federal governments. Municipal autonomy is also discussed in the context of sustainable development and environmental protection.

### **ADPU 6055 Seminar on the Legislative Process**

Three credits. Three hours of seminar per week

The course offers the student the opportunity to conduct research and produce a monograph or research report. The course provides an overview of the constitutional history of the United States of America and the constitution of the Commonwealth of Puerto Rico, with emphasis on the republican form of government and the powers emanating from it. This includes the legislative, executive, and judicial branches. Through class discussions and written works on the legislative branch, problems such as the scope of the legislative branch, the doctrine of separation of powers, and the inherent power of the legislative branch, among others, are studied. In addition, the legislative procedure is investigated, analyzed, and studied, depending on the powers of the legislative power, its foundations, nature, and scope.

### ADPU 6056 Seminar on the Administration of the Judiciary

Three credits. Three hours of seminar per week.

The seminar focuses on the administrative processes of both the state and federal judicial branches. The students, guided by the professor, discuss, debate and dialogue about the role of imparting justice and the participation of the courts in the formulation of public policy, as well as the relationship of the courts with citizens, lawyers and other branches of government. The student conducts research on the selected topic and produces a monograph or research report that is delivered in phases until the final work is delivered.

### **ADPU 6059 Supervised Practice**

Three credits. Three hours of lecture a week.

Internship in government agencies under the supervision of a faculty member of the School of Public Administration who familiarizes the student with the application of theoretical concepts and principles of public administration. Exclusively for students with no administrative experience.

# ADPU 6305 Administration and Fiscal Policy

Three credits. Three hours of lecture a week.

The course studies the processes, regulations, and practices of planning, execution, and control of government financial policies and programs. Attention is paid to municipal and state financial management, as well as relations with the federal government. Some of the topics discussed are financial organizations, government accounting, and public debt.

Mailing Address: 9 University Ave., Ste. 901 San Juan PR 00925-2529 **Physical Address:** Carmen Rivera Alvarado (CRA) Building, Third floor

**Phone**: (787) 764-0000, extensions 87428, 87431

Email: admi.public@upr.edu

Website: <a href="http://sociales.uprrp.edu/egap/">http://sociales.uprrp.edu/egap/</a>

#### **DEGREE:**

# Joint Law Program (Juris Doctor) and Master of Public Administration

#### **ACCREDITATIONS:**

Network of Schools of Public Policy, Affairs and Administration (NASPAA), 2010-2024

#### **Academic Affiliations:**

Inter-American Network for Education in Public Administration (INPAE) Latin American Center for Development Administration (CLAD) Midwest Political Science Association (MPSA) American Society for Public Administration (ASPA) International Society for Third-Sector Research (ISTR)

#### **FACULTY:**

**Luz Mairym López Rodríguez,** Ph.D., Walden University, 2010, Associate Professor. Public policy evaluation; program evaluation; non-profit organizations; applied research; distance learning course design.

**Liz Johanna Ortiz Laureano,** Ph.D., University of Costa Rica, Rodrigo Facio Campus, 2020. Assistant Professor. Government and public policies; social policies; evaluation of health systems; human rights and social justice; community work; methodology for systematization of experiences.

**Víctor Rivera Hernández,** JD, Interamerican University, 1994, Master's Degree in Current and Comparative Spanish Law, University Complutense of Madrid, 2022 and Master's Degree in Public Administration, University of Puerto Rico, Río Piedras Campus, 1993. Assistant Professor. Government law; labor law; collective bargaining; public service ethics; supervision and leadership.

**Deliz Rodríguez Carrasquillo,** Ph.D., University of Puerto Rico, Río Piedras Campus, 2018. Assistant Professor. Human resources; classification and compensation; performance management; evaluation and training; gender and employment; Job Burnout Syndrome. **Urayoán Jordán Salivia,** Ph.D., University of Baltimore, 2020. Assistant Professor. Strategic alliances, citizen participation, group and citizen empowerment, co-production, non-profit organizations (especially cooperatives) and education.



#### JOINT LAW PROGRAM AND MASTER'S DEGREE IN PUBLIC ADMINISTRATION

The School of Law and the Graduate School of Public Administration (EGAP) offer a joint program aiming to train lawyers and public administrators with the skills required to practice in both fields of knowledge.

The reason for the program is to offer a unique opportunity to students who have the dedication and commitment necessary to develop within an intense intellectual process. An increasing number of students at the University of Puerto Rico School of Law study Public Administration to obtain more specialized training in their legal education necessary for their professional performance. In response to this reality, the initiative between both schools and this joint degree creation arose. The reports from the accreditation entities of both fields show the expansion of joint degrees such as the one proposed here.

The concurrent obtaining of the Juris Doctor (JD) and the Master of Public Administration (MAP) responds to the training of professionals in both disciplines - law and public administration – to nourish the community with resources whose usefulness can be greater than those obtained from the independent work of professionals in both fields. The depth and acuity of the perceptions that come from a person trained in both disciplines can contribute significantly to the future treatment of many social situations responding to the intersection of law and public administration.

# **ADMISSION REQUIREMENTS:**

### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific master's Program Requirements**

- 1. Bachelor's degree from a recognized university or its equivalent.
- 2. Spanish and English Proficiency.
- 3. Overall academic index of 3.00 on a scale of 4.00.

### Required Documents for the Application for Admission\*

- 1. Application for admission to graduate studies in electronic format through the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a> platform.
- 2. Payment for the application fee.
- 3. Two official academic transcripts.
- 4. A 500 to 600-word essay, about your interest in Public Administration related to one of the following values promoted by the school: ethics, diversity, equity, transparency and merit.
- 5. Curriculum vitae or resume (maximum of 2 pages). It must include, at a minimum, academic history, professional experience and others (internships, volunteer work, memberships in professional organizations).
- 6. Example of a written assignment done in a university course.

- 7. Two letters of recommendation (one of them from a professor).
- 8. Graduate School Admission Test Results (GRE). You are waived if you meet <u>one</u> of these:
  - a. 5 years of work experience (administrative/managerial) in government, NPO or private sector.
  - b. Minimum GPA of 3.50 in the bachelor's degree.
  - c. Master's, PhD, or JD, with a minimum GPA of 3.00, from an accredited program. International students must provide evidence of accreditation of their programs.
- 9. Interview (if necessary). To be determined by the Admissions Committee.
- 10. Those students who do not have the B.A./B.S. when applying, if admitted, must file the official academic transcripts with a degree.

Note: An internship or supervised internship (3 additional credits) will be required for applicants who do not have at least one year of administrative/managerial work experience. This requirement will be included in the admission letter and further guidance will be offered in academic advising.

# **GRADUATION REQUIREMENTS\*:**

Meet the general graduation requirements established by the Río Piedras Campus and the specific requirements of the program:

- 1. Pass 13 credits of core courses, 15 credits of specialty, 6 credits of free electives. All courses must be passed with a grade of C or higher.
- 2. Approve the Research Seminar.
- 3. Complete 37 credits.

\*The student must also meet the admission and graduation requirements of the School of Law.

Those interested can apply simultaneously to both Schools, Law and Public Administration, and decide where they begin their studies, or they can apply to the second School, during the first year in the first school to which they applied. If so, they will begin their studies at the second school to which they apply in the next academic year, that is, in their second year. The School of Law admits only in August of each academic year, while the Graduate School of Public Administration (EGAP) admits in August and January.

The student who begins studies at the School of Law during their second year at EGAP will remain the entire year taking courses at the School of Law. In the remaining years, the student must take courses from both Schools until completing both degrees. The student must complete both majors to obtain their graduation diplomas, regardless of whether they first completed all required courses at one of the schools.

#### **PROGRAM OF STUDY:**

The syllabus can be found on the following pages:

https://sociales.uprrp.edu/egap/

http://derecho.uprrp.edu/

Mailing Address: 9 University Ave., Ste. 901 San Juan PR 00925-2529

**Telephone:** (787) 764-0000, extensions 87500, 87501

**Fax:** (787) 522-1327

Website: https://sociales.uprrp.edu/economia/programa-graduado/

**DEGREE**:

#### **Master of Arts in Economics**

**Jaime del Valle Caballero**, Ph.D., University of Manchester, 1992. Professor. EconomicTheory; microeconomics; quantitative methods; technological theory.

**José Laborde Rivera**, Ph.D., State University of New York, Stony Brook, 2008. Assistant Professor. Quantitative methods; health economics; health systems; pharmaceutical sector.

**Juan Lara Fontánez,** Ph.D., State University of New York, 1981. Professor. International Economics; macroeconomics; Latin America.

**Indira Luciano Montalvo**, Ph.D., National Autonomous University of Mexico, 2005. Associate Professor. Economic Theory; regional urban economy; quantitative methods.

**Argeo T. Quiñonez Pérez**, MA, University of Massachusetts, 1982. Associate Professor. Economy of Puerto Rico; economic history; economic development; international economy.

**Carlos Rodríguez Ramos**, Ph.D., National Autonomous University of Mexico, 2001. Associate Professor. Quantitative methods; macroeconomics; Monetary economics.

**Eileen Segarra Alméstica**, Ph.D., University of California, Berkeley 1998. Professor. Economic Theory; labor economics; public finance.

**Joseph Vogel,** Ph.D., Rutgers University, 1987. Professor. History of Economic Thought; environmental; biodiversity; human rights; Intellectual Property Rights.

#### **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific master's Program Requirements**

- 1. Bachelor's degree or its equivalent from a recognized university.
- 2. Approval of the following courses or their equivalents: Statistical Methods I and II, Mathematical Foundations of Economics I and II, Intermediate Microeconomic Analysis, Intermediate Macroeconomic Analysis.
- 3. Overall GPA of 3.00 points or higher on a 4.00 scale.
- 4. Specialty average of 3.00 points or more on a 4.00 scale.



- 5. In exceptional cases, a student with an index of less than 3.00 may be allowed conditional admission.
- 6. Proficiency in Spanish and English.

### **Required Documents for the Application for Admission**

- 1. Application for Admission to Graduate Studies in electronic format through the platform <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>.
- 2. Payment for the application fee.
- 3. Two official credit transcripts of studies completed up to the date of application.
- 4. Approval of prerequisite courses, if applicable.

### **GRADUATION REQUIREMENTS:**

Comply with the general graduation requirements at the Río Piedras Campus. Inaddition, students will need to meet the program-specific requirements:

- 1. Pass the thirty (30) credits required by the Graduate Program.
- 2. Approve the thesis proposal.
- 3. Defend thesis.

#### **PROGRAM OF STUDY:**

Program Requirements	Credits
Core Courses	18
ECON 6031-6032 Economic Theory	6
ECON 6051-6052 Statistics and Econometrics	6
ECON 6070 Research Seminar	3
ECON 6080 Continuation of the Research Seminar	3
Elective Courses	
(The student may take up to 6 credits of electives in another school.	
Courses must be at the graduate level and authorized bythe Graduate	12
Program).	
ECON 6900 Degree Exam	0
Thesis	0
ECON 6955 Thesis in Progress	0
Total Credits	30

### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student InformationSystem of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to beincluded in the 2023-2024 Graduate Catalog.

### **ECON 6031 Economic Theory**

Three credits. Three hours of lecture a week.

Prerequisite: Graduate program admission.

Critical Analysis of the Fundamental Theoretical Principles of Micro and Macroeconomics. Microeconomics covers, among others, the following topics: demand analysis, neoclassical production theory, market structure, general equilibrium and welfare economics, capital and interest theory, and decisional theory. The parts of macroeconomics cover topics such as: theories on the semi-dynamic Kaldor system, the macrodynamics of economic growth, Keynesian theory in the 1990s, and the Keynesian theory of the 1990s.

### **ECON 6032 Economic Theory**

Three credits. Three hours of lecture a week. Prerequisite: Graduate program admission.

Critical Analysis of the Fundamental Theoretical Principles of Micro and Macroeconomics. Microeconomics covers demand analysis, neoclassical production theory, market structure, general equilibrium and welfare economics, capital and interest theory, and decisional theory. The partsof macroeconomics cover theories on the semi-dynamic Kaldor system, the macrodynamic of economic growth, Keynesian theory in the 1990s, and the Keynesian theory of the 1990s.

### ECON 6051-6052 Statistics and Econometrics

Three credits.

Examination of modern statistical methods for the analysis of quantitative data with emphasis on procedural logic and the application of statistical concepts and techniques to the analysis of economic problems.

### **ECON 6070 Research Seminar**

Three credits. Three hours of lecture a week.

Prerequisite: ECON 6031, ECON 6032, ECON 6051.

The purpose of this seminar is to guide students in the process of defining and developing a research topic leading to their thesis proposal; familiarize students with the styles of thesis presentation and article writing according to the main journals of the profession; train them in the use of various methods in the search for information and the preparation of bibliography; and to develop awareness of the fundamental precepts of research ethics. Submission of an original thesis or essay proposal is required, demonstrating the student's ability to begin work on the thesis.

#### **ECON 6080 Research Seminar II**

Three credits.

Prerequisite: ECON 6070

The purpose of this seminar is to allow students the opportunity toacquire knowledge and skills in economic research, as well as confidence in their ability, through direct experiences and frank criticism and discussion of these with their thesis supervisor. Students will take advantage of this seminar to develop their thesis research. It is recommended that during this seminar the student prepares for the defense of their thesis proposal.

#### ECON 6900 Degree Exam

Zero credits.



Prerequisites: ECON 6031, ECON 6032, ECON 6051, ECON 6052.

Consists of the defense of the thesis proposal.

### **ECON 6955 Thesis in Progress**

No credit.

Prerequisite: ECON 6080

This is a control course to which all students who are activelyworking on the thesis must enroll, in order to be entitled to the use of university facilities, including supervision by professor-advisors.

### OTHER COURSE DESCRIPTIONS:

#### **ECON 5005 Urban Economics Seminar**

Three credits.

Prerequisite: ECON 3031 –3032 and ECON 4381.

Study of economic analysis method of urban development and discussion of the main problems related to the urban environment, such as the economic development of cities, housing, transportation, environmental pollution, and the financing of urban governments. The course aims for students tapply the techniques of economic analysis to study some urban economic aspects.

#### **ECON 5010 Health Economics**

Three credits. Three hours of discussion a week.

Prerequisite: ECON 4381

Analysis of health and medical service problems. Application of the theoretical and empirical techniques of economic analysis to the study of welfare economics of health as a commodity, hospitals and the non-profit sector, human capital and medical resources, the role of government, legal problems of medical malpractice, and innovation in medicine.

## **ECON 6005 Principles of Economic Theory**

Three credits. Three hours of lecture a week.

Prerequisite: Authorization from the head of the economics department.

Accelerated and rigorous introduction to the fundamentals of macroeconomic and microeconomic theory, itsmethodology, and its tools, for students entering the Graduate Program with limited or no familiarity with economic theory. This course does not count towards the minimum number of credits required to obtain the master's degree. Face-to-face, hybrid and online course modalities are available.

#### **ECON 6007 Economy of Puerto Rico**

Three credits. Three hours of lecture a week.

Prerequisite: ECON 6005 or equivalent. It does not count towards the minimum number ofcredits needed for the master's degree in economics.



Study of Puerto Rico's economic problems through the analysis of the characteristics and trends of Puerto Rico's economy. This study includes geography and economic history, the role of agriculture, land tenure, demographic variables, and their interrelation with PuertoRico's economic development, public revenues and expenditures, banking and credit institutions, transportation and communications, net income, gross product and balance of payments, industrial development, and government economic policy.

### **ECON 6015 History of Economic Thought**

Three credits.

Critical analysis of the great schools of economic thought since Adam Smith, and of the contributions of their main exponents in the light of the political, economic and intellectual environment in which they lived.

#### **ECON 6035 Mathematical Economics**

Three credits. Three hours of lecture per week and two hours of laboratory time per week.

The mathematical economics course will employ the language of mathematics to describe the various situations in economics. Mathematical arguments are logical and exact, making it possible to deal with the results of economic hypotheses quite accurately. For this reason, mathematical models aimed at explaining economic phenomena have become indispensable tools in economic sciences. Both their language and their techniques allow them to analyze situations and solve problems that, otherwise, could not be faced effectively. In this course, differential equations and first-order differences, higher order equations and simultaneous differences, non-linear programming, calculus of variations and Game Theory will be used to solve the different problems of Economic Science.

#### **ECON 6090 Graduate Seminar on Environmental Economics**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the Economics program.

The purpose of this course is for the student to become acquainted with the theoretical and practical problems involved in the control of environmental externalities. Different books and articles will be read and discussed in class. The perspective of the course is quite broad, as the research includes the political and bureaucratic dimensions of decision-making on environmental policy, as well as the existing theoretical problems for the design of environmental control institutions in a dynamic world. This requires research into the incentives that different key elements may have during the various stages of the control process. It is also necessary to assess the transaction costs associated with the different alternatives. Finally, the process of acquiring information and the incentives for those who possess and produce such information will be analyzed.

#### **ECON 6095 Economics of Human Resources**

Three credits. Three hours of discussion a week.

Analysis of theoretical models applied to problems of economic development and management of natural resources, the importance of natural resources used in different economic sectors, and their impact on economic development. Economic principles applied in the efficient use of resources such as water, land, sea, and forests; Incorporation of economic criteria into public policy on the management and conservation of natural resources.

### **ECON 6111 International Trade: Theory and Practice**

Three credits. Three hours of lecture a week.

Prerequisite: Professor's Authorization.

The distinction between internal exchange and foreign trade. The Historical Background of the Pure Theory of International Trade: Medieval Concepts, Mercantilism, Physiocrats, Absolute and Comparative Advantages. Classical andneoclassical theories of international trade. Trade Policy Theory: Tariffs, Quotas, EconomicIntegration.

### **ECON 6112 International Trade: Policy and Finance**

Three credits. Three hours of lecture a week.

International balance of payments. The pure mechanism of international financial adjustments: flexible, gold-standard exchange rates. Interactions between foreign trade and national income. Pre-1972 adjustment mechanisms; liquidity crisis; asymmetry of the adjustment mechanism. Recent developments in international finance. The possibilities of anew international currency system. Face-to-face, hybrid, and online modalities available.

### **ECON 6125 Public Finance and Fiscal Policy**

Three credits.

Analysis of the main theories, emphasizing the theory of collective goods and the principles and problems associated with government activities of revenue collection and expenditure budgeting. Special attention is given to the problems of stability and growth, with particular reference to the economies of underdeveloped countries.

### ECON 6130 Seminar on Public Finance and Fiscal Policy

Three credits.

Critical study of topics related to the theory of public income and expenditure. Possibilities and limits of fiscal policy.

#### **ECON 6131 Advanced Microeconomics**

Three credits.

Selected problems in price and distribution theory, firm theory, consumption theory, and welfare economics. It includes Samuelson's Manifest Preference; consumer stability testing; the firm and the market; signing under dynamic conditions involving uncertainty, risk, and discounting the future; dynamics stability tests, including Samuelson's Correspondence Principle; evidence of

maximizing well-being.

#### ECON 6132 Advanced Macroeconomics

Three credits. Three hours of lecture a week.

In-depth analysis of various macroeconomic topics discussed in ECON 6031-6032; Development and analysis of advanced topics in macroeconomics.

### **ECON 6135 Monetary Theory and Policy**

Three credits.

Analysis of theory and policy relevant to the role of the monetary and banking system, including the international monetary system, in determining aggregate demand and the levelof employment and prices.

### **ECON 6140 Seminar: Monetary Theory and Policy**

Three credits.

Prerequisite: ECON 6135 or its equivalent.

Critical study of topics related to monetarytheory, monetary policy, and national and international stabilization policies.

### **ECON 6145 Economic History**

Three credits.

The development of economic institutions and processes over the past 200 years, with anemphasis on the Western world.

### **ECON 6150 Seminar: Economic Problems and Economic Policy**

Three credits. Three hours of lecture a week.

Analysis of important economic policy issues such as economic opportunities and motivation (incentive), government intervention and the achievement of progress and economic stability, national and international economic development, consumption levels y capital formation. Reference will be made to Puerto Rico's and other countries' situation.

#### **ECON 6151 Economic Development: Theory and Problems**

Three credits. Three hours of lecture a week.

Prerequisite: Professor's authorization. Analysis of the Economic Problems of Least Developed Countries in Africa, Asia and Latin America. Difference between development and growth. Economic development theories, the role of capital, natural resources, social factors and technology. The external sector and economic development. Theoretical problems of development and trade in underdeveloped countries, problems of foreign aid.

#### **ECON 6152 Economic Development: Planning and Policy**

Three credits. Three hours of lecture a week.

Analysis of the main policy issues facing the least developed countries. Alternatives between multiple targets. Planning role. The private sector and the public sector. Maximization of employment. Versus product maximization. Inflation versus stagnation. Problems of regional development and income distribution.

### **ECON 6175 Demographic Economics**

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student status.

Demographic changes have a direct effect on the development of countries and their economies. In recent years, the United States and Puerto Rico have experienced dramatic changes in the composition and level of their populations. This course will serve as a theoretical basis for graduate students interested in carrying out population studies, its impact on the economy and vice versa. Thetopics will be worked technically and rigorously with particular emphasis on the census and other globally accepted measures. Through lectures in class, academic readings and research papers, the student will learn about the global demographic situationand its greatest challenges such as; the environment, the aging population, health, the crisisof retirement systems and famine, among others.

### **ECON 6195 Comparative Economic Systems**

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student status.

Critical and thorough study of systems theory and practice. Alternates of economic organization.

#### **ECON 6275 Intense Reading Course**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the graduate program.

Special course for students who wish todelve deeper into a topic or area of study that has not been covered in other courses. Students will work independently.

#### **ECON 6276 Intense Reading Course II**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the graduate program.

An additional special course providing space for students who wish to delve into a topic or area of study that has not been covered nother courses. Students will work independently in agreement with the professor.

### ECON 6295 Project Evaluation and the Cost-Benefit Technique

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the graduate program.

The course studies the theory related to the cost-benefit technique used in project evaluation. Among the topics covered are the intertemporal valuation of benefits and costs, the evaluation of projects from the public versus the commercial point of view, shadow prices, investment algorithms, and others. Alarge part of the course will be dedicated to the study of various cases based on the techniques and concepts learned.

#### **ECON 6305 Financial Economics**

Three credits. Three hours of discussion a week.

Prerequisite: ECON 4382

Analysis of the characteristics and markets of major financial instruments. It studies how interest rates and security prices are determined in theeconomy and what factors cause them to change. It studies how, using futures contracts, options, interest rate swaps and portfolio immunization, risk is managed.

#### ECON 6410 Seminar on Economic Interaction in the Caribbean

Three credits. Three hours of discussion a week.

Critical analysis of the concept and forms of economic integration. Different approaches to integration; past experiences, areas of free trade; customs unions; common market, full integration. Economic integration between developed and developing countries. Integrationissues. Economics in the Caribbean. The economic background of Caribbean countries; Possible objections to the Caribbean Integration Program. Caribbean countries problems. Trade and development patterns of these countries.

#### **ECON 6495 Econometrics**

Three credits. Five hours of lecture per week.

Nature of econometrics. Econometric models. Parameter estimation. Identification of the model. Methods of minima squared: linear and nonlinear equations. Methods of maximumplausibility, simple and general cases. Current econometric models, construction, nature and use of some of the recent large-scale econometric models.

#### **ECON 6497 Macroeconometrics**

Three credits. Three hours of lecture a week.

Prerequisites: ECON 6051

The development of stochastic macroeconometrics, in addition to bridging the gap between macroeconomics and econometrics courses, has generated a large number of new models. This has motivated the development of econometric techniques to test these models. In the macroeconometrics course, econometric techniques, mainly time series analysis, that have applications in macroeconometrics are discussed. Among the concepts examined are non-causality in the Granger sense; cointegration; decomposition of a series between permanent and transitory elements; Modeling of expectations and efficient markets and analysis of the business cycle.

#### **ECON 6515 Agricultural Development in Underdeveloped Countries**

Three credits. Three hours of lecture a week.

Role of agriculture in economic growth. Influence of physical, cultural and institutional attributes of the economy on agricultural productivity and economic growth. Transformation of agriculture and its problems in developing countries.

## **ECON 6550 Seminar: Economic Forecasting and Planning**

Three credits.

Theory and technique of forecasting and planning in developing countries. Among the topics discussed are the theoretical aspects of economic planning and forecasting; economic development planning: global, regional, and sectoral; planning of human resources, agricultural and industrial development, public services and supplying industries, social assistance and welfare programs. Particular emphasis is given to practical or laboratorywork. Students will develop projects aimed at formulating development plans by applying the techniques studied.

## **ECON 6675 Industrial Planning and Development in Developing Countries**

Three credits. Three hours of lecture a week.

Prerequisite: For graduate students, authorization from the professor.

The Industrial Development Strategy. Main emphasis on decision planning concerning the selection between alternative projects, import substitution and export expansion. Other important considerations to be included in the course will be those concerning the factors determining technology transfers and the role of technical and financial assistance in the industrialization process.

#### ECON 6695 Economic Aspects of Regional Urban Development

Three credits. Three hours of lecture a week.

Prerequisite: Counselor's Authorization.

The objective of the course is not to train urban economists but to allow graduate students to use the analytical tools attheir disposal in a regional urban dimension. The course focuses on economic decision-making instruments in the process of urban micro-regional development. Among other aspects, it will consider valid economic instruments to determine how new investments are distributed in each urban center; how the concept of economic space enters the process of urban development; what are the economic aspects of urban development; whatrole the city plays in national development.

#### **ECON 6715 Analysis of Production and Scheduling Functions**

Three credits. Three hours of lecture a week.

Theory of static and dynamic production. Aggregate production functions and productionselection theory under "related assumptions". Factor-product, factor-factor, and product-product relationship. Resource distribution models. Optimization of the firm'sproduction and determination of the optimal size of the company. Studies of linear programming models.

## **ECON 6735 Computer Programming for Economists**

Three credits. Three hours of lecture a week.

Prerequisite: Professor's Authorization or ECON 6051.

This course is designed to facilitate the solution to research problems in the Social Sciences in general and economics in particular. The course will emphasize conceptual and methodological aspects of quantitative analysis. PLI will be taught; This modern programming language will be used for problem-solving, data modification, analysis, and simulation model construction. Students will be exposed to various canned programs that are of potential utility to economists and social scientists.

#### **ECON 6895 Industrial Organization**

Three credits. Three hours of lecture a week.

Prerequisite: Be a student admitted to the Graduate Program.

Critical Study of Industrial Organization and Structure, covering, among others, the following related topics: industriallocation, the distribution of wealth and income, government and its public policy regardingeconomic power.

Mailing address: P.O. Box 23345, San Juan, Puerto Rico 00931-3345

**Direct phone**: (787) 763-5499

**Telephone**: (787) 764-0000, extensions 87543, 87546, 87548

Website: <a href="http://sociales.uprrp.edu/psicologia/">http://sociales.uprrp.edu/psicologia/</a>

**DEGREE:** 

## **Master of Arts in Clinical Psychology**

#### FACULTY:

Cruz Bermúdez, Nelson D., Ph.D., Brandeis University, 2007, Professor. Research topics: Neuroscience of addiction and mental disorders; neuro-education.

Dávila Marrero, Elixmahir, Ph.D., University of Puerto Rico, 2005, Associate Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a tool for cognitive rehabilitation with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

Espada Brignoni, Teófilo, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Culture and subjectivity, Social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

Galarza García, Laura, Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace psychology; organizational strategy and change; Selection, development, and management of individual and organizational performance; Work engagement.

García Ramos, Tania, Ph.D., Complutense University of Madrid, 1995, Professor. Research topics: Industrial Organizational Psychology; Work and Organizational Psychology; Work and subjectivity; Theorization about work; research methodology; Epistemology of complexity.

Gómez Escudero, María de los Ángeles, Ph.D., Université de Paris V, 1991, Professor. Research topics: Parenthood and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

Jiménez Torres, Aida, Ph.D., University of Puerto Rico, 1993. Professor. Research topics: Family and Couples: Attachment: Multiculturalism and psychotherapy.

Martínez Mejias, Sylvia, Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in affective bonding and attachment theory; Expert testimony in custody and special education cases; Assessment in early intervention and developmental disabilities.

Méndez Castillo, Milagros, Ph.D., Fordham University, 1993, Associate Professor. Research topics: Adolescent sexuality, Violence in schools, Health psychology, Psychology teaching.

Miranda Gierbolini, Dolores, Ph.D., Temple University, 1987, Professor. Research topics: Development of sustainable communities, Social movements, Social policy, Political

subjectivities, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

Morales Arandes, Edgardo, Ed.D., Boston University, 1986, Associate Professor. Research topics: Language and metaphor as models for constructing socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogical and collaborative practices; evidence-based psychotherapy; qualitative research.

Nina Estrella, Ruth V., Ph.D., National Autonomous University of Mexico, 1991, Professor. Research topics: Interpersonal communication, family, couple relationships, and sexuality and adolescence.

Ruiz Alfaro, Frances, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Research interests: Family bonds, special needs, relational constructionism, and generative practices in psychotherapy.

Santiago Estrada, Sara, Ph.D., University of Puerto Rico, 2013. Professor. Research topics: Transformations in work; Study of subjectivities in work scenarios, educational organizational settings; Organizational change.

Tirado Santiago, Giovanni, Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

Vale Nieves, Otomie, Ph.D., University of Puerto Rico, 1993, Professor.Research Topics: Technology and learning; development, subjectivity, and historical context; critical psychology; language and subjectivity; youth construction; technology and gender.

#### ADMISSION REQUIREMENTS:

General Requirements of the Río Piedras Campus https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

Specific Requirements of the Master's Program

- 1. Possess, or be in the process of completing no later than the summer of the year in which you wish to begin graduate studies, a bachelor's degree or equivalent from an accredited institution or university.
- 2. Have a general bachelor's degree academic index of no less than 3.00 points (or its equivalent in the grading system of the university of origin) or a general academic index (bachelor's and master's) of no less than 3.00 points if you have a master's degree.
- 3. Academic index of no less than 3.00 points in: (a) General or Introductory Psychology; (b) Social Psychology or a course related to the field applying; (c) Elements of Statistical Reasoning; (d) Psychological Research Methodology.
- 4. Have proficiency in Spanish and English.
- 5. Attend an interview.

Documents Required for Admission Application.

- 1. Application for Admission to Graduate Studies in electronic format.
- 2. Two Official transcripts.



- 3. Curriculum vitae.
- 4. Write an essay.

## Other Requirements (for Qualified Candidates):

1. Group interview (candidates will be notified of the appointment).

#### **GRADUATION REQUIREMENTS:**

In addition to the general requirements for obtaining a master's degree at the Río Piedras Campus, students must complete a residency semester.

## PROGRAM STUDY

Code	Course Title	Credits
Core Courses		
PSIC 6405	Theories of Personality	3
PSIC 6006	Applied Statistics to Psychology	3
PSIC 6007	Seminar on Psychological Research Methods	3
PSIC 6030	Proseminar in General and Applied Psychology: Ethical Issues in Psychology	1
Courses		22
PSYC 6401	Psychological Assessment I	3
PSYC 6403	Practice in Psychological Assessment I	1
PSYC 6408	Principles of Psychopathology	3
PSIC 6431	Practice in Clinical Psychology I	0
PSIC 6432	Practice in Clinical Psychology II	2
PSIC 6433	Practice in Clinical Psychology III	2
PSIC 6434	Practice in Clinical Psychology IV	2
PSYC 6020	Proseminar in General and Applied Psychology: Principles of Psychological Measurement	1
PSYC 6070	Proseminar in General and Applied Psychology: Society and Puerto Rican Culture	1
PSIC	Two courses in Clinical Skills	6
One of the fol	llowing courses	
PSIC 6040	Proseminar in General and Applied Psychology: Principles of Supervision	
PSIC 6050	Proseminar in General and Applied Psychology: Principles of Consulting	1
PSYC 6060	Proseminar in General and Applied Psychology: Evaluation of Programs and Services	
PSYC 6080	Proseminar in General and Applied Psychology: Employee Evaluation	
PSYC 6090	Proseminar in General and Applied Psychology: Employee Evaluation	
Elective Courses		9
Comprehensive Exam		0
Thesis		3
PSIC 6010 or PSIC 6995	Thesis Seminar	3
PSYC 6008	Thesis Work	0
	Total	44

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2024 to be included in the 2024-2025 Graduate Catalog.

PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week.

Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

PSYC 6402 Psychological Assessment II

Three to four credits. Two hours.

Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work, and the presentation of written reports.

PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408, and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

PSYC 6404 Practice in Psychological Assessment II

No credit. Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403, and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

PSYC 6408 Principles of Psychopathology

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

PSIC 6431 Practice in Clinical Psychology I

No credit. Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

PSIC 6432 Practice in Clinical Psychology II

Two credits.

Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

PSIC 6433 Practice in Clinical Psychology III

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

PSYC 6006 Statistics Applied to Psychology Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

PSYC 6007 Seminar: Methods of Psychological Research Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection

of areas, methods, and topics in psychological research.

PSYC 6008 Thesis Work No credits. Meeting by agreement. Prerequisite: PSYC 6010



The course is designed for those students who need guidance and advice from their thesis advisors regarding difficulties encountered in different phases of thesis research and in the preparation and writing of the thesis. The student will enroll in the course each semester in which they are carrying out their thesis work.

PSYC 6010 Thesis Seminar Three credits. Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose the student to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology One credit. Sixteen lecture hours per semester.

The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various models of man as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course.

PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultancy and advisory service models with the purpose of knowing and applying the basic principles of these models to situations requiring the advice of a psychologist.

PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.

PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course.

PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models for identifying community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

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Website: <a href="http://sociales.uprrp.edu/psicologia/">http://sociales.uprrp.edu/psicologia/</a>

**DEGREE:** 

## Master of Arts in Industrial Organizational Psychology

#### **FACULTY:**

**Dávila Marrero, Elixmahir**, Ph.D., University of Puerto Rico, 2005, Associate Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a tool for cognitive rehabilitation with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

**Espada Brignoni, Teófilo**, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Culture and subjectivity, Social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

**Galarza García, Laura,** Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace psychology; organizational strategy and change; Selection, development, and management of individual and organizational performance; Work engagement.

**García Ramos, Tania**, Ph.D., Complutense University of Madrid, 1995, Professor. Research topics: Industrial Organizational Psychology; Work and Organizational Psychology; Work and subjectivity; Theorization about work; research methodology; Epistemology of complexity.

**Gómez Escudero, María de los Ángeles**, Ph.D., Université de Paris V, 1991, Professor. Research topics: Parenthood and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

**Jiménez Torres, Aida**, Ph.D., University of Puerto Rico, 1993. Professor. Research topics: Family and Couples: Attachment: Multiculturalism and psychotherapy.

Martínez Mejias, Sylvia, Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in affective bonding and attachment theory; Expert testimony in custody and special education cases; Assessment in early intervention and developmental disabilities.

**Méndez Castillo, Milagros**, Ph.D. Fordham University 1993, Associate Professor. Research topics: Adolescent sexuality, Violence in schools, Health psychology, Psychology teaching.

**Miranda Gierbolini, Dolores**, Ph.D., Temple University, 1987, Professor. Research topics: Development of sustainable communities, Social movements, Social policy, Political subjectivities, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

**Morales Arandes, Edgardo**, Ed.D. Boston University 1986, Associate Professor. Research topics: Language and metaphor as models for constructing socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogical and collaborative practices; evidence-based psychotherapy; qualitative research.

**Nina Estrella, Ruth V**., Ph.D., National Autonomous University of Mexico, 1991, Professor. Research topics: Interpersonal communication, family, couple relationships, and sexuality and adolescence.

**Ruiz Alfaro, Frances**, Ph.D. University of Puerto Rico, 2014, Assistant Professor. Research topics: Research interests: Family bonds, special needs, relational constructionism, and generative practices in psychotherapy.

**Santiago Estrada, Sara**, Ph.D., University of Puerto Rico, 2013. Professor. Research topics: Transformations in work; Study of subjectivities in work scenarios, educational organizational settings; Organizational change.

**Tirado Santiago, Giovanni,** Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

#### **ADMISSION REQUIREMENTS**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

### **Specific Requirements of the Master's Program**

- 1. Possess, or be in the process of completing no later than the summer of the year in which you wish to begin graduate studies, a bachelor's degree or equivalent from an accredited institution or university.
- 2. Have a general bachelor's degree academic index of no less than 3.00 points (or its equivalent in the grading system of the university of origin) or a general academic index (bachelor's and master's) of no less than 3.00 points if you have a master's degree.
- 3. Academic index of no less than 3.00 points in: (a) General or Introductory Psychology; (b) Social Psychology or a course related to the field applying; (c) Elements of Statistical Reasoning; (d) Psychological Research Methodology.
- 4. Have proficiency in Spanish and English.
- 5. Attend an interview.



- 6. Documents Required for Admission Application.
- 7. Application for Admission to Graduate Studies in electronic format.
- 8. Official transcripts.
- 9. Curriculum vitae.
- 10. Write an essay.

## **STUDY PROGRAM**

## Master's degree with a specialization in Industrial-Organizational Psychology

Core Courses (10 credits)		
Code	Course Title	Credits
PSIC 6006	Applied Statistics to Psychology	3
PSIC 6007	Seminar: Psychological Research Methods	3
PSIC 6005	Theories of Personality	3
PSIC 6030	Module: Ethical Issues in Psychology	1
Elective courses (9 credits)		
XXXX		3
XXXX		3
XXXX		3
Specialty Cou	rrses (22 credits)	
PSIC 6025	Psychosocial Approach to the Study of Organizational Behavior	3
PSIC 6026	Psychological Approach to Development and Change in	3
	Organizations	
PSIC 6040	Proseminar in General and Applied Psychology: Principles of Supervision	1
PSIC 6050	Proseminar in General and Applied Psychology: Principles of Consulting	1
PSIC 6080	Proseminar in General and Applied Psychology: Employee Evaluation	1
PSIC 6201	Practicum in Industrial Social Psychology	3
PSIC 6205	Industrial Social Psychology	3
PSIC 6206	Construction of Psychological Tests	3
PSIC 6209	Psychosocial Aspects of Labor Regulation	3
SIC 6216	Laboratory of Construction of Psychological Tests	1
Comprehensi	ve Exam	
XXXX	Comprehensive Exam	0
Thesis		
PSIC 6010	Thesis Seminar /	3
PSIC 6995	Research Practicum	
PSIC 6008	Thesis Work	0

#### **COURSE DESCRIPTIONS:**

The following course descriptions are the most recent entries in the Student Information System of the Office of the Registrar at the Río Piedras Campus, as of November 30, 2023. These will be included in the 2023-2024 Graduate Catalog.

### **PSYC 6005 Theories of Personality**

Three credits.

Study of theories on the structure, dynamics, and development of personality, emphasizing contemporary approaches. Critical examination of the problems, theories, and research that help clarify the role of motivation in personality.

#### PSYC 6006 Statistics Applied to Psychology

Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

## PSYC 6007 Seminar: Methods of Psychological Research

Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection of areas, methods, and topics in psychological research.

#### **PSYC 6008 Thesis Work**

No credits. Independent studies.

Prerequisite: PSYC 6010

The course is designed for those students who need guidance and advice from their thesis advisors regarding difficulties encountered in different phases of thesis research and in the preparation and writing of the thesis. The student will enroll in the course each semester in which they are carrying out their thesis work.

#### **PSYC 6009 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to give the student a general examination of the eight areas of psychology that encompass what is typically taught in a general or introductory psychology course. The areas to be covered are: history and systems, sensation and physiological perception, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

#### **PSYC 6010 Thesis Seminar**

Three credits.

Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

#### **PSYC 6015 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide a general overview of the eight areas of psychology that are typically covered in a general or introductory psychology course. The areas to be covered are: history and systems, sensation and perception, physiological, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

# PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose the student to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

#### PSYC 6025 Psychosocial Approach to the Study of Organizational Behavior

Three credits. Three lecture hours per week.

Prerequisite: Admission to the Graduate Program.

The following topics are covered relatively quickly: organization design, motivation, satisfaction, communication, conflict, and others. The discussion deepens on some methods that have been used to try to facilitate change in organizations. Current administrative practice is critically evaluated, and an attempt is made to identify and question the ideology or set of values that informs it. The negative consequences of such ideology are illustrated, and the possibility that the human tendency to unilaterally control one's situation leads precisely to organizational ineffectiveness is discussed. An invitation is made to invent and explore models of control that lead to effectiveness.

#### PSYC 6026 Psychological Approach to Development and Change in Organizations

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6025

Various models for producing information relevant to organizational development and change are explored. The aim is to compare and evaluate these models so that the student becomes familiar with them and feels capable of beginning to explore the application of some.

# **PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology** One credit. Sixteen lecture hours per semester.

The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various psychological models of human behavior as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

# **PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision** One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course.

# **PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting** One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultancy and advisory service models with the purpose of knowing and applying the basic principles of these models to situations requiring the advice of a psychologist.

# PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.

# PSYC 6070 Proseminar in General and Applied Psychology: Society and Puerto Rican Culture

One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with the effect of variables resulting from Puerto Rican society and culture on individual and group behavior. An emphasis is placed on analyzing situations that require the intervention of the clinical psychologist in light of these variables.

# **PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation** One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course.



## PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models for identifying community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

## **PSYC 6105 Advanced Social Psychology**

Three credits. Three lecture hours per week.

The course is organized around the problem of the social construction of reality. It aims to develop both a theoretical and methodological framework for the study of this issue. To this end, various theories such as ethnomethodology, symbolic interactionism, and role theory are studied; and there will be a deeper exploration in areas such as deviance and social control, attitudes, attribution, social comparison, social movements, and ideology. An effort will be made to use literature from Puerto Rico to illustrate and understand the social construction of reality.

## **PSYC 6106 Community Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the Department Director.

The course aims to prepare future psychologists in the analysis and solution of psychosocial problems affecting the community.

#### PSYC 6107 Intercultural Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in Psychology.

This seminar aims to demonstrate the extent to which social psychology may be subject to cultural variations. Social psychology research in different cultures is studied, analyzed comparatively, and considered for its implications on existing theories. Research within the Puerto Rican culture is emphasized, and there is an attempt to replicate at least one foreign study in our culture.

## PSYC 6108 Psychology, Society, and Health

Three credits. One lecture hour and two discussion hours per week.

Prerequisite: PSYC 6106

Analysis of the socio-economic conditions, organizations, and social visions that affect the health and illness situation in Puerto Rico, and in other countries of the Americas. The role of the psychologist in relation to this issue.

#### PSYC 6109 The Group as a Means of Social Intervention

Three credits. Two lecture hours and three lab hours per week.



Prerequisite: PSYC 6105, 6106.

The application of group theories to social life will be studied to facilitate psychological, social, organizational, institutional, and community change.

# PSYC 6110 Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico

Three credits. Three lecture hours per week.

The seminar aims to gather relevant information regarding change agents in Puerto Rico such as: the search for the historical background of Puerto Rican society in its basic outlines: population, emigration and immigration, urbanization, poverty, slums, social stratification, education, housing, employment and unemployment, industrialization, and modernization. These topics or indicators of change, among others, will be analyzed based on objective and verifiable information from the review of literature from studies conducted here and elsewhere, with a psychological emphasis. It will explore how changes in these areas affect interpersonal relationships, human development, the formation of beliefs and values, and coexistence in Puerto Rico.

## PSYC 6115 Analysis of Strategies for Conflict and Crisis Management

Three credits. Three lecture hours per week.

Conceptual and formal analysis for the management of interpersonal, group, and community conflicts.

## PSYC 6116 Practice in Strategies for Conflict and Crisis Management

Credits: 0

Prerequisite: Concurrent with PSYC 6115.

Supervised practice in interventions aimed at managing interpersonal, group, and community conflicts.

#### PSYC 6120 Seminar in Community Psychology and Social Policy

Three credits. Three lecture hours per week.

Prerequisite: Permission from the director and the instructor.

The course attempts to examine the content of public policy in the areas of health, education, and social welfare as it applies to community psychology in Puerto Rico. Full understanding will allow for the effective planning of psychosocial intervention strategies.

## **PSYC 6131 Community Practice I**

Three credits.

The purpose of this practice is to expand the theoretical framework discussed in the courses of Advanced Social Psychology I and Community Psychology. It also aims to promote the acquisition of intervention skills in communities, formal groups, organizations, institutions, or geographical communities, data collection, and other aspects associated with research.

#### **PSYC 6132 Community Practice II**

Three credits.

This practice aims to expand the intervention and research skills acquired in Community Practice I.

### **PSYC 6133 Community Practice III**

Three credits.

Prerequisite: PSYC 6132

This practice aims to refine and expand the skills acquired in the Community Practice I and II courses and offers students the opportunity to acquire new community work skills in a new work setting.

## **PSYC 6195 Seminar on Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6105

Study of current problems and themes in social psychology and related areas.

#### **PSYC 6201 Practicum I**

Three credits. One lecture hour and twenty lab hours per week.

Students will dedicate at least 120 hours to practical work in an organization where they apply the concepts and techniques of the social-industrial program. Students will meet one hour weekly with the supervising professor to discuss problems and consult on references to study. As part of the course, each student will prepare a work that is publishable in a scientific journal.

#### **PSYC 6202 Practicum II**

Three credits. Three supervision hours and eight practice hours per week.

Prerequisite: PSYC 6201 and 6205.

Practice in government and private organizations with particular attention to the organizational problems of such institutions. The course includes 120 hours of practice, in addition to weekly meetings for supervision.

#### PSYC 6205 Industrial Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Being a graduate student.

Topics relevant to the world of work with high social content are covered. Topics include: historical significance of work and needs fulfilled by working, technology and job satisfaction, formal and informal organization, job analysis, recruitment and selection, introduction to performance evolution and training, as well as termination of employment (unemployment, retirement, and exit interviews).

## PSYC 6206 Construction of Psychological Tests

Three credits. Two lecture hours per week.

Prerequisite: PSYC 6006

Theory of constructing aptitude, intelligence, achievement, personality, and interest tests. Practice in the preliminary development of one of these types of tests.

#### PSYC 6209 Psychosocial Aspects of Labor Regulation

Three credits.

Prerequisite: Admission to the program.

Critical analysis of labor regulation in areas such as health, safety, schedules, wages, labor unions, and others.

## PSYC 6215 Psychosocial Approach to Organizational Conflicts

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director.

Analysis of psychological and sociological theories of organizational conflicts and strategies for their solutions.

## PSYC 6216 Psychological Test Construction Laboratory

One credit. One lab hour per week.

Prerequisite: To be taken concurrently with PSYC 6206.

Laboratory for drafting questions, item analysis, reliability determination, norms, equating, and validity in psychological tests.

#### PSYC 6218 Psychology and Occupational Health

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6205 or equivalent.

The course explores the workplace with an emphasis on the health, safety, and well-being of the workforce. It focuses on the interaction between the worker and their workplace and its effects on the worker's life both inside and outside the company. The course explores topics such as: the healthy organization, work-life balance and spillover effect, health and productivity, stress and health, workplace violence, physiological aspects of illness, safety and accidents, as well as intervention alternatives in work settings. As part of the course activities, students will develop a group intervention in an organization identified by them as a contribution to the organization and the quality of life of its members.

#### PSYC 6225 Techniques of Psychological Evaluation in Personnel Selection

Three credits. Three lecture hours per week.

Discussion of the main psychological evaluation techniques used in personnel selection. Face-to-face, hybrid, and online course.

# **PSYC 6227 Social Psychology of Work and Production in Contemporary Capitalist Society** Three credits. Three lecture hours per week.

Analysis of theories of alienation, communication, and organization in relation to changes in the economy and society, brought about by the contemporary crisis. The perspectives of social psychology in the technological era will be studied.

## PSYC 6301 Advanced Developmental Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in Psychology or permission from the advisor.

Study of the basic principles of human development with an emphasis on childhood and adolescence. Critical consideration of recent scientific findings. Special attention is given to the problems and peculiarities of childhood and adolescence in Puerto Rico.

## PSYC 6302 Advanced Developmental Psychology

Three credits.

Prerequisite: Bachelor's degree and with permission from the professor.

Based on the study of the principles governing human development, from conception to the end of adolescence. Subsequent evolutionary stages, such as early adulthood, middle adulthood, and the onset of old age, will be considered. Parallel to the study of human evolution during these periods, the psychological circumstances accompanying the achievement of fulfillment and the decline of life are discussed.

#### PSYC 6305 Advanced Statistical and Methodological Designs

Three credits. Three lecture hours per week.

Statistical analyses and designs, and the theory behind them.

## PSYC 6306 History and Systems of Psychology

Three credits. Three lecture hours per week.

Prerequisite: Admission to the graduate program.

The course examines the history of psychology, from ideas in the countries of the ancient East to contemporary psychology. It attempts to identify the historical links of the discipline. Finally, the state of the discipline and its history in Latin America are examined.

## **PSYC 6311 Teaching Psychology**

Three credits. Three lecture hours per week.

This course focuses on the teaching and assessment of the general psychology course. Innovations in teaching and instructional methods are examined. The central themes and debates of general psychology, course content, ethics in teaching, and assessment of achievement are discussed.

## PSYC 6312 Practice in Teaching Introductory Psychology

Three credits. Eight practice hours per week.

Prerequisite: PSYC 6311

A course designed to provide supervised experiences and skills in teaching psychology. The course includes supervised practice in different teaching methods.

## **PSYC 6315 Practice in Teaching Advanced Psychology Courses**

Three credits. Twelve supervised practice hours per week.

Prerequisites: PSYC 6312 and permission from the professor.

Organization and teaching of an advanced undergraduate psychology course under the supervision of a professor. Includes discussion of the philosophical foundations of teaching and the most recent aspects of the topic to be taught.

## PSYC 6317 Advanced Physiological Psychology

Three credits. Three lecture hours per week.

The course emphasizes a study of the relationship between an organism's physiological system and behavior. Special attention is given to the functioning of the central nervous system and its influence on behavior.

#### **PSYC 6318 Human Learning**

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director.

The course will broadly cover verbal memory and verbal behavior of humans. It will include a brief study of historical backgrounds and general methodology; the rest of the course consists of the study of various models of interpolation of memory and/or language.

#### PSYC 6325 Psychological Approach to the Study of Cognitive Processes

Three credits. Three lecture hours per week. Prerequisite: Permission from the director

Basic theories on the relationship between mental events and human behavior and effectiveness. The importance of cognitive processes in psychological practice in Puerto Rico is emphasized.

## PSYC 6327 Computer Use and Application in Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Introduction to terminology, principles, and common applications of computers in psychological work.

## PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week. Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

## PSYC 6402 Psychological Assessment II

Three to four credits. Two hours. Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work, and the presentation of written reports.

## PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408, and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

#### PSYC 6404 Practice in Psychological Assessment II

Credits: 0Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403. and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

#### PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

#### **PSYC 6406 Practice in Psychotherapy**

Credits: 0Eight hours of practice per week. Prerequisite: Enrolled in PSYC 6405.



Supervised practice in individual or group therapy. The practice is an integral part of the PSYC 6405 course.

## PSYC 6407 Emergency Clinic and Short-Term Psychotherapy

Three credits. Three hours of lecture per week.

Prerequisite: Professor's authorization.

The course proposes the study of clinical and ethical knowledge that allows, beyond the so-called intervention, a positioning that centrally embraces the words of individuals who come to the consulting room at a time of intricate conscious and unconscious phenomena that exceed their handling capacity and tolerance for distress, and to facilitate their connection with their crisis and symptoms as one not only affected by external events but as a production of their own complexity, subjectivity, and discourse.

## PSYC 6408 Principles of Psychopathology

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

## **PSYC 6409 Practice in Psychopathology**

Credits: 0Four hours of practice. Prerequisite: Enrolled in PSYC 6408.

Observation, interviews, preparation of case histories, diagnosis, and clinical discussion of behavioral disorders. The practice is an integral part of the PSYC 6408 course.

#### **PSYC 6410 Advanced Seminar in Behavior Modification**

Three credits. Three hours of lecture per week; practice (optional).

Prerequisite: PSYC 6417

Critical and intensive study of the theoretical framework of behavior modification principles and the therapeutic effectiveness of behavioral modification techniques.

## **PSYC 6416 Group Therapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: Graduate student in psychology.

The course will emphasize the theoretical and practical aspects of group therapy and will offer a human laboratory to experience client and therapist roles in a group psychotherapy setting.

## **PSYC 6417 Principles of Behavior Modification**

Three credits. Three hours of lecture and four hours of practicum.

Prerequisite: Graduate student in psychology.

Study of the basic psychological principles governing human behavior, particularly those derived from learning psychology. Emphasis will be placed on the application of social learning principles to the modification of psychotic, neurotic, and maladjusted behavior in clinical and educational institutions. Special attention will also be given to the critical discussion of recent scientific findings in behavioral modification with particular interest in the applicability of these findings to adjustment problems in Puerto Rico.

#### PSYC 6418 Disorders of Childhood Behavior

Three credits. Two hours of lecture per week; Practicum by agreement.

Prerequisite: Authorization from the Department Director.

Issues of etiology, classification, and management of children exhibiting extreme isolation, boundaryless behavior, odd and chaotic tendencies, and behavior determined by organic disorders. Theoretical frameworks, assessment techniques, and diagnosis are considered. Opportunities for practice will be provided. Lectures by guest consultants will be offered.

## **PSIC 6421 Family Therapy I**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: PSIC 6405, 6408

Study of some family therapy systems, their theoretical models, techniques used, and case analysis. Students are offered the opportunity to experience simulated family therapy experiences (laboratory) and to conceptualize their own experiences within the different family systems they share personally and professionally.

#### PSIC 6423 Practice in Family Therapy I

Three credits. Three to four hours of practice.

Prerequisite: PSIC 6405, 6408 and 6421

Observation experiences of family therapy sessions; opportunity to work with families as a cotherapist providing family therapy. Participation in Practice Center meetings, case discussions, and supervision meetings.

#### PSIC 6431 Practice in Clinical Psychology I

Credits: 0Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

#### **PSIC 6432 Practice in Clinical Psychology II**

Two credits.

Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## **PSIC 6433 Practice in Clinical Psychology III**

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6436 Intramural Practice in Clinical Psychology

Three credits.

Prerequisite: Director's authorization.

Supervised practice in psychotherapy (individual, group, couples, and/or families) and psychological assessment. This practice is carried out at the facilities of the University Center for Psychological Services and Studies (CUSEP) during the summer sessions.

#### **PSIC 6437 Introduction to Clinical Practice**

Three credits. One hour of lecture, one hour of discussion, and five hours of supervised practice per week.

The clinic is structured around concepts and foundations that provide a basis and context for the experiential experience (practice). This course will present basic concepts in a theoretical-practical-therapeutic integration. This will be specifically carried out through the discussion of different aspects: theoretical frameworks, clinical observation, interview styles and processes, clinical conceptualization, therapeutic processes, and clinical contexts.

#### **PSIC 6505 Module on Dreams**

One credit. Three hours of lecture per week.

Prerequisite: Director's authorization.

The meaning of dreams from a physiological and psychological point of view, Jung's dream theory and Dr. Efrén Ramírez's theory. Dr. Ramírez's dream interpretation method, and its utility in terms of personal development, as a psychotherapy method, and as a group therapy method.

### PSIC 6506 Colloquium on Psychology Topics

Credits: 0One hour of meeting per week.

Lectures, discussion, and exchange of ideas among department faculty, students, and invited speakers. Students will enroll each semester.

#### **PSIC 6507 The Psychology of Women**

Three credits. Three hours of lecture per week.

This course is organized around the question of whether there is a distinctly female psychology and what its biological and social determinants are. It studies the acquisition of sexual roles and their historical determination and transcultural relativity. The literature related to biological, sexual, cognitive, and affective functioning of women is reviewed. In addition, the development of feminist movements, the sociopolitical situation of women in industrial society, and the impact of these changes on the relationships between sexes, family, and Puerto Rican society are studied.

## PSIC 6510 Seminar on the Family in Puerto Rico

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Director's authorization.

Analysis and research on the history and psychosocial aspects of the family in Puerto Rico. The primary purpose of the seminar is to promote psychosocial research on the family and its issues.

#### PSIC 6515 Intelligence, Creativity, and Cognitive Complexity

Three credits. Three hours of lecture per week.

The concepts of intelligence, creativity, and cognitive complexity will be contrasted, and their relevance to contemporary Puerto Rican society will be determined.

## **PSIC 6516 Supervised Reading Course**

Three credits.

Prerequisite: Professor's authorization.

Readings revolve around a topic chosen by the student and the professor. The student covers the concepts with the professor's approval and prepares a monograph on the concept of their choice.

## PSIC 6517 Advanced Psychopharmacology and Neurophysiology of Drug Use and Abuse

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This course delves into the knowledge of the psychophysiological system and its alteration through the use of chemical substances. Students will become familiar with the chemical and pharmacological aspects of substances that are subject to abuse, as well as those used in various treatment modalities (methadone, naltrexone, etc.). Particular attention will be given to the study of human behavior and its interaction with the action of substances on the psychophysiological system.

## **PSIC 6518 Psychology of Adolescence**

Three credits. Two lecture hours and one discussion hour per week.

Prerequisite: PSIC 6301

Study of the theories and research explaining the typical processes of adolescence, considering the cultural variables that contribute to the formulation of such theories and the design of such research. Discussion of the physical, cognitive, social, and affective aspects of development, as well as the evolution of identity and sexuality in adolescence. Analysis of family processes, the school experience, peer relationships, and their influence on development.

## PSIC 6525 Psychological Analysis of Power

Three credits. Three lecture hours per week.

Analysis of the concept of power at the individual level (power traits, power motivation, control foci), and at the group level (leadership, gender relations). Some emphasis will be given to communal and institutional levels.

## **PSIC 6526 Spirituality in Psychology**

Three credits. One lecture hour, one discussion hour, and one workshop hour per week.

Prerequisites: PSCI 3005 or 3003

This graduate-level course examines the conceptualizations and contemporary debates about the notion of spirituality in psychology, particularly its integration into therapeutic practice and in the training of helping professionals. It reviews the ethical premises for psychology as it integrates spirituality into its research and practice.

#### **PSIC 6527 Fundamentals of Human Sexuality**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This introductory course aims to provide an overview of human sexuality. It includes processes for clarifying personal sexual attitudes and values. The topic will be approached from both a personal perspective and its social dimension. Students will examine some sexual issues in Puerto Rican society.

#### **PSIC 6528 Violence and Complexity**

Three credits. Three seminar hours per week.

The purpose of this course is to contribute to the development of a conceptual framework in which to locate violence as a complex, socially constructed phenomenon. It will study the relationships between psychic life and social life from the centrality that the signifier of violence has acquired in our contemporaneity. This includes a detailed examination of the relationships between the history of subject constitution and identifications (subjectivation) and the world we share with others (intersubjectivity) and its relation to violence. Contributions from psychoanalytic discourse to the analysis of violence will be examined, and dialogical relations between psychoanalytic discourse and other contemporary fields of theorization such as poststructuralism, deconstruction, social constructivism, and Lacanian psychoanalysis will be fostered. Critical examination of the contributions of traditional psychology on the topic of violence.

## PSIC 6529 Review and Critical Analysis of Psychological Literature in Puerto Rico

Three credits. Three lecture hours per week.

Prerequisite: Having passed a minimum of 9 graduate credits.

Review of research and publications made in Puerto Rico, their theoretical frameworks, methodology, and implications for understanding the psychological reality of Puerto Ricans. An analytical and critical framework will be provided.

# **PSIC 6535 Theoretical Controversies on Human Development: Early Childhood** Three credits.

Different aspects of human development from birth to seven years of age will be examined. The focus is epistemological, emphasizing the basic assumptions of the discipline, fundamental controversies, and the ideological and philosophical aspects of the theories examined.

# PSIC 6537 Psychopathology of Affective Development in Childhood: Psychoanalytic Perspective

Three credits.

Prerequisite: Director's authorization.

To provide a clinical view of the affective development of the child from a psychoanalytic perspective, allowing for an understanding of child psychopathology.

#### **PSIC 6545 Program Evaluation and Consulting**

Three credits. Three lecture hours per week.

Introduction to the basic concepts and methods of consulting and program evaluation and to the ethical and value controversies surrounding them. Emphasis is placed on developing skills in these areas and their application in public service programs and private non-profit agencies.

## PSIC 6546 Analysis of Interventions in Organizations: Theory and Practice

Three credits. Three lecture hours per week.

Prerequisite: PSIC 6025 or its equivalent, permission of the director or PSIC 6026.

Analysis of interventions carried out in public and private organizations in and outside of Puerto Rico, in light of the conceptual models that guide them. Different intervention models, their purposes, conceptual frameworks, and ethical principles will be presented. Analysis of the current applications of these and other models, paying particular attention to the congruence between theory and practice.

#### **PSIC 6555 School Psychology**

Three credits. Three discussion hours per week.

General orientation on school psychology, focusing the discussion on the public education system of Puerto Rico and on the ethical principles of the discipline. The various functions carried out in professional practice in this area and its historical development and future of school psychology will be highlighted.

## PSIC 6591 School Psychology Practice I

Three credits. Eleven hours of supervised practice per week.

Prerequisite: PSIC 6555

Supervised practice in the provision of services in the school context, including experiences such as: direct observation in the classroom, health promotion and prevention, community relations, interventions with academic and disciplinary problems.

## PSIC 6592 School Psychology Practice II

Three credits. Three hours of direct supervision and ten hours of practice per week in the school setting.

Prerequisites: PSIC 6401, 6403, 6555 and 6591.

Continuation of supervised practice in the provision of psychological services in a school setting. Students will gain experience in intervention strategies such as crisis and conflict intervention, management of specific behaviors in groups, interdisciplinary team work, psychoeducational evaluations, and program evaluations. This course complements PSIC 6591.

#### **PSIC 6995 Research Practicum**

One to four credits per semester.

Prerequisite: Enrollment in the graduate program and Professor's authorization.

The course is aimed at developing the student's skills necessary for psychological research through active participation in the development of research projects, under the supervision of a professor. The course can be repeated for credit, with no limit with the approval of the research professor.

#### PSIC 7005 Seminar in School Psychology: The Roles of the School Psychologist

Three credits. Fifteen hours of lecture per week.

Prerequisite: Director's authorization.

Study of the clinical process with learning and behavior problems. Emphasis on the integration of data from case histories, interviews, and psychometric tests.

## PSIC 8000 Philosophical Foundations of Psychology

Three credits. Three hours of lecture per week. Prerequisite: Admission to the graduate program.

Changes in the paradigms of science and their consequences in psychology.

#### **PSIC 8001 Dissertation Seminar**

Credits: 0Three hours of discussion per week.

Prerequisite: Master's degree or PSIC 6007. Permission of the director and/or graduate program

coordinator.

The dissertation is an original investigation demonstrating the student's capabilities as an independent researcher. During the dissertation seminar, the student will choose their research topic and problem, review the literature (relevant theoretical and empirical findings), and develop the research design or action plan. A formal proposal will be submitted to the dissertation committee for approval.

#### **PSIC 8002 Dissertation Work**

Credits: 0Three hours of discussion per week.

Prerequisite: PSIC 8001

This course is designed to follow up on the work done in the dissertation seminar. The proposed research will be completed, meaning that information will be collected and interpreted with the advice of the dissertation committee. The student will enroll in the course every semester they are working on their dissertation and will periodically submit written reports of their progress. The thesis work is completed by submitting the final draft of the dissertation.

# PSIC 8005 Seminar in School Psychology: Professional Problems in School Psychology Three credits. Three hours of lecture per week.

Examination and in-depth analysis of unresolved problems in the area of psychoeducational diagnosis and intervention and behavior modification; counseling, consulting, and advising parents.

## **PSIC 8007 School Psychology: Mental Health Consultation in Schools**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization., consortium student.

Consultation as a model of school psychological service. The student will become familiar with and trained in various modalities and levels of consultation to be used as a school psychologist. The investigative and evaluative aspects of consultation will be studied.

#### PSIC 8015 Advanced Social Psychology II

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

Examines the historical forms of subjectivity in areas of daily life such as child rearing, morality, sexuality, and love relationships.

### PSIC 8017 Seminar on Multiple Perspectives in Research II

Three credits. Three hours of lecture per week.

Prerequisite PSIC 6007

Examination of different theoretical fields in psychology and their research. Analysis of assumptions, research strategies, methods, and techniques most used.

## **PSIC 8018 Contemporary Social Research: Meeting with its Authors**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007 and PSIC 8017.

Various approaches in social science research by meeting researchers and discussing their research with them.

## PSIC 8019 The Social Scientist as a Judicial Expert

Three credits. Three hours of lecture per week.

Prerequisite: Master's degree in psychology or one of the social sciences.

Theoretical and practical considerations in preparing the social scientist as a judicial expert.

## PSIC 8027 Advanced Psychobiology: Foundations, Uses, and Controversies

Three credits.

The discussion period considers the influences of modern biology, particularly evolutionary, ethological, and systemic currents on the psychological conceptualization of humans. Essential concepts such as evaluation, adaptation, species-typical behavior, biological niche, and systemic organization. The discussion period is complemented with a practical laboratory considering the controversies and applications of a psychobiological approach.

## PSIC 8028 Psychopharmacology

Three credits. Three hours of lecture and seminar per week.

Prerequisites: PSIC 6317 or PSIC 8027.

The course will discuss aspects of psychopharmacology and neurophysiology. It will include lectures on Anatomy and Physiology of the nervous system, Synaptic Neurochemistry, Pharmacokinetics and Pharmacodynamics, and on the neuropharmacological impact of various drugs on consciousness and behavior states. The neurobiological bases of mental disorders, the mechanisms of action of different medications, and the strategies used in experimental studies and in clinical psychopharmacology will be studied. Anxiolytics and antidepressants, antipsychotic drugs, sedative hypnotics, and narcotics will be analyzed. The content will be presented from both a basic science perspective and a clinical orientation combining lectures and discussions of readings. The course is specially designed for students in the Clinical Psychology graduate program and doctoral students specializing in Academic-Research Psychology.

## **PSIC 8105 Psychology and Social Movements**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

The theoretical-practical contributions of psychology to social movements of the last decades in Puerto Rico are analyzed.

## **PSIC 8115 Social Psychology of Education**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105 or EDUC 6270.

Examination of education crisis in contemporary capitalist society. Critical analysis of the most important theoretical fields for its explanation. The social construction of education and the new subjectivity.

#### **PSIC 8125** The Sociocultural Study of the Mind

Three credits. One hour of lecture and one hour of discussion per week.

Analysis of the sociocultural approach as a conceptual framework in the study of the mind. Discussion of the historical background of the approach and its development to the present with an emphasis on the research program it has generated.

### **PSIC 8200 Foundations of Social Psychology and Current Topics**

Three credits. Three hours of lecture per week.

This course studies the theoretical and methodological foundations of social psychology. The course discusses classic and contemporary theories, majoring in social psychology research, as well as new trends, like the affective aspects of social behavior. This course is divided into four general units: epistemological and historical backgrounds, theorizing the individual in the social context, affective aspects of social dynamics, and power structures and contemporary related fields. In each unit, theoretical and methodological approaches are examined to allow students to develop an understanding of the field, as well as the research methodology from a social psychological perspective and integrate the social and affective aspects of behavior. Ethical issues related to theory, research, and psychosocial interventions are discussed. This course examines social and affective processes affecting behavior. In person course.

#### PISC 8201 Human Development: The Life Cycle

Three credits. Three hours of lecture per week.

The course offers a general overview of the theories and research related to the development of the human subject. It will cover the relationship between physical, cognitive, and socio-emotional development of the subject from childhood to old age. Emphasis will be placed on the theoretical and scientific bases of developmental psychology. The student will not only have information concerning developmental processes but also a critical understanding of the underlying processes

of human development. The course will emphasize the dynamic processes of development and the dialectic between psychological processes and development. In-person course.

# **PSIC 8202: Psychological Approach to the Study of Cognitive and Affective Processes** Three credits. Three hours of lecture per week.

This course studies the main theoretical models used to explain human cognitive and affective aspects of behavior. The emergence of cognitive psychology is examined considering sociohistorical transformations. Information processing models, genetic epistemology, the historical-cultural perspective, and affective processes are analyzed. Cognitive processes such as attention, sensation, perception, memory, language, and problem-solving are discussed. How affective processes and cultural differences shape cognitive processes and human behavior is analyzed. Inperson course.

## **PSIC 8203 Models and Techniques of Psychotherapy**

Three credits. Three hours of lecture per week.

This course focuses on the exposition of the different theoretical models of psychotherapy, as well as their origins and evolutions. Once the basis of the theoretical models is established, current therapeutic approaches will be examined from a critical viewpoint, emphasizing conceptual problems, methodology, and alternatives to address such issues. Evidence-based psychotherapeutic approaches used with different populations will also be discussed. In-person course.

## **PSIC 8204 Personality and Human Diversity**

Three credits. Three hours of lecture per week.

This course addresses the categories of personality, subjectivity, and subjectivation from a critical and complex approach. It examines the paradigmatic assumptions underlying personality theories and traditional approaches in the study of human beings. It proposes a conceptual approach that includes debates on humans from the complexity paradigm, constructivism, psychoanalytic theory, and updated foundational psychological premises. It explores the application of this conceptual approach to the human, relevant in contemporary clinical practice, as well as considerations of the Puerto Rican population and the unavoidable sensitivity towards differences and cultural and individual diversity necessary in psychological training. In-person course.

#### PSIC 8205 Advanced Psychological Assessment

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 6401 AND PSIC.

Training in the administration and interpretation of various techniques used in personality assessment such as: TAT, Bender Gestalt, and Person Drawing. Includes supervised practical work, laboratory work, and the presentation of written reports. In-person course.

#### **PSIC 8206 Advanced Practice in Psychological Assessment**

One credit.

Prerequisites: PSIC 6401 and PSIC 6403.

Corequisite: PSIC 8205

Intensive practice in the administration and assessment of the following tests: Thematic Apperception Test (TAT), Children's Apperception Test (CAT), Bender Gestalt Visual-Motor Test, Human Figure Drawing among other tests. This includes tests discussed in PSIC 6401; Psychological Assessment I and applied in PSIC 6403 practice experiences. Personality inventories such as the Personality Assessment Inventory (PAI), the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and basic concepts of the Rorschach are also included. Emphasis is placed on the clinical approach to the responses of the subjects with whom one works, which are part of their discourse and life history. In-person course.

#### **PSIC 8215 Psychology and Law**

Three credits.

Analysis of basic concepts common to psychology and law.

## PSIC 8216 Employment and Discrimination.

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

Critical analysis of employment discrimination and its consequences.

#### **PSIC 8300 Advanced Clinical Psychology Practice**

One credit. Three hours of supervised practice.

Prerequisites: PSIC 6434

This advanced clinical practice in psychotherapy (individual, group, couples, and/or families, and/or psychological assessments) allows students to increase their in-person clinical hours and refine their clinical skills. During this advanced practice, students will also increase exposure to diverse populations and rotate through external clinical practices. In-person course.

## **PSIC 8301 Advanced Family and Couples Therapy**

Three credits. Three lecture hours per week. Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8302

This course offers students an overview of family and couple's therapy basic concepts and fundamentals. They will also become familiar with the different systemic theoretical models. Different techniques used by the various theoretical models will be emphasized. Similarly, they will develop group research skills that address some family or couple's issue. In-person course.

#### **PSIC 8302 Advanced Practice in Family and Couples**

One credit. Supervised practice.

Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8301

This course is a clinical practice where the student has the opportunity to acquire advanced clinical skills to work with couples and families from a systemic perspective. During this clinical practice, the student will have interventions with clinical cases using one or several systemic theoretical models. This practice must be taken simultaneously with the theoretical course in advanced therapy for families and couples. In-person course.

#### **PSIC 8303 Research Practice**

One credit.

The aim of this course is to foster research experience in students. They will join a faculty member's project to acquire and refine research skills. They will be working under the supervision of a mentor/researcher. Students must attend weekly one hour research sessions under the mentorship of their supervisor. Each research project of the supervisor will have a brief description of their research. This course can be taken more than once to continue with a research project. In addition, their respective research supervisors will add additional references to the course. Inperson course.

## **PSIC 8304 Clinical Supervision Seminar**

One credit.

Prerequisite: PSIC 6433

This course provides students with an overview of clinical supervision and the different approaches and models of supervision applied to clinical psychology. The student is exposed to the development of supervision as a fundamental part of a psychologist's training. The student will appreciate different conceptualizations of clinical supervision according to each theoretical model and its particular objectives, approaches, and strategies. Additionally, they will learn the difference between supervision and consultancy. Moreover, the student will have the opportunity to create and develop instruments to measure variables that should be present in each psychotherapeutic model. There will be integration into theory and research in seeking research publications on psychotherapy and supervision. In-person course.

#### PSIC 8335 Research Methods in Psychology on Human Development

One credit. Three lecture hours per week.

Prerequisite: PSIC 6006, 6007, 6301 and authorization.

Discussion of the most frequently used methods in psychological research on human development. Examination of the central issues of time analysis, life changes, contributions of the evolutionary approach, and the relationship between research and theory development.

#### PSIC 8405 Attachment Theory: Critical Analysis and Clinical Application

Three credits. Three lecture hours per week.

Analyzes the basic assumptions of the theory based on ethological study. It is compared with other dynamic approaches and clinical applications are derived.

## **PSIC 8407 Rorschach Technique**

Four credits. Three lecture hours and three hours of supervised practice per week.

Prerequisites: PSIC 6020, 6401 and 6402.

Introductory course in the Rorschach psychological assessment technique. Includes the theoretical basis, principles of administration, scoring, and interpretation. Provides practical experience.

## **PSIC 8409 Psychotherapeutic Research: Process and Outcome**

Three credits. Two hours of lecture and discussion and one hour of practice per week.

Prerequisite: Professor's authorization.

Formal research on psychotherapy programs for children, adolescents, and adults in various modalities (such as individual, group, couples, and family). Examination of research on psychotherapeutic processes and outcomes.

#### PSIC 8411 Seminar on Psychoanalysis Part I: Adult

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Study of Freud's writings, essential for understanding subjectivity.

## PSIC 8412 Seminar on Psychoanalysis Part II: Child

Three credits. Three hours of lecture per week.

Study of the basic texts of the most important psychoanalysts in the field of child psychoanalysis.

### PSIC 8415 Analysis and Reflection on the Practice of Clinical Psychology in Puerto Rico

Three credits. Three hours of lecture per week and nine hours of laboratory.

Prerequisites: PSIC 6431, 6432, 6433 and 6434.

Advanced supervised practice in psychotherapy (individual, group, couples and/or families, and/or psychological evaluations). The practice allows students to generate new approaches and intervention models, refine clinical skills and deepen in specific populations or issues. This practice course consists of three credits per semester and can be repeated up to three times.

### **PSIC 8416 Psychological Evaluation of Children with Disabilities**

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 3025, 6301, 6401, 6402, 6403 and 6404.

Theoretical and methodological controversies on the psychological evaluation of children with disabilities. Examination of the effects of disability on the development of children, on their families, and the issue of social and educational placement.

## **PSIC 8420 Seminar: Study of Families**

Three credits.

Prerequisite: PSIC 6421

Critical study of theoretical and research literature on families and its applicability in Puerto Rico. Research techniques for studying families in Puerto Rico will be developed.

## **PSIC 8425 Seminar on Supervision in Psychotherapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: 60 graduate credits in clinical psychology or its equivalent.

Critical consideration of theoretical and practical aspects of psychotherapy supervision. Practical experience in observation, research, and supervision.

## **PSIC 8495 Internship in Clinical Psychology**

No credits.

Prerequisite: Authorization from the department director or graduate program coordinator and PSIC 6431, 6432, 6433, 6434.

Supervised practice in clinical psychology up to the accumulation of 2,000 hours of professional experience as the last requirement for the doctoral degree.

#### **PSIC 8505 Psychology and Reason**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007

Analysis of the body/mind separation and the "software/hardware" split of labor and its consequences in the constitution and development of psychology.

### PSIC 8506 Advanced Seminar in Community Psychology: Contemporary Debates

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105; PSIC 6106.

Contemporary debates in community psychology and their realization in research and intervention. The discussion is framed within community psychology in Puerto Rico.

#### **PSIC 8507 Consultation in the School Context**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PSIC 6555

Study of the different roles and functions of the consultant in the school context. Deep discussion of the basic principles and intervention models in professional psychological consultancy. Emphasis on the stages of the consultancy relationship and the processes that develop during intervention.

#### **PSIC 8508 Practice of Consultation in the School Context**

Zero credits. Ten hours of supervised practice and three hours of supervision.

Prerequisite: PSIC 6555

Supervised practice in consultation in the school context where theoretical knowledge is applied, and discipline-specific skills are developed. This course complements consultation in the school context (PSIC 8507).

## PSIC 8515 Biological Approaches to the Study of Psychopathology

Three credits. Three hours of seminar per week.

Prerequisite: PSIC 6408, PSIC 6317 or PSIC 8027.

Study of biological models proposed to explain various human psychopathological conditions. Emphasis on critical analysis of research supporting or contradicting these models and on pharmacological interventions derived from them. Analysis of the most important controversies in their application and their impact on psychology practice.

## **PSIC 8516 Psychoeducational Evaluation**

Three credits. Three hours of lecture per week and two hours of supervised practice per week. Prerequisites: PSIC 6401, 6403 and 6555.

Analysis of concepts and psychological and educational strategies used in psychoeducational evaluation. Includes conceptualization of school context evaluations, evaluations of academic achievement, basic skills in writing, reading mathematics, and social performance and dynamic cognitive aspects, and pedagogical strategies. The course integrates, as fundamental aspects of the psychoeducational evaluation, modalities of corrective and remedial intervention strategies. The course provides for the application of concepts and the development of specific skills that allow for psychoeducational evaluations.

### PSIC 8525 Play: Reflection, Analysis, and Intervention

Three credits. Two hours of lecture per week and two hours of supervised practice per week. Prerequisite: PSIC 8405 and PSIC 8412.

Study of children's plays from a psychoanalytic and interactional perspective and its implications in clinical practice with children. Critical examination of other theoretical perspectives and their clinical application. Supervised practice in clinical intervention.



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#### **DEGREE:**

Master of Arts in Research Psychology in Neurocognition and Human Development

#### **FACULTY:**

**Cruz Bermúdez, Nelson D.**, Ph.D., Brandeis University, 2007, Professor. Research topics: Neuroscience of addiction and mental disorders; neuro-education.

**Dávila Marrero, Elixmahir**, Ph.D. University of Puerto Rico, 2005, Associate Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a tool for cognitive rehabilitation with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

**Espada Brignoni, Teófilo**, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Culture and subjectivity, Social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

**Galarza García, Laura**, Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace psychology; organizational strategy and change; Selection, development, and management of individual and organizational performance; Work engagement.

**García Ramos, Tania**, Ph.D. Complutense University of Madrid, 1995, Professor. Research topics: Industrial Organizational Psychology; Work and Organizational Psychology; Work and subjectivity; Theorization about work; research methodology; Epistemology of complexity.

**Gómez Escudero, María de los Ángeles,** Ph.D., Université de Paris V, 1991, Professor. Research topics: Parenthood and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

**Jiménez Torres, Aida**, Ph.D., University of Puerto Rico, 1993. Professor. Research topics: Family and Couples: Attachment: Multiculturalism and psychotherapy.

Martínez Mejias, Sylvia, Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in affective bonding and attachment theory; Expert testimony in custody and special education cases; Assessment in early intervention and developmental disabilities.



**Méndez Castillo, Milagros**, Ph.D. Fordham University, 1993, Associate Professor. Research topics: Adolescent sexuality, Violence in schools, Health psychology, Psychology teaching.

**Miranda Gierbolini, Dolores**, Ph.D., Temple University, 1987, Professor. Research topics: Development of sustainable communities, Social movements, Social policy, Political subjectivities, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

**Morales Arandes, Edgardo**, Ed.D. Boston University, 1986, Associate Professor. Research topics: Language and metaphor as models for constructing socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogical and collaborative practices; evidence-based psychotherapy; qualitative research.

**Nina Estrella, Ruth V.,** Ph.D., National Autonomous University of Mexico, 1991, Professor. Research topics: Interpersonal communication, family, couple relationships, and sexuality and adolescence.

**Ruiz Alfaro, Frances**, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Research interests: Family bonds, special needs, relational constructionism, and generative practices in psychotherapy.

**Santiago Estrada, Sara**, Ph.D., University of Puerto Rico, 2013. Professor. Research topics: Transformations in work; Study of subjectivities in work scenarios, educational organizational settings; Organizational change.

**Tirado Santiago, Giovanni**, Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

### **ADMISSION REQUIREMENTS**

### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Requirements of the Master's Program**

- 1. Bachelor's degree or equivalent from an accredited institution or university; or a bachelor's degree in progress to be completed no later than the summer of the year you wish to begin graduate studies.
- 2. Bachelor's degree with an academic index of no less than 3.00 points (or its equivalent in the grading system of the university of origin) or a general academic index (bachelor's and master's) of no less than 3.00 points if you have a master's degree.

- 3. Academic index of no less than 3.00 points in: (a) General or Introductory Psychology; (b) Social Psychology or a course related to the specialization field; (c) Elements of Statistical Reasoning; (d) Psychological Research Methodology.
- 4. Spanish and English proficiency
- 5. Attend an-interview.
- 6. Documents Required for Admission Application
- 7. Application for Admission to Graduate Studies in electronic format.
- 8. Official academic transcripts.
- 9. Curriculum vitae.
- 10. Written essay.

## **STUDY PROGRAM:**

Core Courses (12 credits)			
Code	Course Title	Credits	
PSIC 6006	Applied Statistics to Psychology	3	
PSIC 6007	Seminar: Psychological Research Methods	3	
PSIC 6305	Advanced Methodological Designs and Statistics	3	
PSIC 8017	Seminar on Multiple Perspectives in Research II	3	
Specialty Courses (15 credits)			
PSIC 6301	Advanced Developmental Psychology I	3	
PSIC 6317	Advanced Physiological Psychology	3	
PSIC 8202	Psychological Approach to the Study of Cognitive and Affective Processes	3	
PSIC 6995	Research Practicum I	3	
PSIC 6995	Research Practicum II	3	
XXXX	APA Writing and Style Workshop	0	
XXXX	Proposal Writing Workshop	0	
Elective courses (3 credits)			
XXXX		0	
Comprehensive Exam			
XXXX	Comprehensive Exam	0	

### **COURSE DESCRIPTIONS**

The following course descriptions are the most recent entries in the Student Information System of the Office of the Registrar at the Río Piedras Campus, as of November 30, 2023. These will be included in the 2023-2024 Graduate Catalog.

### **PSYC 6005 Theories of Personality**

Three credits.

Study of theories on the structure, dynamics, and development of personality, emphasizing contemporary approaches. Critical examination of the problems, theories, and research that help clarify the role of motivation in personality.

## **PSYC 6006 Statistics Applied to Psychology**

Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

## PSYC 6007 Seminar: Methods of Psychological Research

Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection of areas, methods, and topics in psychological research.

#### **PSYC 6008 Thesis Work**

No credits. Independent studies.

Prerequisite: PSYC 6010

The course is designed for those students who need guidance and advice from their thesis advisors regarding difficulties encountered in different phases of thesis research and in the preparation and writing of the thesis. The student will enroll in the course each semester in which they are carrying out their thesis work.

#### PSYC 6009 Proseminar in General Psychology

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director

The purpose of this course is to give the student a general examination of the eight areas of psychology that encompass what is typically taught in a general or introductory psychology course. The areas to be covered are history and systems, sensation and physiological perception, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

#### **PSYC 6010 Thesis Seminar**

Three credits.

Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

## **PSYC 6015 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide a general overview of the eight areas of psychology that are typically covered in a general or introductory psychology course. The areas to be covered are history and systems, sensation and perception, physiological, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

## PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose the student to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

## PSYC 6025 Psychosocial Approach to the Study of Organizational Behavior

Three credits. Three lecture hours per week.

Prerequisite: Admission to the Graduate Program.

The following topics are covered relatively quickly: organization design, motivation, satisfaction, communication, conflict, and others. The discussion deepens on some methods that have been used to try to facilitate change in organizations. Current administrative practice is critically evaluated, and an attempt is made to identify and question the ideology or set of values that informs it. The negative consequences of such ideology are illustrated, and the possibility that the human tendency to unilaterally control one's situation leads precisely to organizational ineffectiveness is discussed. An invitation is made to invent and explore models of control that lead to effectiveness.

### PSYC 6026 Psychological Approach to Development and Change in Organizations

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6025

Various models for producing information relevant to organizational development and change are explored. The aim is to compare and evaluate these models so that the student becomes familiar with them and feels capable of beginning to explore the application of some.

# PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology One credit. Sixteen lecture hours per semester.

The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various psychological models of human



behavior as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

## PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course.

# **PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting** One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultant and advisory service models with the purpose of knowing and applying the basic principles of these models to situations requiring the advice of a psychologist.

## PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.

## PSYC 6070 Proseminar in General and Applied Psychology: Society and Puerto Rican Culture

One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with the effect of variables resulting from Puerto Rican society and culture on individual and group behavior. An emphasis is placed on analyzing situations requiring the intervention of the clinical psychologist considering these variables.

# **PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation** One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course.

## PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models for identifying community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

#### PSYC 6105 Advanced Social Psychology

Three credits. Three lecture hours per week.

The course is organized around the problem of the social construction of reality. It aims to develop both a theoretical and methodological framework to study social construction. To this end, various theories such as ethnomethodology, symbolic interactionism, and role theory are studied; and there will be a deeper exploration in areas such as deviance and social control, attitudes, attribution, social comparison, social movements, and ideology. An effort will be made to use literature from Puerto Rico to illustrate and understand the social construction of reality.

#### **PSYC 6106 Community Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the Department Director.

The course aims to prepare future psychologists in the analysis and solution of psychosocial problems affecting the community.

## **PSYC 6107 Intercultural Social Psychology**

Three credits. Three lecture hours per week. Prerequisite: Bachelor's degree in psychology.

This seminar aims to demonstrate the extent to which social psychology may be subject to cultural variations. Social psychology research in different cultures is studied, analyzed comparatively, and considered for its implications on existing theories. Research within the Puerto Rican culture is emphasized, and there is an attempt to replicate at least one foreign study in our culture.

### PSYC 6108 Psychology, Society, and Health

Three credits. One lecture hour and two discussion hours per week.

Prerequisite: PSYC 6106

Analysis of the socio-economic conditions, organizations, and social visions that affect the health and illness situation in Puerto Rico, and in other countries of the Americas. The role of the psychologist in relation to this issue.

### PSYC 6109 The Group as a Means of Social Intervention

Three credits. Two lecture hours and three lab hours per week.

Prerequisite: PSYC 6105, 6106.

The application of group theories to social life will be studied to facilitate psychological, social, organizational, institutional, and community change.

## PSYC 6110 Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico

Three credits. Three lecture hours per week.

The seminar aims to gather relevant information regarding change agents in Puerto Rico such as: the search for the historical background of Puerto Rican society in its basic outlines: population, emigration and immigration, urbanization, poverty, slums, social stratification, education, housing, employment and unemployment, industrialization, and modernization. These topics or indicators of change, among others, will be analyzed based on objective and verifiable information from the review of literature from studies with a psychological emphasis. It will explore how changes in these areas affect interpersonal relationships, human development, the formation of beliefs and values, and coexistence in Puerto Rico.

### PSYC 6115 Analysis of Strategies for Conflict and Crisis Management

Three credits. Three lecture hours per week.

Conceptual and formal analysis for the management of interpersonal, group, and community conflicts.

## PSYC 6116 Practice in Strategies for Conflict and Crisis Management

No credit.

Prerequisite: Concurrent with PSYC 6115

Supervised practice in interventions aimed at managing interpersonal, group, and community conflicts.

## PSYC 6120 Seminar in Community Psychology and Social Policy

Three credits. Three lecture hours per week.

Prerequisite: Permission from the director and the instructor

The course attempts to examine the content of public policy in the areas of health, education, and social welfare as it applies to community psychology in Puerto Rico. Full understanding will allow for the effective planning of psychosocial intervention strategies.

#### **PSYC 6131 Community Practice I**

Three credits.

The purpose of this practice is to expand the theoretical framework discussed in the courses of Advanced Social Psychology I and Community Psychology. It also aims to promote the acquisition of intervention skills in communities, formal groups, organizations, institutions, or geographical communities, data collection, and other aspects associated with research.

#### **PSYC 6132 Community Practice II**

Three credits.

This practice aims to expand the intervention and research skills acquired in Community Practice I.

#### **PSYC 6133 Community Practice III**

Three credits.

Prerequisite: PSYC 6132

This practice aims to refine and expand the skills acquired in the Community Practice I and II courses and offers students the opportunity to acquire new community work skills in a new work setting.

## **PSYC 6195 Seminar on Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6105

Study of current problems and themes in social psychology and related areas.

#### PSYC 6201 Practicum I

Three credits. One lecture hour and twenty lab hours per week.

Students will dedicate at least 120 hours to practical work in an organization where they apply the concepts and techniques of the social-industrial program. Students will meet one hour weekly with the supervising professor to discuss problems and consult on references to study. As part of the course, each student will prepare a work that is publishable in a scientific journal.

#### PSYC 6202 Practicum II

Three credits. Three supervision hours and eight practice hours per week.

Prerequisite: PSYC 6201 and 6205.

Practice in government and private organizations with particular attention to the organizational problems of such institutions. The course includes 120 hours of practice, in addition to weekly meetings for supervision.

#### PSYC 6205 Industrial Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Being a graduate student.

Topics relevant to the world of work with high social content are covered. Topics include: historical significance of work and needs fulfilled by working, technology and job satisfaction, formal and informal organization, job analysis, recruitment and selection, introduction to performance evolution and training, as well as termination of employment (unemployment, retirement, and exit interviews).

#### **PSYC 6206 Construction of Psychological Tests**

Three credits. Two lecture hours per week.

Prerequisite: PSYC 6006

Theory of constructing aptitude, intelligence, achievement, personality, and interest tests. Practice in the preliminary development of one of these types of tests.

## PSYC 6209 Psychosocial Aspects of Labor Regulation

Three credits.

Prerequisite: Admission to the program.

Critical analysis of labor regulation in areas such as health, safety, schedules, wages, labor unions, and others.

## PSYC 6215 Psychosocial Approach to Organizational Conflicts

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Analysis of psychological and sociological theories of organizational conflicts and strategies for their solutions.

## PSYC 6216 Psychological Test Construction Laboratory

One credit. One lab hour per week.

Prerequisite: To be taken concurrently with PSYC 6206.

Laboratory for drafting questions, item analysis, reliability determination, norms, equating, and validity in psychological tests.

## **PSYC 6218 Psychology and Occupational Health**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6205 or equivalent.

The course explores the workplace with an emphasis on the health, safety, and well-being of the workforce. It focuses on the interaction between the worker and their workplace and its effects on the worker's life both inside and outside the company. The course explores topics such as: the healthy organization, work-life balance and spillover effect, health and productivity, stress and health, workplace violence, physiological aspects of illness, safety and accidents, as well as intervention alternatives in work settings. As part of the course activities, students will develop a group intervention in an organization identified by them as a contribution to the organization and the quality of life of its members.

### PSYC 6225 Techniques of Psychological Evaluation in Personnel Selection

Three credits. Three lecture hours per week.

Discussion of the main psychological evaluation techniques used in personnel selection. Face-to-face, hybrid, and online course.

## **PSYC 6227 Social Psychology of Work and Production in Contemporary Capitalist Society** Three credits. Three lecture hours per week.

Analysis of theories of alienation, communication, and organization in relation to changes in the economy and society, brought about by the contemporary crisis. The perspectives of social psychology in the technological era will be studied.

## PSYC 6301 Advanced Developmental Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in Psychology or permission from the advisor.

Study of the basic principles of human development with an emphasis on childhood and adolescence. Critical consideration of recent scientific findings. Special attention is given to the problems and peculiarities of childhood and adolescence in Puerto Rico.

## PSYC 6302 Advanced Developmental Psychology

Three credits.

Prerequisite: Bachelor's degree and with permission from the professor.

Based on the study of the principles governing human development, from conception to the end of adolescence. Subsequent evolutionary stages, such as early adulthood, middle adulthood, and the onset of old age, will be considered. Parallel to the study of human evolution during these periods, the psychological circumstances accompanying the achievement of fulfillment and the decline of life are discussed.

#### PSYC 6305 Advanced Statistical and Methodological Designs

Three credits. Three lecture hours per week.

Statistical analyses and designs, and the theory behind them.

### PSYC 6306 History and Systems of Psychology

Three credits. Three lecture hours per week.

Prerequisite: Admission to the graduate program.

The course examines the history of psychology, from ideas in the countries of the ancient East to contemporary psychology. It attempts to identify the historical links of the discipline. Finally, the state of the discipline and its history in Latin America are examined.

## **PSYC 6311 Teaching Psychology**

Three credits. Three lecture hours per week.

This course focuses on the teaching and assessment of the general psychology course. Innovations in teaching and instructional methods are examined. The central themes and debates of general psychology, course content, ethics in teaching, and assessment of achievement are discussed.

## **PSYC 6312 Practice in Teaching Introductory Psychology**

Three credits. Eight practice hours per week.

Prerequisite: PSYC 6311

A course designed to provide supervised experiences and skills in teaching psychology. The course includes supervised practice in different teaching methods.

## **PSYC 6315 Practice in Teaching Advanced Psychology Courses**

Three credits. Twelve supervised practice hours per week.

Prerequisites: PSYC 6312 and permission from the professor.

Organization and teaching of an advanced undergraduate psychology course under the supervision of a professor. Includes discussion of the philosophical foundations of teaching and the most recent aspects of the topic to be taught.

#### PSYC 6317 Advanced Physiological Psychology

Three credits. Three lecture hours per week.

The course emphasizes a study of the relationship between an organism's physiological system and behavior. Special attention is given to the functioning of the central nervous system and its influence on behavior.

#### **PSYC 6318 Human Learning**

Three credits. Three lecture hours per week. Prerequisite: Permission from the director

The course will broadly cover verbal memory and verbal behavior of humans. It will include a brief study of historical backgrounds and general methodology; the rest of the course consists of the study of various models of interpolation of memory and/or language.

### PSYC 6325 Psychological Approach to the Study of Cognitive Processes

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Basic theories on the relationship between mental events and human behavior and effectiveness. The importance of cognitive processes in psychological practice in Puerto Rico is emphasized.

### PSYC 6327 Computer Use and Application in Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Introduction to terminology, principles, and common applications of computers in psychological work.

#### PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week.

Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

#### PSYC 6402 Psychological Assessment II

Three to four credits. Two hours. Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work, and the presentation of written reports.

## PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408, and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

## PSYC 6404 Practice in Psychological Assessment II

Credits: 0Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403, and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

## PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

#### PSYC 6406 Practice in Psychotherapy

Credits: 0Eight hours of practice per week. Prerequisite: Enrolled in PSYC 6405.

Supervised practice in individual or group therapy. The practice is an integral part of the PSYC 6405 course.



## PSYC 6407 Emergency Clinic and Short-Term Psychotherapy

Three credits. Three hours of lecture per week.

Prerequisite: Professor's authorization.

The course proposes the study of clinical and ethical knowledge that allows, beyond the so-called intervention, a positioning that centrally embraces the words of individuals who come to the consulting room at a time of intricate conscious and unconscious phenomena that exceed their handling capacity and tolerance for distress, and to facilitate their connection with their crisis and symptoms as one not only affected by external events but as a production of their own complexity, subjectivity, and discourse.

## **PSYC 6408 Principles of Psychopathology**

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

## **PSYC 6409 Practice in Psychopathology**

Credits: 0Four hours of practice. Prerequisite: Enrolled in PSYC 6408.

Observation, interviews, preparation of case histories, diagnosis, and clinical discussion of behavioral disorders. The practice is an integral part of the PSYC 6408 course.

#### **PSYC 6410 Advanced Seminar in Behavior Modification**

Three credits. Three hours of lecture per week; practice (optional).

Prerequisite: PSYC 6417.

Critical and intensive study of the theoretical framework of behavior modification principles and the therapeutic effectiveness of behavioral modification techniques.

#### **PSYC 6416 Group Therapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: Graduate student in psychology.

The course will emphasize the theoretical and practical aspects of group therapy and will offer a human laboratory to experience client and therapist roles in a group psychotherapy setting.

#### **PSYC 6417 Principles of Behavior Modification**

Three credits. Three hours of lecture and four hours of practicum.

Prerequisite: Graduate student in psychology.

Study of the basic psychological principles governing human behavior, particularly those derived from learning psychology. Emphasis will be placed on the application of social learning principles

to the modification of psychotic, neurotic, and maladjusted behavior in clinical and educational institutions. Special attention will also be given to the critical discussion of recent scientific findings in behavioral modification with particular interest in the applicability of these findings to adjustment problems in Puerto Rico.

### **PSYC 6418 Disorders of Childhood Behavior**

Three credits. Two hours of lecture per week; Practicum by agreement.

Prerequisite: Authorization from the Department Director.

Issues of etiology, classification, and management of children exhibiting extreme isolation, boundaryless behavior, odd and chaotic tendencies, and behavior determined by organic disorders. Theoretical frameworks, assessment techniques, and diagnosis are considered. Opportunities for practice will be provided. Lectures by guest consultants will be offered.

## PSIC 6421 Family Therapy I

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: PSIC 6405, 6408.

Study of some family therapy systems, their theoretical models, techniques used, and case analysis. Students are offered the opportunity to experience simulated family therapy experiences (laboratory) and to conceptualize their own experiences within the different family systems they share personally and professionally.

## **PSIC 6423 Practice in Family Therapy I**

Three credits. Three to four hours of practice.

Prerequisite: PSIC 6405, 6408 and 6402.

Observation experiences of family therapy sessions; opportunity to work with families as a cotherapist providing family therapy. Participation in Practice Center meetings, case discussions, and supervision meetings.

### PSIC 6431 Practice in Clinical Psychology I

Credits: 0Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

### **PSIC 6432 Practice in Clinical Psychology II**

Two credits.

Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6433 Practice in Clinical Psychology III

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## **PSIC 6436 Intramural Practice in Clinical Psychology**

Three credits.

Prerequisite: Director's authorization.

Supervised practice in psychotherapy (individual, group, couples, and/or families) and psychological assessment. This practice is carried out at the facilities of the University Center for Psychological Services and Studies (CUSEP) during the summer sessions.

#### **PSIC 6437 Introduction to Clinical Practice**

Three credits. One hour of lecture, one hour of discussion, and five hours of supervised practice per week.

The clinic is structured around concepts and foundations that provide a basis and context for the experiential experience (practice). This course will present basic concepts in a theoretical-practical-therapeutic integration. This will be specifically carried out through the discussion of different aspects: theoretical frameworks, clinical observation, interview styles and processes, clinical conceptualization, therapeutic processes, and clinical contexts.

#### **PSIC 6505 Module on Dreams**

One credit. Three hours of lecture per week.

Prerequisite: Director's authorization.

The meaning of dreams from a physiological and psychological point of view, Jung's dream theory and Dr. Efrén Ramírez's theory. Dr. Ramírez's dream interpretation method, and its utility in terms of personal development, as a psychotherapy method, and as a group therapy method.

## PSIC 6506 Colloquium on Psychology Topics

Credits: 0One hour of meeting per week.

Lectures, discussion, and exchange of ideas among department faculty, students, and invited speakers. Students will enroll each semester.

## PSIC 6507 The Psychology of Women

Three credits. Three hours of lecture per week.

This course is organized around the question of whether there is a distinctly female psychology and what its biological and social determinants are. It studies the acquisition of sexual roles and their historical determination and transcultural relativity. The literature related to biological, sexual, cognitive, and affective functioning of women is reviewed. In addition, the development of feminist movements, the sociopolitical situation of women in industrial society, and the impact of these changes on the relationships between sexes, family, and Puerto Rican society are studied.

### **PSIC 6510 Seminar on the Family in Puerto Rico**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Director's authorization.

Analysis and research on the history and psychosocial aspects of the family in Puerto Rico. The primary purpose of the seminar is to promote psychosocial research on the family and its issues.

## PSIC 6515 Intelligence, Creativity, and Cognitive Complexity

Three credits. Three hours of lecture per week.

The concepts of intelligence, creativity, and cognitive complexity will be contrasted, and their relevance to contemporary Puerto Rican society will be determined.

#### **PSIC 6516 Supervised Reading Course**

Three credits.

Prerequisite: Professor's authorization.

Readings revolve around a topic chosen by the student and the professor. The student covers the concepts with the professor's approval and prepares a monograph on the concept of their choice.

## PSIC 6517 Advanced Psychopharmacology and Neurophysiology of Drug Use and Abuse

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This course delves into the knowledge of the psychophysiological system and its alteration through the use of chemical substances. Students will become familiar with the chemical and pharmacological aspects of substances that are subject to abuse, as well as those used in various treatment modalities (methadone, naltrexone, etc.). Particular attention will be given to the study of human behavior and its interaction with the action of substances on the psychophysiological system.

## PSIC 6518 Psychology of Adolescence

Three credits. Two lecture hours and one discussion hour per week.

Prerequisite: PSIC 6301

Study of the theories and research explaining the typical processes of adolescence, considering the cultural variables that contribute to the formulation of such theories and the design of such research. Discussion of the physical, cognitive, social, and affective aspects of development, as well as the evolution of identity and sexuality in adolescence. Analysis of family processes, school experience, peer relationships, and their influence on development.

## PSIC 6525 Psychological Analysis of Power

Three credits. Three lecture hours per week.

Analysis of the concept of power at the individual level (power traits, power motivation, control foci), and at the group level (leadership, gender relations). Some emphasis will be given to communal and institutional levels.

## **PSIC 6526 Spirituality in Psychology**

Three credits. One lecture hour, one discussion hour, and one workshop hour per week.

Prerequisites: PSCI 3005 or 3003.

This graduate-level course examines conceptualizations and contemporary debates about the notion of spirituality in psychology, particularly its integration into therapeutic practice and in the training of helping professionals. It reviews the ethical premises for psychology as it integrates spirituality into its research and practice.

### **PSIC 6527 Fundamentals of Human Sexuality**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This introductory course aims to provide an overview of human sexuality. It includes processes for clarifying personal sexual attitudes and values. The topic will be approached from both a personal perspective and its social dimension. Students will examine some sexual issues in Puerto Rican society.

#### **PSIC 6528 Violence and Complexity**

Three credits. Three seminar hours per week.

The purpose of this course is to contribute to the development of a conceptual framework in which to locate violence as a complex, socially constructed phenomenon. It will study the relationships between psychic life and social life from the centrality that the signifier of violence has acquired in our contemporaneity. This includes a detailed examination of the relationships between the history of subject constitution and identifications (subjectivation) and the world we share with others (intersubjectivity) and its relation to violence. Contributions from psychoanalytic discourse to the analysis of violence will be examined, and dialogical relations between psychoanalytic discourse and other contemporary fields of theorization such as poststructuralism, deconstruction,

social constructivism, and Lacanian psychoanalysis will be fostered. Critical examination of the contributions of traditional psychology on the topic of violence.

### PSIC 6529 Review and Critical Analysis of Psychological Literature in Puerto Rico

Three credits. Three lecture hours per week.

Prerequisite: Having passed a minimum of 9 graduate credits.

Review of research and publications made in Puerto Rico, their theoretical frameworks, methodology, and implications for understanding the psychological reality of Puerto Ricans. An analytical and critical framework will be provided.

## PSIC 6535 Theoretical Controversies on Human Development: Early Childhood

Three credits.

Different aspects of human development from birth to seven years of age will be examined. The focus is epistemology, emphasizing the basic assumptions of the discipline, fundamental controversies, and the ideological and philosophical aspects of the theories examined.

## PSIC 6537 Psychopathology of Affective Development in Childhood: Psychoanalytic Perspective

Three credits.

Prerequisite: Director's authorization.

To provide a clinical view of the affective development of the child from a psychoanalytic perspective, allowing for an understanding of child psychopathology.

#### **PSIC 6545 Program Evaluation and Consulting**

Three credits. Three lecture hours per week.

Introduction to the basic concepts and methods of consulting and program evaluation and to the ethical and value controversies surrounding them. Emphasis is placed on developing skills in these areas and their application in public service programs and private non-profit agencies.

#### PSIC 6546 Analysis of Interventions in Organizations: Theory and Practice

Three credits. Three lecture hours per week.

Prerequisite: PSIC 6025 or its equivalent, authorization from the director or PSIC 6026.

Analysis of interventions carried out in public and private organizations in and outside of Puerto Rico, considering the conceptual models that guide them. Different intervention models, their purposes, conceptual frameworks, and ethical principles will be presented. Analysis of the current applications of these and other models, paying particular attention to the congruence between theory and practice.

#### **PSIC 6555 School Psychology**

Three credits. Three discussion hours per week.

General orientation on school psychology, focusing the discussion on the public education system of Puerto Rico and on the ethical principles of discipline. The various functions carried out in professional practice in this area and its historical development and future of school psychology will be highlighted.

## PSIC 6591 School Psychology Practice I

Three credits. Eleven hours of supervised practice per week.

Prerequisite: PSIC 6555

Supervised practice in the provision of services in the school context, including experiences such as: direct observation in the classroom, health promotion and prevention, community relations, interventions with academic and disciplinary problems.

## PSIC 6592 School Psychology Practice II

Three credits. Three hours of direct supervision and ten hours of practice per week in the school setting.

Prerequisites: PSIC 6401, 6403, 6555 and 6591.

Continuation of supervised practice in the provision of psychological services in a school setting. Students will gain experience in intervention strategies such as crisis and conflict intervention, management of specific behaviors in groups, interdisciplinary teamwork, psychoeducational evaluations, and program evaluations. This course complements PSIC 6591.

## **PSIC 6995 Research Practicum**

One to four credits per semester.

Prerequisite: Enrollment in the graduate program and professor's authorization.

The course is aimed at developing the student's skills necessary for psychological research through active participation in the development of research projects, under the supervision of a professor. The course can be repeated for credit, with no limit with the approval of the research professor.

### PSIC 7005 Seminar in School Psychology: The Roles of the School Psychologist

Three credits. Fifteen hours of lecture per week.

Prerequisite: Director's authorization.

Study of the clinical process with learning and behavior problems. Emphasis on the integration of data from case histories, interviews, and psychometric tests.

### PSIC 8000 Philosophical Foundations of Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Admission to the graduate program.

Changes in the paradigms of science and their consequences in psychology.

#### **PSIC 8001 Dissertation Seminar**

Credits: 0Three hours of discussion per week.

Prerequisite: Master's degree or PSIC 6007. Authorization from the director and/or graduate program coordinator.

The dissertation is an original investigation demonstrating the student's capabilities as an independent researcher. During the dissertation seminar, the student will choose their research topic and problem, review the literature (relevant theoretical and empirical findings), and develop the research design or action plan. A formal proposal will be submitted to the dissertation committee for approval.

#### **PSIC 8002 Dissertation Work**

Credits: 0Three hours of discussion per week.

Prerequisite: PSIC 8001

This course is designed to follow up on the work done in the dissertation seminar. The proposed research will be completed, meaning that information will be collected and interpreted with the advice of the dissertation committee. The student will enroll in the course every semester they are working on their dissertation and will periodically submit written reports of their progress. The thesis work is completed by submitting the final draft of the dissertation.

## PSIC 8005 Seminar in School Psychology: Professional Problems in School Psychology Three credits. Three hours of lecture per week.

Examination and in-depth analysis of unresolved problems in psychoeducational diagnosis and intervention and behavior modification; counseling, consulting, and advising parents.

## PSIC 8007 School Psychology: Mental Health Consultation in Schools

Three credits. Three hours of lecture per week.

Prerequisite: Director's athorization, consortium student.

Consultation as a model of school psychological service. The student will become familiar with and trained in various modalities and levels of consultation to be used as a school psychologist. The investigative and evaluative aspects of consultation will be studied.

## PSIC 8015 Advanced Social Psychology II

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

Examines the historical forms of subjectivity in areas of daily life such as child rearing, morality, sexuality, and love relationships.

### PSIC 8017 Seminar on Multiple Perspectives in Research II

Three credits. Three hours of lecture per week.

Prerequisite PSIC 6007

Examination of different theoretical fields in psychology and their research. Analysis of assumptions, research strategies, methods, and techniques most used.

## **PSIC 8018 Contemporary Social Research: Meeting with its Authors**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007 and PSIC 8017.

Various approaches in social science research by meeting researchers and discussing their research with them.

## PSIC 8019 The Social Scientist as a Judicial Expert

Three credits. Three hours of lecture per week.

Prerequisite: Master's degree in psychology or one of the social sciences.

Theoretical and practical considerations in preparing the social scientist as a judicial expert.

## PSIC 8027 Advanced Psychobiology: Foundations, Uses, and Controversies

Three credits.

The discussion period considers the influences of modern biology, particularly evolutionary, ethological, and systemic currents on the psychological conceptualization of humans. Essential concepts such as evaluation, adaptation, species-typical behavior, biological niche, and systemic organization. The discussion period is complemented with a practical laboratory considering the controversies and applications of a psychobiological approach.

## PSIC 8028 Psychopharmacology

Three credits. Three hours of lecture and seminar per week.

Prerequisites: PSIC 6317 or PSIC 8027.

The course will discuss aspects of psychopharmacology and neurophysiology. It will include lectures on Anatomy and Physiology of the nervous system, Synaptic Neurochemistry, Pharmacokinetics and Pharmacodynamics, and on the neuropharmacological impact of various drugs on states of consciousness and behavior. The neurobiological bases of mental disorders, the mechanisms of action of different medications, and the strategies used in experimental studies and in clinical psychopharmacology will be studied. Anxiolytics and antidepressants, antipsychotic drugs, sedative hypnotics, and narcotics will be analyzed. The content will be presented from both a basic science perspective and a clinical orientation combining lectures and discussions of readings. The course is specially designed for students in the Clinical Psychology graduate program and doctoral students specializing in Academic-Research Psychology.

## **PSIC 8105 Psychology and Social Movements**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

The theoretical-practical contributions of psychology to social movements of the last decades in Puerto Rico are analyzed.

### **PSIC 8115 Social Psychology of Education**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105 or EDUC 6270.

Examination of the crises of education in contemporary capitalist society. Critical analysis of the most important theoretical fields for its explanation. The social construction of education and the new subjectivity.

#### **PSIC 8125 The Sociocultural Study of the Mind**

Three credits. One hour of lecture and one hour of discussion per week.

Analysis of the sociocultural approach as a conceptual framework in the study of the mind. Discussion of the historical background of the approach and its development to the present with an emphasis on the research program it has generated.

## PSIC 8200 Foundations of Social Psychology and Current Topics

Three credits. Three hours of lecture per week.

This course studies the theoretical and methodological foundations of social psychology. The course discusses classic and contemporary theories, majoring in social psychology research, as well as new trends, like the affective aspects of social behavior. This course is divided into four general units: epistemological and historical backgrounds, theorizing the individual in the social context, affective aspects of social dynamics, and power structures and contemporary related fields. In each unit, theoretical and methodological approaches are examined to provide students with the opportunity to develop an understanding of the field, as well as the research methodology from a social psychological perspective and integrate the social and affective aspects of behavior. Ethical issues related to theory, research, and psychosocial interventions are discussed. This course examines social and affective processes that affect behavior. In-person course.

### PISC 8201 Human Development: The Life Cycle

Three credits. Three hours of lecture per week.

The course offers a general overview of the theories and research related to the development of the human subject. It will cover the relationship between physical, cognitive, and socio-emotional development of the subject from childhood to old age. Emphasis will be placed on the theoretical and scientific bases of developmental psychology. The student will not only have information concerning developmental processes but also a critical understanding of the underlying processes of human development. The course will emphasize the dynamic processes of development and the dialectic between psychological processes and development. In-person course.

## PSIC 8202: Psychological Approach to the Study of Cognitive and Affective Processes Three credits. Three hours of lecture per week.

This course studies the main theoretical models used to explain human cognitive and affective aspects of behavior. The emergence of cognitive psychology is examined considering sociohistorical transformations. Information processing models, genetic epistemology, the historical-cultural perspective, and affective processes are analyzed. Cognitive processes such as attention, sensation, perception, memory, language, and problem-solving are discussed. How affective

processes and cultural differences shape cognitive processes and human behavior is analyzed. Inperson course.

## **PSIC 8203 Models and Techniques of Psychotherapy**

Three credits. Three hours of lecture per week.

This course focuses on the exposition of the different theoretical models of psychotherapy, as well as their origins and evolutions. Once the basis of the theoretical models is established, current therapeutic approaches will be examined from a critical viewpoint, emphasizing conceptual problems, methodology, and alternatives to address such issues. Evidence-based psychotherapeutic approaches used with different populations will also be discussed. In-person course.

## **PSIC 8204 Personality and Human Diversity**

Three credits. Three hours of lecture per week.

This course addresses the categories of personality, subjectivity, and subjectivation from a critical and complex approach. It examines the paradigmatic assumptions underlying personality theories and traditional approaches in the study of human beings. It proposes a conceptual approach that includes debates on humans from the complexity paradigm, constructivism, psychoanalytic theory, and updated foundational psychological premises. It explores the application of this conceptual approach to the human, relevant in contemporary clinical practice, as well as particular considerations of the Puerto Rican population and the unavoidable sensitivity towards differences and cultural and individual diversity necessary in psychological training. In-person course.

### PSIC 8205 Advanced Psychological Assessment

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 6401 and PSIC 6403.

Training in the administration and interpretation of various techniques used in personality assessment such as: TAT, Bender Gestalt, and Person Drawing. Includes supervised practical work, laboratory work, and the presentation of written reports. In-person course

### PSIC 8206 Advanced Practice in Psychological Assessment

One credit.

Prerequisites: PSIC 6401 and PSIC 6403.

Corequisite: PSIC 8205

Intensive practice in the administration and assessment of the following tests: Thematic Apperception Test (TAT), Children's Apperception Test (CAT), Bender Gestalt Visual-Motor Test, Human Figure Drawing among other tests. This includes tests contained in the course Psic. 6401; Psychological Assessment I, worked on in the practice of this course, Psic. 6403. Personality inventories such as the Personality Assessment Inventory (PAI), the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and basic concepts of the Rorschach are also included.

Emphasis is placed on the clinical approach to the responses of the subjects with whom one works, which are part of their discourse and life history. In-person course.

## **PSIC 8215 Psychology and Law**

Three credits.

Analysis of basic concepts common to psychology and law.

### PSIC 8216 Employment and Discrimination.

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

Critical analysis of employment discrimination and its consequences.

### **PSIC 8300 Advanced Clinical Psychology Practice**

One credit. Three hours of supervised practice.

Prerequisites: PSIC 6434

This advanced clinical practice in psychotherapy (individual, group, couples, and/or families, and/or psychological assessments) allows students to increase their in-person clinical hours and refine their clinical skills. During this advanced practice, students will also increase exposure to diverse populations and rotate through external clinical practices. In-person course.

## **PSIC 8301 Advanced Family and Couples Therapy**

Three credits. Three lecture hours per week. Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8302

This course offers students an overview of the basic concepts and fundamentals of family and couples' therapy. They will also become familiar with the different systemic theoretical models. Different techniques used by the various theoretical models will be emphasized. Similarly, they will develop group research skills that address some family or couples' issues. In-person course.

### **PSIC 8302 Advanced Practice in Family and Couples**

One credit. Supervised practice.

Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8301

This course is a clinical practice where the student has the opportunity to acquire advanced clinical skills to work with couples and families from a systemic perspective. During this clinical practice, the student will have interventions with clinical cases using one or several systemic theoretical models. This practice must be taken simultaneously with the theoretical course in advanced therapy for families and couples. In-person course.

#### **PSIC 8303 Research Practice**

One credit.

The aim of this course is to foster research experience in students. They will join a faculty member's project to acquire and refine research skills. They will be working under the supervision of a mentor/researcher. Students must attend weekly one hour research sessions under the mentorship of their supervisor. Each research project of the supervisor will have a brief description of their research. This course can be taken more than once to continue with a research project. In addition, their respective research supervisors will add additional references to the course. Inperson course.

## **PSIC 8304 Clinical Supervision Seminar**

One credit.

Prerequisite: PSIC 6433

This course provides students with an overview of clinical supervision and the different approaches and models of supervision applied to clinical psychology. The student is exposed to the development of supervision as a fundamental part of a psychologist's training. The student will experience different conceptualizations of clinical supervision according to each theoretical model and its particular objectives, approaches, and strategies. Additionally, they will learn the difference between supervision and consultancy. Moreover, the student will create and develop instruments to measure variables that should be present in each psychotherapeutic model. There will be integration into theory and research in seeking research publications on psychotherapy and supervision. In-person course.

## PSIC 8335 Research Methods in Psychology on Human Development

One credit. Three lecture hours per week.

Prerequisite: PSIC 6006, 6007, 6301 and professor's authorization.

Discussion of the most frequently used methods in psychological research on human development. Examination of the central issues of time analysis, life changes, contributions of the evolutionary approach, and the relationship between research and theory development.

### PSIC 8405 Attachment Theory: Critical Analysis and Clinical Application

Three credits. Three lecture hours per week.

Analyzes the basic assumptions of the theory based on ethological study. It is compared with other dynamic approaches and clinical applications are derived.

#### **PSIC 8407 Rorschach Technique**

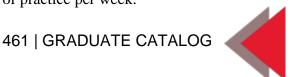
Four credits. Three lecture hours and three hours of supervised practice per week.

Prerequisites: PSIC 6020, 6401 and 6402.

Introductory course in the Rorschach psychological assessment technique. Includes the theoretical basis, principles of administration, scoring, and interpretation. Provides practical experience.

### **PSIC 8409 Psychotherapeutic Research: Process and Outcome**

Three credits. Two hours of lecture and discussion and one hour of practice per week.



Prerequisite: Professor's authorization.

Formal research on psychotherapy programs for children, adolescents, and adults in various modalities (such as individual, group, couples, and family). Examination of research on psychotherapeutic processes and outcomes.

#### PSIC 8411 Seminar on Psychoanalysis Part I: Adult

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Study of Freud's writings, essential for understanding subjectivity.

## PSIC 8412 Seminar on Psychoanalysis Part II: Child

Three credits. Three hours of lecture per week.

Study of the basic texts of the most important psychoanalysts in the field of child psychoanalysis.

## PSIC 8415 Analysis and Reflection on the Practice of Clinical Psychology in Puerto Rico

Three credits. Three hours of lecture per week and nine hours of laboratory.

Prerequisites: PSIC 6431, 6432, 6433 and 6434.

Advanced supervised practice in psychotherapy (individual, group, couples and/or families, and/or psychological evaluations). It allows generating new approaches and intervention models, as well as refining clinical skills and deepening in specific populations or issues. This practice course consists of three credits per semester and can be repeated up to three times.

#### PSIC 8416 Psychological Evaluation of Children with Disabilities

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 3025, 6301, 6401, 6402, 6403 and 6404.

Theoretical and methodological controversies on the psychological evaluation of children with disabilities. Examination of the effects of the disability on the development of children, on their families, and the issue of social and educational placement.

#### **PSIC 8420 Seminar: Study of Families**

Three credits.

Prerequisite: PSIC 6421

Critical study of theoretical and research literature on families and its applicability in Puerto Rico. Research techniques for studying families in Puerto Rico will be developed.

## PSIC 8425 Seminar on Supervision in Psychotherapy

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: 60 graduate credits in clinical psychology or its equivalent.

Critical consideration of theoretical and practical aspects of psychotherapy supervision. Practical experience in observation, research, and supervision.

## PSIC 8495 Internship in Clinical Psychology

No credits.

Prerequisite: Permission from the department director or graduate program coordinator and PSIC 6431, 6432, 6433, 6434.

Supervised practice in clinical psychology up to the accumulation of 2,000 hours of professional experience as the last requirement for the doctoral degree.

## **PSIC 8505 Psychology and Reason**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007

Analysis of the body/mind separation and the "software/hardware" split of labor and its consequences in the constitution and development of psychology.

## PSIC 8506 Advanced Seminar in Community Psychology: Contemporary Debates

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105; PSIC 6106.

Contemporary debates in community psychology and their realization in research and intervention. The discussion is framed within community psychology in Puerto Rico.

#### **PSIC 8507 Consultation in the School Context**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PSIC 6555

Study of the different roles and functions of the consultant in the school context. Deep discussion of the basic principles and intervention models in professional psychological consultancy. Emphasis on the stages of the consultancy relationship and the processes that develop during intervention.

#### PSIC 8508 Practice of Consultation in the School Context

Zero credits. Ten hours of supervised practice and three hours of supervision.

Prerequisite: PSIC 6555

Supervised practice in consultation in the school context where theoretical knowledge is applied, and discipline-specific skills are developed. This course complements consultation in the school context (PSIC 8507).

### PSIC 8515 Biological Approaches to the Study of Psychopathology

Three credits. Three hours of seminar per week.

Prerequisite: PSIC 6408, PSIC 6317 or PSIC 8027.

Study of biological models proposed to explain various human psychopathology conditions. Emphasis on critical analysis of research supporting or contradicting these models and on pharmacological interventions derived from them. Analysis of the most important controversies in their application and their impact on psychology practice.

### **PSIC 8516 Psychoeducational Evaluation**

Three credits. Three hours of lecture per week and two hours of supervised practice per week. Prerequisites: PSIC 6401, 6403 and 6555.

Analysis of concepts and psychological and educational strategies used in psychoeducational evaluation. Includes conceptualization of what evaluation is in the school context, evaluations of academic achievement, basic skills in writing, reading mathematics, as well as social performance and dynamic cognitive aspects, and pedagogical strategies. Integrating as fundamental aspects of the psychoeducational evaluation, modalities of corrective and remedial intervention strategies. Provide for the application of concepts and the development of specific skills that allow for psychoeducational evaluations.

## PSIC 8525 Play: Reflection, Analysis, and Intervention

Three credits. Two hours of lecture per week and two hours of supervised practice per week. Prerequisite: PSIC 8405 and PSIC 8412.

Study of play in children from a psychoanalytic and interactional perspective and its implications in clinical practice with children. Critical examination of other theoretical perspectives and their clinical application. Supervised practice in clinical intervention.



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**DEGREE:** 

## Master of Arts in Community Social Psychology

#### **FACULTY:**

**Cruz Bermudez, Nelson D.,** Ph.D., Brandeis University, 2007, Assistant Professor. Research topics: Neuroscience of drug addiction and mental disorders; neuroeducation.

**Dávila Marrero, Elixmahir,** Ph.D., University of Puerto Rico, 2005, Assistant Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a cognitive rehabilitation tool with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

**Espada Brignoni, Teófilo,** Ph.D., University of Puerto Rico, 2015. Assistant Professor Research topics: Culture and subjectivity, Social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

**Galarza García, Laura,** Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace Psychology; Organizational Strategy and Change; Selection, Development and Management of Individual and Organizational Performance; Work Engagement.

**Gómez Escudero, María de los Ángeles,** Ph.D., Université de Paris V, 1991, Professor. Research topics: Parentality and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

**Jiménez Torres, Aida,** Ph.D., University of Puerto Rico, 1993. Associate Professor. Research topics: Family and Couples: Attachment: Multiculturality and psychotherapy.

**Martínez Mejías, Sylvia,** Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in attachment bonding and attachment theory; Court expertise in custody and special education cases; Evaluation in early intervention and developmental deficits.

**Méndez Castillo, Milagros,** Ph.D., Fordham University, 1993, Associate Professor. Research topics: Sexuality in adolescents, Violence in schools, Health psychology, Teaching psychology. **Miranda Gierbolini, Dolores,** Ph.D., Temple University, 1987, Professor. Research interests: Development of sustainable communities, Social movements, Social policy, Political subjectivations, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

**Morales Arandes, Edgardo,** Ed.D., Boston University, 1986, Associate Professor. Research topics: Language and metaphor as models of construction of socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogic and collaborative practices; evidence-based psychotherapy; qualitative research.

**Nina Estrella, Ruth V.,** Ph.D., National Autonomus University of Mexico, 1991, Professor. Research topics: interpersonal communication, family, couple relationships, and sexuality and adolescence.

**Ruiz Alfaro, Frances,** Ph.D., University of Puerto Rico, 2014. Assistant Professor. Research topics: Affective bonding; Discourse and literature, Subjectivity; Assessment of Autism Spectrum Disorder.

**Santiago Estrada, Sara,** Ph.D., University of Puerto Rico, 2013. Associate Professor. Research topics: Transformations at work; Study of subjectivities in work scenarios, educational organizational scenarios; Change in organizations.

**Tirado Santiago, Giovanni,** Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

**Vale Nieves, Otomie,** Ph.D., University of Puerto Rico, 1993, Professor. Research topics: Technology and learning; development, subjectivity and historical context; critical psychology; language and subjectivity; construction of the young, technology and gender.

#### **ADMISSION REQUIREMENTS**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Requirements of the Master's Program**

- 1. Possess, or be in the process of completing no later than the summer of the year in which you wish to begin graduate studies, a bachelor's degree or equivalent from an accredited institution or university.
- 2. Have a general bachelor's degree academic index of no less than 3.00 points (or its equivalent in the grading system of the university of origin) or a general academic index (bachelor's and master's) of no less than 3.00 points if you have a master's degree.
- 3. Academic index of no less than 3.00 points in: (a) General or Introductory Psychology; (b) Social Psychology or a course related to the field applying; (c) Elements of Statistical Reasoning; (d) Psychological Research Methodology.
- 4. Have proficiency in Spanish and English.
- 5. Attend an interview



- 6. Documents Required for Admission Application
- 7. Application for Admission to Graduate Studies in electronic format.
- 8. Official transcripts
- 9. Curriculum vitae
- 10. Write an essay

## **STUDY PROGRAM**

Core Courses (10 credits)			
Code	Course Title	Credits	
PSIC 6006	Applied Statistics to Psychology	3	
PSIC 6007	Seminar: Psychological Research Methods	3	
PSIC 6005	Theories of Personality	3	
PSIC 6030	Module: Ethical Issues in Psychology	1	
Elective courses (9 credits)			
Specialty Courses (21 credits)			
PSIC 6105	Advanced Social Psychology	3	
PSIC 6106	Community Psychology	3	
PSIC 6109	The Group as a Means of Social Intervention	3	
PSIC 6110	Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico	3	
PSIC 6131	Community Practice I	3	
PSIC 6132	Community Practice II	3	
PSIC 6133	Community Practice III	3	
Comprehensive Exam			
XXXX	Comprehensive Exam	0	
	Thesis		
PSIC 6010 6 PSIC 6995	Thesis Seminar / Research Practicum	3	
PSIC 6008	Thesis Work	0	
	Total	43	

### **COURSE DESCRIPTIONS:**

The following course descriptions are the most recent entries in the Student Information System

of the Office of the Registrar at the Río Piedras Campus, as of November 30, 2023. These will be included in the 2023-2024 Graduate Catalog.

### **PSYC 6005 Theories of Personality**

Three credits.

Study of theories on the structure, dynamics, and development of personality, emphasizing contemporary approaches. Critical examination of the problems, theories, and research that help clarify the role of motivation in personality.

## **PSYC 6006 Statistics Applied to Psychology**

Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

## PSYC 6007 Seminar: Methods of Psychological Research

Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection of areas, methods, and topics in psychological research.

## **PSYC 6008 Thesis Work**

No credits. Independent studies.

Prerequisite: PSYC 6010

The course is designed for those students who need guidance and advice from their thesis advisors regarding difficulties encountered in different phases of thesis research and in the preparation and writing of the thesis. The student will enroll in the course each semester in which they are carrying out their thesis work.

### **PSYC 6009 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to give the student a general examination of the eight areas of psychology that encompass what is typically taught in a general or introductory psychology course. The areas to be covered are: history and systems, sensation and physiological perception, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

#### **PSYC 6010 Thesis Seminar**

Three credits.

Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

#### **PSYC 6015 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide a general overview of the eight areas of psychology that are typically covered in a general or introductory psychology course. The areas to be covered are history and systems, sensation and perception, physiological, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

## PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose the student to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

## PSYC 6025 Psychosocial Approach to the Study of Organizational Behavior

Three credits. Three lecture hours per week.

Prerequisite: Admission to the Graduate Program.

The following topics are covered relatively quickly: organization design, motivation, satisfaction, communication, conflict, and others. The discussion deepens on some methods that have been used to try to facilitate change in organizations. Current administrative practice is critically evaluated, and an attempt is made to identify and question the ideology or set of values that informs it. The negative consequences of such ideology are illustrated, and the possibility that the human tendency to unilaterally control one's situation leads precisely to organizational ineffectiveness is discussed. An invitation is made to invent and explore models of control that lead to effectiveness.

## PSYC 6026 Psychological Approach to Development and Change in Organizations

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6025

Various models for producing information relevant to organizational development and change are explored. The aim is to compare and evaluate these models so that the student becomes familiar with them and feels capable of beginning to explore the application of some.

## PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology One credit. Sixteen lecture hours per semester.

The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various psychological models of human behavior as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

# **PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision** One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course.

# **PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting** One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultancy and advisory service models with the purpose of knowing and applying the basic principles of these models to situations requiring the advice of a psychologist.

# PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.

# PSYC 6070 Proseminar in General and Applied Psychology: Society and Puerto Rican Culture

One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with the effect of variables resulting from Puerto Rican society and culture on individual and group behavior. An emphasis is placed on analyzing situations that require the intervention of the clinical psychologist considering these variables.

# **PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation** One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course.



## PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models for identifying community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

## PSYC 6105 Advanced Social Psychology

Three credits. Three lecture hours per week.

The course is organized around the problem of the social construction of reality. It aims to develop both a theoretical and methodological framework for the study of this issue. To this end, various theories such as ethnomethodology, symbolic interactionism, and role theory are studied; and there will be a deeper exploration in areas such as deviance and social control, attitudes, attribution, social comparison, social movements, and ideology. An effort will be made to use literature from Puerto Rico to illustrate and understand the social construction of reality.

## **PSYC 6106 Community Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the Department Director.

The course aims to prepare future psychologists in the analysis and solution of psychosocial problems affecting the community.

#### PSYC 6107 Intercultural Social Psychology

Three credits. Three lecture hours per week. Prerequisite: Bachelor's degree in psychology.

This seminar aims to demonstrate the extent to which social psychology may be subject to cultural variations. Social psychology research in different cultures is studied, analyzed comparatively, and considered for its implications on existing theories. Research within the Puerto Rican culture is emphasized, and there is an attempt to replicate at least one foreign study in our culture.

## PSYC 6108 Psychology, Society, and Health

Three credits. One lecture hour and two discussion hours per week.

Prerequisite: PSYC 6106

Analysis of the socio-economic conditions, organizations, and social visions that affect the health and illness situation in Puerto Rico, and in other countries of the Americas. The role of the psychologist in relation to this issue.

## PSYC 6109 The Group as a Means of Social Intervention

Three credits. Two lecture hours and three lab hours per week.



Prerequisite: PSYC 6105, 6106

The application of group theories to social life will be studied to facilitate psychological, social, organizational, institutional, and community change.

## PSYC 6110 Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico

Three credits. Three lecture hours per week.

The seminar aims to gather relevant information regarding change agents in Puerto Rico such as: the search for the historical background of Puerto Rican society in its basic outlines: population, emigration and immigration, urbanization, poverty, slums, social stratification, education, housing, employment and unemployment, industrialization, and modernization. These topics or indicators of change, among others, will be analyzed based on objective and verifiable information from the review of literature from studies conducted here and elsewhere, with a psychological emphasis. It will explore how changes in these areas affect interpersonal relationships, human development, the formation of beliefs and values, and coexistence in Puerto Rico.

## PSYC 6115 Analysis of Strategies for Conflict and Crisis Management

Three credits. Three lecture hours per week.

Conceptual and formal analysis for the management of interpersonal, group, and community conflicts.

## PSYC 6116 Practice in Strategies for Conflict and Crisis Management

No credit.

Prerequisite: Concurrent with PSYC 6115.

Supervised practice in interventions aimed at managing interpersonal, group, and community conflicts.

## PSYC 6120 Seminar in Community Psychology and Social Policy

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director and the professor.

The course attempts to examine the content of public policy in the areas of health, education, and social welfare as it applies to community psychology in Puerto Rico. Full understanding will allow for the effective planning of psychosocial intervention strategies.

## **PSYC 6131 Community Practice I**

Three credits.

The purpose of this practice is to expand the theoretical framework discussed in the courses of Advanced Social Psychology I and Community Psychology. It also aims to promote the acquisition

of intervention skills in communities, formal groups, organizations, institutions, or geographical communities, data collection, and other aspects associated with research.

## **PSYC 6132 Community Practice II**

Three credits.

This practice aims to expand the intervention and research skills acquired in Community Practice I.

## **PSYC 6133 Community Practice III**

Three credits.

Prerequisite: PSYC 6132

This practice aims to refine and expand the skills acquired in the Community Practice I and II courses and offers students the opportunity to acquire new community work skills in a new work setting.

## **PSYC 6195 Seminar on Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6105

Study of current problems and themes in social psychology and related areas.

## **PSYC 6201 Practicum I**

Three credits. One lecture hour and twenty lab hours per week.

Students will dedicate at least 120 hours to practical work in an organization where they apply the concepts and techniques of the social-industrial program. Students will meet one hour weekly with the supervising professor to discuss problems and consult on references to study. As part of the course, each student will work on publishable research in a scientific journal.

#### **PSYC 6202 Practicum II**

Three credits. Three supervision hours and eight practice hours per week.

Prerequisite: PSYC 6201 and 6205.

Practice in government and private organizations with particular attention to the organizational problems of such institutions. The course includes 120 hours of practice, in addition to weekly meetings for supervision.

#### PSYC 6205 Industrial Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Graduate student status.

Topics relevant to the world of work with high social content are covered. Topics include historical significance of work and needs fulfilled by working, technology and job satisfaction, formal and informal organization, job analysis, recruitment and selection, introduction to performance

evolution and training, as well as termination of employment (unemployment, retirement, and exit interviews).

## **PSYC 6206 Construction of Psychological Tests**

Three credits. Two lecture hours per week.

Prerequisite: PSYC 6006

Theory of constructing aptitude, intelligence, achievement, personality, and interest tests. Practice in the preliminary development of one of these types of tests.

## PSYC 6209 Psychosocial Aspects of Labor Regulation

Three credits.

Prerequisite: Admission to the program.

Critical analysis of labor regulation in areas such as health, safety, schedules, wages, labor unions, and others.

## PSYC 6215 Psychosocial Approach to Organizational Conflicts

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director.

Analysis of psychological and sociological theories of organizational conflicts and strategies for their solutions.

## PSYC 6216 Psychological Test Construction Laboratory

One credit. One lab hour per week.

Prerequisite: To be taken concurrently with PSYC 6206.

Laboratory for drafting questions, item analysis, reliability determination, norms, equating, and validity in psychological tests.

## PSYC 6218 Psychology and Occupational Health

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6205 or equivalent.

The course explores the workplace with an emphasis on the health, safety, and well-being of the workforce. It focuses on the interaction between the worker and their workplace and its effects on the worker's life both inside and outside the company. The course explores topics such as: the healthy organization, work-life balance and spillover effect, health and productivity, stress and health, workplace violence, physiological aspects of illness, safety and accidents, as well as intervention alternatives in work settings. As part of the course activities, students will develop a group intervention in an organization identified by them as a contribution to the organization and the quality of life of its members.

## PSYC 6225 Techniques of Psychological Evaluation in Personnel Selection

Three credits. Three lecture hours per week.

Discussion of the main psychological evaluation techniques used in personnel selection. Face-to-face, hybrid, and online course.

# **PSYC 6227 Social Psychology of Work and Production in Contemporary Capitalist Society** Three credits. Three lecture hours per week.

Analysis of theories of alienation, communication, and organization in relation to changes in the economy and society, brought about by the contemporary crisis. The perspectives of social psychology in the technological era will be studied.

## PSYC 6301 Advanced Developmental Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in psychology or authorization from the advisor.

Study of the basic principles of human development with an emphasis on childhood and adolescence. Critical consideration of recent scientific findings. Special attention is given to the problems and peculiarities of childhood and adolescence in Puerto Rico.

## PSYC 6302 Advanced Developmental Psychology

Three credits.

Prerequisite: Bachelor's degree and with authorization from the professor.

Based on the study of the principles governing human development, from conception to the end of adolescence. Subsequent evolutionary stages, such as early adulthood, middle adulthood, and the onset of old age, will be considered. Parallel to the study of human evolution during these periods, the psychological circumstances accompanying the achievement of fulfillment, and the decline of life are discussed.

#### PSYC 6305 Advanced Statistical and Methodological Designs

Three credits. Three lecture hours per week.

Statistical analyses and designs, and the theory behind them.

## PSYC 6306 History and Systems of Psychology

Three credits. Three lecture hours per week.

Prerequisite: Admission to the graduate program.

The course examines the history of psychology, from ideas in the countries of the ancient East to contemporary psychology. It attempts to identify the historical links of the discipline. Finally, the state of the discipline and its history in Latin America are examined.

## PSYC 6311 Teaching Psychology

Three credits. Three lecture hours per week.

This course focuses on the teaching and assessment of the general psychology course. Innovations in teaching and instructional methods are examined. The central themes and debates of general psychology, course content, ethics in teaching, and assessment of achievement are discussed.

## PSYC 6312 Practice in Teaching Introductory Psychology

Three credits. Eight practice hours per week.

Prerequisite: PSYC 6311

A course designed to provide supervised experiences and skills in teaching psychology. The course includes supervised practice in different teaching methods.

## **PSYC 6315 Practice in Teaching Advanced Psychology Courses**

Three credits. Twelve supervised practice hours per week.

Prerequisites: PSYC 6312 and authorization from the professor.

Organization and teaching of an advanced undergraduate psychology course under the supervision of a professor. Includes discussion of the philosophical foundations of teaching and the most recent aspects of the topic to be taught.

## PSYC 6317 Advanced Physiological Psychology

Three credits. Three lecture hours per week.

The course emphasizes the study of the relationship between an organism's physiological system and behavior. Special attention is given to the functioning of the central nervous system and its influence on behavior.

## **PSYC 6318 Human Learning**

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director.

The course will broadly cover verbal memory and verbal behavior of humans. It will include a brief study of historical backgrounds and general methodology; the rest of the course consists of the study of various models of interpolation of memory and/or language.

## PSYC 6325 Psychological Approach to the Study of Cognitive Processes

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Basic theories on the relationship between mental events and human behavior and effectiveness. The importance of cognitive processes in psychological practice in Puerto Rico is emphasized.

## PSYC 6327 Computer Use and Application in Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Introduction to terminology, principles, and common applications of computers in psychological work.

## PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week. Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

## PSYC 6402 Psychological Assessment II

Three to four credits. Two hours. Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work and the presentation of written reports.

## PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408 and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

#### PSYC 6404 Practice in Psychological Assessment II

Credits: 0Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403 and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

## PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

## **PSYC 6406 Practice in Psychotherapy**

Credits: 0Eight hours of practice per week. Prerequisite: Enrolled in PSYC 6405.



Supervised practice in individual or group therapy. The practice is an integral part of the PSYC 6405 course.

## PSYC 6407 Emergency Clinic and Short-Term Psychotherapy

Three credits. Three hours of lecture per week.

Prerequisite: Professor's authorization.

The course proposes the study of clinical and ethical knowledge that allows, beyond the so-called intervention, a positioning that centrally embraces the words of individuals who come to the consulting room at a time of intricate conscious and unconscious phenomena that exceed their handling capacity and tolerance for distress, and to facilitate their connection with their crisis and symptoms as one not only affected by external events but as a production of their own complexity, subjectivity, and discourse.

## **PSYC 6408 Principles of Psychopathology**

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

## PSYC 6409 Practice in Psychopathology

Credits: 0Four hours of practice. Prerequisite: Enrolled in PSYC 6408.

Observation, interviews, preparation of case histories, diagnosis, and clinical discussion of behavioral disorders. The practice is an integral part of the PSYC 6408 course.

#### PSYC 6410 Advanced Seminar in Behavior Modification

Three credits. Three hours of lecture per week; practice (optional).

Prerequisite: PSYC 6417.

Critical and intensive study of the theoretical framework of behavior modification principles and the therapeutic effectiveness of behavioral modification techniques.

#### **PSYC 6416 Group Therapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: Graduate student in psychology.

The course will emphasize the theoretical and practical aspects of group therapy and will offer a human laboratory to experience client and therapist roles in a group psychotherapy setting.

#### **PSYC 6417 Principles of Behavior Modification**

Three credits. Three hours of lecture and four hours of practicum.

Prerequisite: Graduate student in psychology.

Study of the basic psychological principles governing human behavior, particularly those derived from learning psychology. Emphasis will be placed on the application of social learning principles to the modification of psychotic, neurotic, and maladjusted behavior in clinical and educational institutions. Special attention will also be given to the critical discussion of recent scientific findings in behavioral modification with particular interest in the applicability of these findings to adjustment problems in Puerto Rico.

#### PSYC 6418 Disorders of Childhood Behavior

Three credits. Two hours of lecture per week; Practicum by agreement.

Prerequisite: Authorization from the Department Director.

Issues of etiology, classification, and management of children exhibiting extreme isolation, boundaryless behavior, odd and chaotic tendencies, and behavior determined by organic disorders. Theoretical frameworks, assessment techniques, and diagnosis are considered. Opportunities for practice will be provided. Lectures by guest consultants will be offered.

## PSIC 6421 Family Therapy I

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: PSIC 6405, 6408

Study of some family therapy systems, their theoretical models, techniques used, and case analysis. Students are offered the opportunity to experience simulated family therapy experiences (laboratory) and to conceptualize their own experiences within the different family systems they share personally and professionally.

## **PSIC 6423 Practice in Family Therapy I**

Three credits. Three to four hours of practice.

Prerequisite: PSIC 6405, 6408 and 6421

Observation experiences of family therapy sessions; opportunity to work with families as a cotherapist providing family therapy. Participation in Practice Center meetings, case discussions, and supervision meetings.

#### PSIC 6431 Practice in Clinical Psychology I

Credits: 0Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

#### PSIC 6432 Practice in Clinical Psychology II

Two credits.



Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## **PSIC 6433 Practice in Clinical Psychology III**

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## **PSIC 6436 Intramural Practice in Clinical Psychology**

Three credits.

Prerequisite: Director's authorization.

Supervised practice in psychotherapy (individual, group, couples, and/or families) and psychological assessment. This practice is carried out at the facilities of the University Center for Psychological Services and Studies (CUSEP) during the summer sessions.

#### **PSIC 6437 Introduction to Clinical Practice**

Three credits. One hour of lecture, one hour of discussion, and five hours of supervised practice per week.

The clinic is structured around concepts and foundations providing a basis and context for the experiential experience (practice). This course will present basic concepts in a theoretical-practical-therapeutic integration. This will be specifically carried out through the discussion of different aspects: theoretical frameworks, clinical observation, interview styles and processes, clinical conceptualization, therapeutic processes, and clinical contexts.

#### **PSIC 6505 Module on Dreams**

One credit. Three hours of lecture per week.

Prerequisite: Director's authorization.

The meaning of dreams from a physiological and psychological point of view, Jung's dream theory and Dr. Efrén Ramírez's theory. Dr. Ramírez's dream interpretation method, and its utility in terms of personal development, as a psychotherapy method, and as a group therapy method.

## **PSIC 6506 Colloquium on Psychology Topics**

Credits: 0One hour of meeting per week.

Lectures, discussion, and exchange of ideas among department faculty, students, and invited speakers. Students will enroll each semester.

## PSIC 6507 The Psychology of Women

Three credits. Three hours of lecture per week.

This course is organized around the question of whether there is a distinctly female psychology and what its biological and social determinants are. It studies the acquisition of sexual roles and their historical determination and transcultural relativity. The literature related to biological, sexual, cognitive, and affective functioning of women is reviewed. In addition, the development of feminist movements, the sociopolitical situation of women in industrial society, and the impact of these changes on the relationships between sexes, family, and Puerto Rican society are studied.

## **PSIC 6510 Seminar on the Family in Puerto Rico**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Director's authorization.

Analysis and research on the history and psychosocial aspects of the family in Puerto Rico. The primary purpose of the seminar is to promote psychosocial research on the family and its issues.

## PSIC 6515 Intelligence, Creativity, and Cognitive Complexity

Three credits. Three hours of lecture per week.

The concepts of intelligence, creativity, and cognitive complexity will be contrasted, and their relevance to contemporary Puerto Rican society will be determined.

### **PSIC 6516 Supervised Reading Course**

Three credits.

Prerequisite: Professor's authorization.

Readings revolve around a topic chosen by the student and the professor. The student covers the concepts with the professor's approval and prepares a monograph on the concept of their choice.

## PSIC 6517 Advanced Psychopharmacology and Neurophysiology of Drug Use and Abuse

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This course delves into the knowledge of the psychophysiological system and its alteration through the use of chemical substances. Students will become familiar with the chemical and pharmacological aspects of substances that are subject to abuse, as well as those used in various treatment modalities (methadone, naltrexone, etc.). Particular attention will be given to the study of human behavior and its interaction with the action of substances on the psychophysiological system.

## **PSIC 6518 Psychology of Adolescence**

Three credits. Two lecture hours and one discussion hour per week.

Prerequisite: PSIC 6301

Study of the theories and research explaining the typical processes of adolescence, considering the cultural variables contributing to the formulation of these theories and the design of this research. Discussion of the physical, cognitive, social, and affective aspects of development, as well as the evolution of identity and sexuality in adolescence. Analysis of family processes, school experience, peer relationships, and their influence on development.

#### PSIC 6525 Psychological Analysis of Power

Three credits. Three lecture hours per week.

Analysis of the concept of power at the individual level (power traits, power motivation, control foci), and at the group level (leadership, gender relations). Some emphasis will be given to communal and institutional levels.

## **PSIC 6526 Spirituality in Psychology**

Three credits. One lecture hour, one discussion hour, and one workshop hour per week.

Prerequisites: PSCI 3005 or 3003.

This graduate-level course examines conceptualizations and contemporary debates about the notion of spirituality in psychology, particularly its integration into therapeutic practice and in the training of helping professionals. It reviews the ethical premises for psychology as it integrates spirituality into its research and practice.

#### **PSIC 6527 Fundamentals of Human Sexuality**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This introductory course aims to provide an overview of human sexuality. It includes processes for clarifying personal sexual attitudes and values. The topic will be approached from both a personal perspective and its social dimension. Students will examine some sexual issues in Puerto Rican society.

#### **PSIC 6528 Violence and Complexity**

Three credits. Three seminar hours per week.

The purpose of this course is to contribute to the development of a conceptual framework in which to locate violence as a complex, socially constructed phenomenon. It will study the relationships between psychic life and social life from the centrality that the signifier of violence has acquired

in our contemporaneity. This includes a detailed examination of the relationships between the history of subject constitution and identifications (subjectivation) and the world we share with others (intersubjectivity) and its relation to violence. Contributions from psychoanalytic discourse to the analysis of violence will be examined, and dialogical relations between psychoanalytic discourse and other contemporary fields of theorization such as poststructuralism, deconstruction, social constructivism, and Lacanian psychoanalysis will be fostered. Critical examination of the contributions of traditional psychology on the topic of violence.

## PSIC 6529 Review and Critical Analysis of Psychological Literature in Puerto Rico

Three credits. Three lecture hours per week.

Prerequisite: Having passed a minimum of 9 graduate credits.

Review of research and publications made in Puerto Rico, their theoretical frameworks, methodology, and implications for understanding the psychological reality of Puerto Ricans. An analytical and critical framework will be provided.

## **PSIC 6535 Theoretical Controversies on Human Development: Early Childhood** Three credits.

Different aspects of human development from birth to seven years of age will be examined. The focus is epistemological, emphasizing the basic assumptions of the discipline, fundamental controversies, and the ideological and philosophical aspects of the theories examined.

# PSIC 6537 Psychopathology of Affective Development in Childhood: Psychoanalytic Perspective

Three credits.

Prerequisite: Director's authorization.

To provide a clinical view of the affective development of the child from a psychoanalytic perspective, allowing for an understanding of child psychopathology.

## **PSIC 6545 Program Evaluation and Consulting**

Three credits. Three lecture hours per week.

Introduction to the basic concepts and methods of consulting and program evaluation and to the ethical and value controversies surrounding them. Emphasis is placed on developing skills in these areas and their application in public service programs and private non-profit agencies.

## PSIC 6546 Analysis of Interventions in Organizations: Theory and Practice

Three credits. Three lecture hours per week.

Prerequisite: PSIC 6025 or its equivalent, authorization from the director, or PSIC 6026.

Analysis of interventions carried out in public and private organizations in and outside of Puerto Rico, considering the conceptual models that guide them. Different intervention models, their purposes, conceptual frameworks, and ethical principles will be presented. Analysis of the current

applications of these and other models, paying particular attention to the congruence between theory and practice.

## **PSIC 6555 School Psychology**

Three credits. Three discussion hours per week.

General orientation on school psychology, focusing the discussion on the public education system of Puerto Rico and on the discipline's ethical principles. The various functions carried out in professional practice in this area and its historical development and future of school psychology will be highlighted.

## PSIC 6591 School Psychology Practice I

Three credits. Eleven hours of supervised practice per week.

Prerequisite: PSIC 6555

Supervised practice in the provision of services in the school context, including experiences such as: direct observation in the classroom, health promotion and prevention, community relations, interventions with academic and disciplinary problems.

## PSIC 6592 School Psychology Practice II

Three credits. Three hours of direct supervision and ten hours of practice per week in the school setting.

Prerequisites: PSIC 6401, 6403, 6555 and 6591

Continuation of supervised practice in the provision of psychological services in a school setting. Students will gain experience in intervention strategies such as crisis and conflict intervention, management of specific behaviors in groups, interdisciplinary teamwork, psychoeducational evaluations, and program evaluations. This course complements PSIC 6591.

#### **PSIC 6995 Research Practicum**

One to four credits per semester.

Prerequisite: Enrollment in the graduate program and professor's authorization.

The course is aimed at developing the student's skills necessary for psychological research through active participation in the development of research projects, under the supervision of a professor. The course can be repeated for credit, with no limit with the approval of the research professor.

## PSIC 7005 Seminar in School Psychology: The Roles of the School Psychologist

Three credits. Fifteen hours of lecture per week.

Prerequisite: Director's authorization.

Study of the clinical process with learning and behavior problems. Emphasis on the integration of data from case histories, interviews, and psychometric tests.

## PSIC 8000 Philosophical Foundations of Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Admission to the graduate program.

Changes in the paradigms of science and their consequences in psychology.

#### **PSIC 8001 Dissertation Seminar**

Credits: 0Three hours of discussion per week.

Prerequisite: Master's degree or PSIC 6007. Authorization from the director and/or graduate

program coordinator.

The dissertation is an original investigation demonstrating the student's capabilities as an independent researcher. During the dissertation seminar, the student will choose their research topic and problem, review the literature (relevant theoretical and empirical findings), and develop the research design or action plan. A formal proposal will be submitted to the dissertation committee for approval.

#### **PSIC 8002 Dissertation Work**

Credits: 0Three hours of discussion per week.

Prerequisite: PSIC 8001

This course is designed to follow up on the work done in the dissertation seminar. The proposed research will be completed, meaning that information will be collected and interpreted with the advice of the dissertation committee. The student will enroll in the course every semester they are working on their dissertation and will periodically submit written reports of their progress. The thesis work is completed by submitting the final draft of the dissertation.

# PSIC 8005 Seminar in School Psychology: Professional Problems in School Psychology Three credits. Three hours of lecture per week.

Three credits. Three hours of fecture per week.

Examination and in-depth analysis of unresolved problems in psychoeducational diagnosis and intervention and behavior modification; counseling, consulting, and advising parents.

## PSIC 8007 School Psychology: Mental Health Consultation in Schools

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization, consortium student.

Consultation as a model of school psychological service. The student will become familiar with and trained in various modalities and levels of consultation to be used as a school psychologist. The investigative and evaluative aspects of consultation will be studied.

#### PSIC 8015 Advanced Social Psychology II

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

Examines the historical forms of subjectivity in areas of daily life such as child rearing, morality, sexuality, and love relationships.

## PSIC 8017 Seminar on Multiple Perspectives in Research II

Three credits. Three hours of lecture per week.

Prerequisite PSIC 6007

Examination of different theoretical fields in psychology and their research. Analysis of assumptions, research strategies, methods, and techniques most used.

## **PSIC 8018 Contemporary Social Research: Meeting with its Authors**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007 and PSIC 8017.

Various approaches in social science research by meeting researchers and discussing their research with them.

#### PSIC 8019 The Social Scientist as a Judicial Expert

Three credits. Three hours of lecture per week.

Prerequisite: Master's degree in psychology or one of the social sciences.

Theoretical and practical considerations in preparing the social scientist as a judicial expert.

## PSIC 8027 Advanced Psychobiology: Foundations, Uses, and Controversies

Three credits.

The discussion period considers the influences of modern biology, particularly evolutionary, ethological, and systemic currents on the psychological conceptualization of humans. Essential concepts such as evaluation, adaptation, species-typical behavior, biological niche, and systemic organization. The discussion period is complemented with a practical laboratory considering the controversies and applications of a psychobiological approach.

#### PSIC 8028 Psychopharmacology

Three credits. Three hours of lecture and seminar per week.

Prerequisites: PSIC 6317 or PSIC 8027.

The course will discuss aspects of psychopharmacology and neurophysiology. It will include lectures on Anatomy and Physiology of the nervous system, Synaptic Neurochemistry, Pharmacokinetics and Pharmacodynamics, and on the neuropharmacological impact of various drugs on states of consciousness and behavior. The neurobiological bases of mental disorders, the mechanisms of action of different medications, and the strategies used in experimental studies and in clinical psychopharmacology will be studied. Anxiolytics and antidepressants, antipsychotic drugs, sedative hypnotics, and narcotics will be analyzed. The content will be presented from both a basic science perspective and a clinical orientation combining lectures and discussions of readings. The course is specially designed for students in the Clinical Psychology graduate program and doctoral students specializing in Academic-Research Psychology.

#### **PSIC 8105 Psychology and Social Movements**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

The theoretical-practical contributions of psychology to social movements of the last decades in Puerto Rico are analyzed.

## **PSIC 8115 Social Psychology of Education**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105 or EDUC 6270.

Examination of the crisis of education in contemporary capitalist society. Critical analysis of the most important theoretical fields for its explanation. The social construction of education and the new subjectivity.

#### **PSIC 8125** The Sociocultural Study of the Mind

Three credits. One hour of lecture and one hour of discussion per week.

Analysis of the sociocultural approach as a conceptual framework in the study of the mind. Discussion of the historical background of the approach and its development to the present with an emphasis on the research program it has generated.

## PSIC 8200 Foundations of Social Psychology and Current Topics

Three credits. Three hours of lecture per week.

This course studies the theoretical and methodological foundations of social psychology. The course discusses classic and contemporary theories, key in psychology research, as well as new trends, like the affective aspects of social behavior. This course is divided into four general units: epistemological and historical backgrounds, theorizing the individual in the social context, affective aspects of social dynamics, and power structures and contemporary related fields. In each unit, theoretical and methodological approaches are examined to provide students with the opportunity to develop an understanding of the field, as well as the research methodology from a social psychological perspective and integrate the social and affective aspects of behavior. Ethical issues related to theory, research, and psychosocial interventions are discussed. This course examines social and affective processes that affect behavior. In-person course.

## PISC 8201 Human Development: The Life Cycle

Three credits. Three hours of lecture per week.

The course offers a general overview of the theories and research related to the development of the human subject. It will cover the relationship between physical, cognitive, and socio-emotional development of the subject from childhood to old age. Emphasis will be placed on the theoretical and scientific bases of developmental psychology. The student will not only have information concerning developmental processes but also a critical understanding of the underlying processes of human development. The course will emphasize the dynamic processes of development and the dialectic between psychological processes and development. In-person course.

## PSIC 8202: Psychological Approach to the Study of Cognitive and Affective Processes

Three credits. Three hours of lecture per week.

This course studies the main theoretical models used to explain human cognitive and affective aspects of behavior. The emergence of cognitive psychology is examined considering sociohistorical transformations. Information processing models, genetic epistemology, the historical-cultural perspective, and affective processes are analyzed. Cognitive processes such as attention, sensation, perception, memory, language, and problem-solving are discussed. In particular, how affective processes and cultural differences shape cognitive processes and human behavior is analyzed. In-person course.

## **PSIC 8203 Models and Techniques of Psychotherapy**

Three credits. Three hours of lecture per week.

This course focuses on the exposition of the different theoretical models of psychotherapy, as well as their origins and evolutions. Once the basis of the theoretical models is established, current therapeutic approaches will be examined from a critical viewpoint, emphasizing conceptual problems, methodology, and alternatives to address such issues. Evidence-based psychotherapeutic approaches used with different populations will also be discussed. In-person course.

## **PSIC 8204 Personality and Human Diversity**

Three credits. Three hours of lecture per week.

This course addresses the categories of personality, subjectivity, and subjectivation from a critical and complex approach. It examines the paradigmatic assumptions underlying personality theories and traditional approaches in the study of human beings. It proposes a conceptual approach that includes debates on humans from the complexity paradigm, constructivism, psychoanalytic theory, and updated foundational psychological premises. It explores the application of this conceptual approach to the human, relevant in contemporary clinical practice, as well as considerations of the Puerto Rican population and the unavoidable sensitivity towards differences and cultural and individual diversity necessary in psychological training. In-person course.

#### **PSIC 8205 Advanced Psychological Assessment**

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 6401 and PSIC.

Training in the administration and interpretation of various techniques used in personality assessment such as: TAT, Bender Gestalt, and Person Drawing. Includes supervised practical work, laboratory work, and the presentation of written reports. In-person course

## PSIC 8206 Advanced Practice in Psychological Assessment

One credit.

Prerequisites: PSIC 6401 and PSIC 6403.

Corequisite: PSIC 8205

Intensive practice in the administration and assessment of the following tests: Thematic Apperception Test (TAT), Children's Apperception Test (CAT), Bender Gestalt Visual-Motor Test, Human Figure Drawing among other tests. This includes tests contained in the course Psic. 6401; Psychological Assessment I, worked on in the practice of this course, Psic. 6403. Personality inventories such as the Personality Assessment Inventory (PAI), the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and basic concepts of the Rorschach are also included. Emphasis is placed on the clinical approach to the responses of the subjects with whom one works, which are part of their discourse and life history. In-person course.

## **PSIC 8215 Psychology and Law**

Three credits.

Analysis of basic concepts common to psychology and law.

## **PSIC 8216 Employment and Discrimination.**

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director

Critical analysis of employment discrimination and its consequences.

## **PSIC 8300 Advanced Clinical Psychology Practice**

One credit. Three hours of supervised practice.

Prerequisites: PSIC 6434

This advanced clinical practice in psychotherapy (individual, group, couples, and/or families, and/or psychological assessments) allows students to increase their in-person clinical hours and refine their clinical skills. During this advanced practice, students will also increase exposure to diverse populations and rotate through external clinical practices. In-person course.

## **PSIC 8301 Advanced Family and Couples Therapy**

Three credits. Three lecture hours per week. Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8302

This course offers students an overview of the basic concepts and fundamentals of family and couples' therapy. They will also become familiar with the different systemic theoretical models. Different techniques used by the various theoretical models will be emphasized. Similarly, they will develop group research skills that address some family or couple issues. In-person course.

#### **PSIC 8302 Advanced Practice in Family and Couples**

One credit. Supervised practice.

Prerequisites: PSIC 6432 and PSIC 8203

Corequisites: PSIC 8301

This course is a clinical practice where the student has the opportunity to acquire advanced clinical skills to work with couples and families from a systemic perspective. During this clinical practice,

the student will have interventions with clinical cases using one or several systemic theoretical models. This practice must be taken simultaneously with the theoretical course in advanced therapy for families and couples. In-person course.

#### **PSIC 8303 Research Practice**

One credit.

The aim of this course is to foster research experience in students. They will join a faculty member's project to acquire and refine research skills. They will be working under the supervision of a mentor/researcher. Students must attend weekly one hour research sessions under the mentorship of their supervisor. Each research project of the supervisor will have a brief description of their research. This course can be taken more than once to continue with a research project. In addition, their respective research supervisors will add additional references to the course. Inperson course.

#### **PSIC 8304 Clinical Supervision Seminar**

One credit.

Prerequisite: PSIC 6433

This course provides students with an overview of clinical supervision and the different approaches and models of supervision applied to clinical psychology. The student is exposed to the development of supervision as a fundamental part of a psychologist's training. The student will appreciate different conceptualizations of clinical supervision according to each theoretical model and its particular objectives, approaches, and strategies. Additionally, they will learn the difference between supervision and consultancy. Moreover, the student will have the opportunity to create and develop instruments to measure variables that should be present in each psychotherapeutic model. There will be integration into theory and research in seeking research publications on psychotherapy and supervision. In-person course.

## PSIC 8335 Research Methods in Psychology on Human Development

One credit. Three lecture hours per week.

Prerequisite: PSIC 6006, 6007, 6301 and authorization from the professor.

Discussion of the most frequently used methods in psychological research on human development. Examination of the central issues of time analysis, life changes, contributions of the evolutionary approach, and the relationship between research and theory development.

## PSIC 8405 Attachment Theory: Critical Analysis and Clinical Application

Three credits. Three lecture hours per week.

Analyzes the basic assumptions of the theory based on ethological study. It is compared with other dynamic approaches and clinical applications are derived.

## **PSIC 8407 Rorschach Technique**

Four credits. Three lecture hours and three hours of supervised practice per week.

Prerequisites: PSIC 6020, 6401 and 6402

Introductory course in the Rorschach psychological assessment technique. Includes the theoretical basis, principles of administration, scoring, and interpretation. Provides practical experience.

#### PSIC 8409 Psychotherapeutic Research: Process and Outcome

Three credits. Two hours of lecture and discussion and one hour of practice per week.

Prerequisite: Professor's authorization.

Formal research on psychotherapy programs for children, adolescents, and adults in various modalities (such as individual, group, couples, and family). Examination of research on psychotherapeutic processes and outcomes.

#### PSIC 8411 Seminar on Psychoanalysis Part I: Adult

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Study of Freud's writings, essential for understanding subjectivity.

## PSIC 8412 Seminar on Psychoanalysis Part II: Child

Three credits. Three hours of lecture per week.

Study of the basic texts of the most important psychoanalysts in the field of child psychoanalysis.

#### PSIC 8415 Analysis and Reflection on the Practice of Clinical Psychology in Puerto Rico

Three credits. Three hours of lecture per week and nine hours of laboratory.

Prerequisites: PSIC 6431, 6432, 6433 and 6434.

Advanced supervised practice in psychotherapy (individual, group, couples and/or families, and/or psychological evaluations). It allows generating new approaches and intervention models, as well as refining clinical skills and deepening in specific populations or issues. This practice course consists of three credits per semester and can be repeated up to three times.

#### PSIC 8416 Psychological Evaluation of Children with Disabilities

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 3025, 6301, 6401, 6402, 6403 and 6404...

Theoretical and methodological controversies on the psychological evaluation of children with disabilities. Examination of the effects of disability on the development of children, on their families, and the issue of social and educational placement.

## **PSIC 8420 Seminar: Study of Families**

Three credits.

Prerequisite: PSIC 6421

Critical study of theoretical and research literature on families and its applicability in Puerto Rico. Research techniques for studying families in Puerto Rico will be developed.

## PSIC 8425 Seminar on Supervision in Psychotherapy

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: 60 graduate credits in clinical psychology or its equivalent.

Critical consideration of theoretical and practical aspects of psychotherapy supervision. Practical experience in observation, research, and supervision.

## **PSIC 8495 Internship in Clinical Psychology**

No credits.

Prerequisite: Authorization from the department director or graduate program coordinator and PSIC 6431, 6432, 6433, 6434.

Supervised practice in clinical psychology up to the accumulation of 2,000 hours of professional experience as the last requirement for the doctoral degree.

## **PSIC 8505 Psychology and Reason**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007

Analysis of the body/mind separation and the "software/hardware" split of labor and its consequences in the constitution and development of psychology.

## PSIC 8506 Advanced Seminar in Community Psychology: Contemporary Debates

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105, PSIC 6106.

Contemporary debates in community psychology and their realization in research and intervention. The discussion is framed within community psychology in Puerto Rico.

#### **PSIC 8507 Consultation in the School Context**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PSIC 6555

Study of the different roles and functions of the consultant in the school context. Deep discussion of the basic principles and intervention models in professional psychological consultancy. Emphasis on the stages of the consultancy relationship and the processes that develop during intervention.

#### PSIC 8508 Practice of Consultation in the School Context

Zero credits. Ten hours of supervised practice and three hours of supervision.

Prerequisite: PSIC 6555

Supervised practice in consultation in the school context where theoretical knowledge is applied, and discipline-specific skills are developed. This course complements consultation in the school context (PSIC 8507).

## PSIC 8515 Biological Approaches to the Study of Psychopathology

Three credits. Three hours of seminar per week. Prerequisite: PSIC 6408, PSIC 6317 or PSIC 8027.

Study of biological models proposed to explain various human psychopathological conditions. Emphasis on critical analysis of research supporting or contradicting these models and on pharmacological interventions derived from them. Analysis of the most important controversies in their application and their impact on psychology practice.

## **PSIC 8516 Psychoeducational Evaluation**

Three credits. Three hours of lecture per week and two hours of supervised practice per week. Prerequisites: PSIC 6401, 6403 and 6555.

Analysis of concepts and psychological and educational strategies used in psychoeducational evaluation. Includes conceptualization of evaluations in the school context, evaluations of academic achievement, basic skills in writing, reading mathematics, as well as social performance and dynamic cognitive aspects, and pedagogical strategies. Integrating as fundamental aspects of the psychoeducational evaluation, modalities of corrective and remedial intervention strategies. Provide for the application of concepts and the development of specific skills that allow for psychoeducational evaluations.

## PSIC 8525 Play: Reflection, Analysis, and Intervention

Three credits. Two hours of lecture per week and two hours of supervised practice per week. Prerequisite: PSIC 8405 and PSIC 8412.

Study of play in children from a psychoanalytic and interactional perspective and its implications in clinical practice with children. Critical examination of other theoretical perspectives and their clinical application. Supervised practice in clinical intervention.

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**DEGREE:** 

## **Doctor of Philosophy in Psychology (PhD)**

#### **PERSONAL DOCENTE:**

**Cruz Bermúdez, Nelson D.**, Ph.D., Brandeis University, 2007, Professor. Research topics: Neuroscience of addiction and mental disorders; neuro-education.

**Dávila Marrero, Elixmahir**, Ph.D., University of Puerto Rico, 2005, Associate Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a tool for cognitive rehabilitation with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

**Espada Brignoni, Teófilo**, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Culture and subjectivity, social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

**Galarza García, Laura**, Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace psychology; organizational strategy and change; Selection, development, and management of individual and organizational performance; Work engagement.

**García Ramos, Tania**, Ph.D., Complutense University of Madrid, 1995, Professor. Research topics: Industrial Organizational Psychology; Work and Organizational Psychology; Work and subjectivity; Theorization about work; research methodology; Epistemology of complexity.

**Gómez Escudero, María de los Ángeles,** Ph.D., Université de Paris V, 1991, Professor. Research topics: Parenthood and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

**Jiménez Torres, Aida**, Ph.D., University of Puerto Rico, 1993. Professor. Research topics: Family and Couples: Attachment: Multiculturalism and psychotherapy.

Martínez Mejias, Sylvia, Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in affective bonding and attachment theory; Expert testimony in custody and special



education cases; Assessment in early intervention and developmental disabilities.

**Méndez Castillo, Milagros**, Ph.D. Fordham University, 1993, Associate Professor. Research topics: Adolescent sexuality, Violence in schools, Health psychology, Psychology teaching.

**Miranda Gierbolini, Dolores**, Ph.D., Temple University, 1987, Professor. Research topics: Development of sustainable communities, Social movements, Social policy, Political subjectivities, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

**Morales Arandes, Edgardo**, Ed.D. Boston University, 1986, Associate Professor. Research topics: Language and metaphor as models for constructing socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogical and collaborative practices; evidence-based psychotherapy; qualitative research.

**Nina Estrella, Ruth V.,** Ph.D., National Autonomous University of Mexico, 1991, Professor. Research topics: Interpersonal communication, family, couple relationships, and sexuality and adolescence.

**Ruiz Alfaro, Frances**, Ph.D. University of Puerto Rico, 2014, Assistant Professor. Research topics: Research interests: Family bonds, special needs, relational constructionism, and generative practices in psychotherapy.

**Santiago Estrada, Sara**, Ph.D., University of Puerto Rico, 2013. Professor. Research topics: Transformations in work; Study of subjectivities in work scenarios, educational organizational settings; Organizational change.

**Tirado Santiago, Giovanni**, Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

## **ADMISSION REQUIREMENTS**

## **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Requirements of the Doctoral Program**

- 1. The minimum graduation GPA will be 3.00 on a 4.00 scale.
- 2. Passing (with a grade of A, B, C, or P) all required courses in the curriculum of the degree sought.
- 3. Passing the master's level comprehensive exam.
- 4. Faculty recommendation in the corresponding area to pursue doctoral studies.



- 5. Passing the doctoral candidacy exam.
- 6. Approval of the dissertation proposal and the dissertation.
- 7. Submission of a graduation application.
- 8. Digital submission of the dissertation duly signed by the Dissertation Committee.
- 9. Publication of the dissertation in UMI.

#### STUDY PROGRAM:

Core Courses (18 credits)		
Code	Course Title	Credits
PSIC 6305	Advanced Methodological Designs and Statistics	3
PSIC 8000	Philosophical Foundations of Psychology	3
PSIC 8017	Seminar on Multiple Perspectives in Research II	3
PSIC 6105 /	Advanced Social Psychology I /	3
PSIC 8015	Advanced Social Psychology II	3
PSIC 6317 /	Advanced Physiological Psychology /	3
PSIC 8027	Advanced Psychobiology	3
PSIC 6325 /	Psychological Approach to the Study of Cognitive Processes	3
PSIC 8125	The Sociocultural Study of the Mind	3
Elective courses (18 credits)		
XXXX		3
Candidacy Exam		
XXXX	Qualifying Exam	0
Dissertation		
PSIC 8001	Dissertation Seminar	0
PSIC 8002	Dissertation Work	0

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **PSYC 6005 Theories of Personality**

Three credits.

Study of theories on the structure, dynamics, and development of personality, emphasizing contemporary approaches. Critical examination of the problems, theories, and research that help clarify the role of motivation in personality.

## **PSYC 6006 Statistics Applied to Psychology**

Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

## PSYC 6007 Seminar: Methods of Psychological Research

Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection of areas, methods, and topics in psychological research.

#### **PSYC 6008 Thesis Work**

No credits. Independent studies.

Prerequisite: PSYC 6010

The course is designed for those students who need guidance and advice from their thesis advisors regarding difficulties encountered in different phases of thesis research and in the preparation and writing of the thesis. The student will enroll in the course each semester in which they are carrying out their thesis work.

## **PSYC 6009 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to give the student a general examination of the eight areas of psychology encompassing topics in general or introductory psychology course. The areas to be covered are history and systems, sensation and physiological perception, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

## **PSYC 6010 Thesis Seminar**

Three credits.

Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

## **PSYC 6015 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide a general overview of the eight areas of psychology that are typically covered in a general or introductory psychology course. The areas to be covered are history and systems, sensation and perception, physiological, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

## PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose the student to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

#### PSYC 6025 Psychosocial Approach to the Study of Organizational Behavior

Three credits. Three lecture hours per week.

Prerequisite: Admission to the Graduate Program.

The following topics are covered relatively quickly: organization design, motivation, satisfaction, communication, conflict, and others. The discussion deepens on some methods that have been used to try to facilitate change in organizations. Current administrative practice is critically evaluated, and an attempt is made to identify and question the ideology or set of values that informs it. The negative consequences of such ideology are illustrated, and the possibility that the human tendency to unilaterally control one's situation leads precisely to organizational ineffectiveness is discussed. An invitation is made to invent and explore models of control that lead to effectiveness.

#### PSYC 6026 Psychological Approach to Development and Change in Organizations

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6025

Various models for producing information relevant to organizational development and change are explored. The aim is to compare and evaluate these models so that the student becomes familiar with them and feels capable of beginning to explore the models' application.

# PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology One credit. Sixteen lecture hours per semester.

The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various psychological models of human behavior as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

## PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision

One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course.

## **PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting** One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultant and advisory service models with the purpose of knowing and applying the basic principles of these models to situations requiring the advice of a psychologist.

## PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.

## PSYC 6070 Proseminar in General and Applied Psychology: Society and Puerto Rican Culture

One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with the effect of variables resulting from Puerto Rican society and culture on individual and group behavior. An emphasis is placed on analyzing situations that require the intervention of the clinical psychologist considering these variables.

# **PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation** One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course.

## PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models to identify community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

## PSYC 6105 Advanced Social Psychology

Three credits. Three lecture hours per week.

The course is organized around the problem of the social construction of reality. It aims to develop both a theoretical and methodological framework for the study of this issue. To this end, various theories such as ethnomethodology, symbolic interactionism, and role theory are studied; and there will be a deeper exploration in areas such as deviance and social control, attitudes, attribution, social comparison, social movements, and ideology. An effort will be made to use literature from Puerto Rico to illustrate and understand the social construction of reality.

## **PSYC 6106 Community Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the Department Director.

The course aims to prepare future psychologists in the analysis and solution of psychosocial problems affecting the community.

## **PSYC 6107 Intercultural Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in psychology.

This seminar aims to demonstrate the extent to which social psychology may be subject to cultural variations. Social psychology research in different cultures is studied, analyzed comparatively, and considered for its implications on existing theories. Research within the Puerto Rican culture is emphasized, and there is an attempt to replicate at least one foreign study in our culture.

## PSYC 6108 Psychology, Society, and Health

Three credits. One lecture hour and two discussion hours per week.

Prerequisite: PSYC 6106

Analysis of the socio-economic conditions, organizations, and social visions that affect health situations in Puerto Rico, and in other countries of the Americas. The role of the psychologist in relation to this issue.

## PSYC 6109 The Group as a Means of Social Intervention

Three credits. Two lecture hours and three lab hours per week.

Prerequisite: PSYC 6105, 6106.

The application of group theories to social life will be studied to facilitate psychological, social, organizational, institutional, and community change.

## PSYC 6110 Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico

Three credits. Three lecture hours per week.

The seminar aims to gather relevant information regarding change agents in Puerto Rico such as the search for the historical background of Puerto Rican society in its basic outlines, population, emigration and immigration, urbanization, poverty, slums, social stratification, education, housing, employment and unemployment, industrialization, and modernization. These topics or indicators of change, among others, will be analyzed based on objective and verifiable information from the review of literature from studies conducted here and elsewhere, with a psychological emphasis. It will explore how changes in these areas affect interpersonal relationships, human development, the formation of beliefs and values, and coexistence in Puerto Rico.

## PSYC 6115 Analysis of Strategies for Conflict and Crisis Management

Three credits. Three lecture hours per week.

Conceptual and formal analysis for the management of interpersonal, group, and community conflicts.

## PSYC 6116 Practice in Strategies for Conflict and Crisis Management

No credit.

Prerequisite: Concurrent with PSYC 6115.

Supervised practice in interventions aimed at managing interpersonal, group, and community conflicts.

## PSYC 6120 Seminar in Community Psychology and Social Policy

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director and the professor.

The course attempts to examine the content of public policy in the areas of health, education, and social welfare as it applies to community psychology in Puerto Rico. Full understanding will allow for the effective planning of psychosocial intervention strategies.

## **PSYC 6131 Community Practice I**

Three credits.

The purpose of this practice is to expand the theoretical framework discussed in the courses of Advanced Social Psychology I and Community Psychology. It also aims to promote the acquisition of intervention skills in communities, formal groups, organizations, institutions, or geographical communities, data collection, and other aspects associated with research.

## **PSYC 6132 Community Practice II**

Three credits.

This practice aims to expand the intervention and research skills acquired in Community Practice I.

#### **PSYC 6133 Community Practice III**



Three credits.

Prerequisite: PSYC 6132

This practice aims to refine and expand the skills acquired in the Community Practice I and II courses and offers students the opportunity to acquire new community work skills in a new work setting.

## **PSYC 6195 Seminar on Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6105

Study of current problems and themes in social psychology and related areas.

#### PSYC 6201 Practicum I

Three credits. One lecture hour and twenty lab hours per week.

Students will dedicate at least 120 hours to practical work in an organization where they apply the concepts and techniques of the social-industrial program. Students will meet one hour weekly with the supervising professor to discuss problems and consult on references to study. As part of the course, each student will prepare a work, publishable in a scientific journal.

## **PSYC 6202 Practicum II**

Three credits. Three supervision hours and eight practice hours per week.

Prerequisite: PSYC 6201 and 6205.

Practice in government and private organizations with particular attention to the organizational problems of such institutions. The course includes 120 hours of practice, in addition to weekly meetings for supervision.

#### PSYC 6205 Industrial Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Graduate student status.

Topics relevant to the world of work with high social content are covered. Topics include historical significance of work and needs fulfilled by working, technology and job satisfaction, formal and informal organization, job analysis, recruitment and selection, introduction to performance evolution and training, as well as termination of employment (unemployment, retirement, and exit interviews).

#### PSYC 6206 Construction of Psychological Tests

Three credits. Two lecture hours per week.

Prerequisite: PSYC 6006

Theory of constructing aptitude, intelligence, achievement, personality, and interest tests. Practice in the preliminary development of one of these types of tests.

## PSYC 6209 Psychosocial Aspects of Labor Regulation

Three credits.

Prerequisite: Admission to the program.

Critical analysis of labor regulation in areas such as health, safety, schedules, wages, labor unions, and others.

## PSYC 6215 Psychosocial Approach to Organizational Conflicts

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Analysis of psychological and sociological theories of organizational conflicts and strategies for their solutions.

## PSYC 6216 Psychological Test Construction Laboratory

One credit. One lab hour per week.

Prerequisite: To be taken concurrently with PSYC 6206.

Laboratory for drafting questions, item analysis, reliability determination, norms, equating, and validity in psychological tests.

## PSYC 6218 Psychology and Occupational Health

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6205 or equivalent.

The course explores the workplace with an emphasis on the health, safety, and well-being of the workforce. It focuses on the interaction between the worker and their workplace and its effects on the worker's life both inside and outside the company. The course explores topics such as: the healthy organization, work-life balance and spillover effect, health and productivity, stress and health, workplace violence, physiological aspects of illness, safety 3 and accidents, as well as intervention alternatives in work settings. As part of the course activities, students will develop a group intervention in an organization identified by them as a contribution to the organization and the quality of life of its members.

## PSYC 6225 Techniques of Psychological Evaluation in Personnel Selection

Three credits. Three lecture hours per week.

Discussion of the main psychological evaluation techniques used in personnel selection. Face-to-face, hybrid, and online course.

**PSYC 6227 Social Psychology of Work and Production in Contemporary Capitalist Society** Three credits. Three lecture hours per week.



Analysis of theories of alienation, communication, and organization in relation to changes in the economy and society, brought about by the contemporary crisis. The perspectives of social psychology in the technological era will be studied.

## PSYC 6301 Advanced Developmental Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in psychology or authorization from the advisor.

Study of the basic principles of human development with an emphasis on childhood and adolescence. Critical consideration of recent scientific findings. Special attention is given to the problems and peculiarities of childhood and adolescence in Puerto Rico.

#### PSYC 6302 Advanced Developmental Psychology

Three credits.

Prerequisite: Bachelor's degree and with authorization from the professor.

Based on the study of the principles governing human development, from conception to the end of adolescence. Subsequent evolutionary stages, such as early adulthood, middle adulthood, and the onset of old age, will be considered. Parallel to the study of human evolution during these periods, the psychological circumstances accompanying the achievement of fulfillment, and the decline of life are discussed.

## PSYC 6305 Advanced Statistical and Methodological Designs

Three credits. Three lecture hours per week.

Statistical analyses and designs, and the theory behind them.

## PSYC 6306 History and Systems of Psychology

Three credits. Three lecture hours per week.

Prerequisite: Admission to the graduate program.

The course examines the history of psychology, from ideas in the countries of the ancient East to contemporary psychology. It attempts to identify the historical links of the discipline. Finally, the state of the discipline and its history in Latin America are examined.

## **PSYC 6311 Teaching Psychology**

Three credits. Three lecture hours per week.

This course focuses on the teaching and assessment of the general psychology course. Innovations in teaching and instructional methods are examined. The central themes and debates of general psychology, course content, ethics in teaching, and assessment of achievement are discussed.

## PSYC 6312 Practice in Teaching Introductory Psychology

Three credits. Eight practice hours per week.

Prerequisite: PSYC 6311

A course designed to provide supervised experiences and skills in teaching psychology. The course includes supervised practice in different teaching methods.

#### **PSYC 6315 Practice in Teaching Advanced Psychology Courses**

Three credits. Twelve supervised practice hours per week.

Prerequisites: PSYC 6312 and authorization from the professor.

Organization and teaching of an advanced undergraduate psychology course under the supervision of a professor. Includes discussion of the philosophical foundations of teaching and the most recent aspects of the topic to be taught.

# PSYC 6317 Advanced Physiological Psychology

Three credits. Three lecture hours per week.

The course emphasizes study of the relationship between an organism's physiological system and behavior. Special attention is given to the functioning of the central nervous system and its influence on behavior.

#### **PSYC 6318 Human Learning**

Three credits. Three lecture hours per week. Prerequisite: Authorization from the director.

The course will broadly cover verbal memory and verbal behavior of humans. It will include a brief study of historical backgrounds and general methodology; the rest of the course consists of the study of various models of interpolation of memory and/or language.

#### PSYC 6325 Psychological Approach to the Study of Cognitive Processes

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Basic theories on the relationship between mental events and human behavior and effectiveness. The importance of cognitive processes in psychological practice in Puerto Rico is emphasized.

#### PSYC 6327 Computer Use and Application in Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Introduction to terminology, principles, and common applications of computers in psychological work.

## PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week. Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

#### PSYC 6402 Psychological Assessment II

Three to four credits. Two hours. Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work, and the presentation of written reports.

# PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408 and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

# PSYC 6404 Practice in Psychological Assessment II

Credits: 0Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403 and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

## PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

#### **PSYC 6406 Practice in Psychotherapy**

Credits: 0Eight hours of practice per week. Prerequisite: Enrolled in PSYC 6405.

Supervised practice in individual or group therapy. The practice is an integral part of the PSYC 6405 course.

#### PSYC 6407 Emergency Clinic and Short-Term Psychotherapy

Three credits. Three hours of lecture per week.



Prerequisite: Professor's authorization.

The course proposes the study of clinical and ethical knowledge that allows, beyond the so-called intervention, a positioning that centrally embraces the words of individuals who come to the consulting room at a time of intricate conscious and unconscious phenomena that exceed their handling capacity and tolerance for distress, and to facilitate their connection with their crisis and symptoms as one not only affected by external events but as a production of their own complexity, subjectivity, and discourse.

## **PSYC 6408 Principles of Psychopathology**

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

# PSYC 6409 Practice in Psychopathology

Credits: 0Four hours of practice. Prerequisite: Enrolled in PSYC 6408.

Observation, interviews, preparation of case histories, diagnosis, and clinical discussion of behavioral disorders. The practice is an integral part of the PSYC 6408 course.

#### PSYC 6410 Advanced Seminar in Behavior Modification

Three credits. Three hours of lecture per week; practice (optional).

Prerequisite: PSYC 6417.

Critical and intensive study of the theoretical framework of behavior modification principles and the therapeutic effectiveness of behavioral modification techniques.

# **PSYC 6416 Group Therapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: Graduate student in psychology.

The course will emphasize the theoretical and practical aspects of group therapy and will offer a human laboratory to experience client and therapist roles in a group psychotherapy setting.

#### **PSYC 6417 Principles of Behavior Modification**

Three credits. Three hours of lecture and four hours of practicum.

Prerequisite: Graduate student in psychology.

Study of the basic psychological principles governing human behavior, particularly those derived from learning psychology. Emphasis will be placed on the application of social learning principles to the modification of psychotic, neurotic, and maladjusted behavior in clinical and educational

institutions. Special attention will also be given to the critical discussion of recent scientific findings in behavioral modification with particular interest in the applicability of these findings to adjustment problems in Puerto Rico.

#### PSYC 6418 Disorders of Childhood Behavior

Three credits. Two hours of lecture per week; Practicum by agreement.

Prerequisite: Authorization from the Department Director.

Issues of etiology, classification, and management of children exhibiting extreme isolation, boundaryless behavior, odd and chaotic tendencies, and behavior determined by organic disorders. Theoretical frameworks, assessment techniques, and diagnosis are considered. Opportunities for practice will be provided. Lectures by guest consultants will be offered.

#### PSIC 6421 Family Therapy I

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: PSIC 6405, 6408

Study of some family therapy systems, their theoretical models, techniques used, and case analysis. Students are offered the opportunity to experience simulated family therapy experiences (laboratory) and to conceptualize their own experiences within the different family systems they share personally and professionally.

# **PSIC 6423 Practice in Family Therapy I**

Three credits. Three to four hours of practice.

Prerequisite: PSIC 6405, 6408 and 6421.

Observation experiences of family therapy sessions; opportunity to work with families as a cotherapist providing family therapy. Participation in Practice Center meetings, case discussions, and supervision meetings.

### PSIC 6431 Practice in Clinical Psychology I

Credits: 0Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

#### PSIC 6432 Practice in Clinical Psychology II

Two credits.

Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

# PSIC 6433 Practice in Clinical Psychology III

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## **PSIC 6436 Intramural Practice in Clinical Psychology**

Three credits.

Prerequisite: Director's authorization.

Supervised practice in psychotherapy (individual, group, couples, and/or families) and psychological assessment. This practice is carried out at the facilities of the University Center for Psychological Services and Studies (CUSEP) during the summer sessions.

#### **PSIC 6437 Introduction to Clinical Practice**

Three credits. One hour of lecture, one hour of discussion, and five hours of supervised practice per week.

The clinic is structured around concepts and foundations that provide a basis and context for the experiential experience (practice). This course will present basic concepts in a theoretical-practical-therapeutic integration. This will be specifically carried out through the discussion of different aspects: theoretical frameworks, clinical observation, interview styles and processes, clinical conceptualization, therapeutic processes, and clinical contexts.

#### **PSIC 6505 Module on Dreams**

One credit. Three hours of lecture per week.

Prerequisite: Director's authorization.

The meaning of dreams from a physiological and psychological point of view, Jung's dream theory and Dr. Efrén Ramírez's theory. Dr. Ramírez's dream interpretation method, and its utility in terms of personal development, as a psychotherapy method, and as a group therapy method.

#### **PSIC 6506 Colloquium on Psychology Topics**

Credits: 0One hour of meeting per week.

Lectures, discussion, and exchange of ideas among department faculty, students, and invited speakers. Students will enroll each semester.

# PSIC 6507 The Psychology of Women

Three credits. Three hours of lecture per week.

This course is organized around the question of whether there is a distinctly female psychology and what its biological and social determinants are. It studies the acquisition of sexual roles and their historical determination and transcultural relativity. The literature related to biological, sexual, cognitive, and affective functioning of women is reviewed. In addition, the development of feminist movements, the sociopolitical situation of women in industrial society, and the impact of these changes on the relationships between sexes, family, and Puerto Rican society are studied.

#### **PSIC 6510 Seminar on the Family in Puerto Rico**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Director's authorization.

Analysis and research on the history and psychosocial aspects of the family in Puerto Rico. The primary purpose of the seminar is to promote psychosocial research on the family and its issues.

## PSIC 6515 Intelligence, Creativity, and Cognitive Complexity

Three credits. Three hours of lecture per week.

The concepts of intelligence, creativity, and cognitive complexity will be contrasted, and their relevance to contemporary Puerto Rican society will be determined.

#### **PSIC 6516 Supervised Reading Course**

Three credits.

Prerequisite: Professor's authorization.

Readings revolve around a topic chosen by the student and the professor. The student covers the concepts with the professor's approval and prepares a monograph on the concept of their choice.

## PSIC 6517 Advanced Psychopharmacology and Neurophysiology of Drug Use and Abuse

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This course delves into the knowledge of the psychophysiological system and its alteration through the use of chemical substances. Students will become familiar with the chemical and pharmacological aspects of substances that are subject to abuse, as well as those used in various treatment modalities (methadone, naltrexone, etc.). Particular attention will be given to the study of human behavior and its interaction with the action of substances on the psychophysiological system.

# PSIC 6518 Psychology of Adolescence

Three credits. Two lecture hours and one discussion hour per week.

Prerequisite: PSIC 6301

Study of the theories and research explaining the typical processes of adolescence, considering the cultural variables that contribute to the formulation of such theories and the design of such research. Discussion of the physical, cognitive, social, and affective aspects of development, as well as the evolution of identity and sexuality in adolescence. Analysis of family processes, school experience, peer relationships, and their influence on development.

## PSIC 6525 Psychological Analysis of Power

Three credits. Three lecture hours per week.

Analysis of the concept of power at the individual level (power traits, power motivation, control foci), and at the group level (leadership, gender relations). Some emphasis will be given to communal and institutional levels.

## **PSIC 6526 Spirituality in Psychology**

Three credits. One lecture hour, one discussion hour, and one workshop hour per week.

Prerequisites: PSCI 3005 or 3003...

This graduate-level course examines conceptualizations and contemporary debates about the notion of spirituality in psychology, particularly its integration into therapeutic practice and in the training of helping professionals. It reviews the ethical premises for psychology as it integrates spirituality into its research and practice.

#### **PSIC 6527 Fundamentals of Human Sexuality**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This introductory course aims to provide an overview of human sexuality. It includes processes for clarifying personal sexual attitudes and values. The topic will be approached from both a personal perspective and its social dimension. Students will examine some sexual issues in Puerto Rican society.

#### **PSIC 6528 Violence and Complexity**

Three credits. Three seminar hours per week.

The purpose of this course is to contribute to the development of a conceptual framework in which to locate violence as a complex, socially constructed phenomenon. It will study the relationships between psychic life and social life from the centrality that the meaning of violence has acquired in our contemporaneity. This includes a detailed examination of the relationships between the history of subject constitution and identifications (subjectivation) and the world we share with others (intersubjectivity) and its relation to violence. Contributions from psychoanalytic discourse to the analysis of violence will be examined, and dialogical relations between psychoanalytic discourse and other contemporary fields of theorization such as poststructuralism, deconstruction,

social constructivism, and Lacanian psychoanalysis will be fostered. Critical examination of the contributions of traditional psychology on the topic of violence.

#### PSIC 6529 Review and Critical Analysis of Psychological Literature in Puerto Rico

Three credits. Three lecture hours per week.

Prerequisite: Having passed a minimum of 9 graduate credits.

Review of research and publications made in Puerto Rico, their theoretical frameworks, methodology, and implications for understanding the psychological reality of Puerto Ricans. An analytical and critical framework will be provided.

# PSIC 6535 Theoretical Controversies on Human Development: Early Childhood

Three credits.

Different aspects of human development from birth to seven years of age will be examined. The focus is epistemological, emphasizing the basic assumptions of the discipline, fundamental controversies, and the ideological and philosophical aspects of the theories examined.

# PSIC 6537 Psychopathology of Affective Development in Childhood: Psychoanalytic Perspective

Three credits.

Prerequisite: Director's authorization.

To provide a clinical view of the affective development of the child from a psychoanalytic perspective, allowing for an understanding of child psychopathology.

## **PSIC 6545 Program Evaluation and Consulting**

Three credits. Three lecture hours per week.

Introduction to the basic concepts and methods of consulting and program evaluation and to the ethical and value controversies surrounding them. Emphasis is placed on developing skills in these areas and their application in public service programs and private non-profit agencies.

#### PSIC 6546 Analysis of Interventions in Organizations: Theory and Practice

Three credits. Three lecture hours per week.

Prerequisite: PSIC 6025 or its equivalent, authorization from the director or PSIC 6026.

Analysis of interventions carried out in public and private organizations in and outside of Puerto Rico, considering the conceptual models guiding them. Different intervention models, their purposes, conceptual frameworks, and ethical principles will be presented. Analysis of the current applications of these and other models, paying particular attention to the congruence between theory and practice.

#### **PSIC 6555 School Psychology**

Three credits. Three discussion hours per week.

General orientation on school psychology, focusing the discussion on the public education system of Puerto Rico and on the ethical principles of the discipline. The various functions carried out in professional practice in this area and its historical development and future of school psychology will be highlighted.

## PSIC 6591 School Psychology Practice I

Three credits. Eleven hours of supervised practice per week.

Prerequisite: PSIC 6555

Supervised practice in the provision of services in the school context, including experiences such as: direct observation in the classroom, health promotion and prevention, community relations, interventions with academic and disciplinary problems.

## PSIC 6592 School Psychology Practice II

Three credits. Three hours of direct supervision and ten hours of practice per week in the school setting.

Prerequisites: PSIC 6401, 6403, 6555 and 6591.

Continuation of supervised practice in the provision of psychological services in a school setting. Students will gain experience in intervention strategies such as crisis and conflict intervention, management of specific behaviors in groups, interdisciplinary teamwork, psychoeducational evaluations, and program evaluations. This course complements PSIC 6591.

# **PSIC 6995 Research Practicum**

One to four credits per semester.

Prerequisite: Enrollment in the graduate program and Professor's authorization.

The course is aimed at developing the student's skills necessary for psychological research through active participation in the development of research projects, under the supervision of a professor. The course can be repeated for credit, with no limit with the approval of the research professor.

#### PSIC 7005 Seminar in School Psychology: The Roles of the School Psychologist

Three credits. Fifteen hours of lecture per week.

Prerequisite: Director's authorization.

Study of the clinical process with learning and behavior problems. Emphasis on the integration of data from case histories, interviews, and psychometric tests.

#### PSIC 8000 Philosophical Foundations of Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Admission to the graduate program.

Changes in the paradigms of science and their consequences in psychology.

#### **PSIC 8001 Dissertation Seminar**

Credits: 0Three hours of discussion per week.

Prerequisite: Master's degree or PSIC 6007. Authorization from the director and/or graduate program coordinator.

The dissertation is an original investigation demonstrating the student's capabilities as an independent researcher. During the dissertation seminar, the student will choose their research topic and problem, review the literature (relevant theoretical and empirical findings), and develop the research design or action plan. A formal proposal will be submitted to the dissertation committee for approval.

#### **PSIC 8002 Dissertation Work**

Credits: 0Three hours of discussion per week.

Prerequisite: PSIC 8001

This course is designed to follow up on the work done in the dissertation seminar. The proposed research will be completed, meaning that information will be collected and interpreted with the advice of the dissertation committee. The student will enroll in the course every semester they are working on their dissertation and will periodically submit written reports of their progress. The thesis work is completed by submitting the final draft of the dissertation.

# PSIC 8005 Seminar in School Psychology: Professional Problems in School Psychology Three credits. Three hours of lecture per week.

Examination and in-depth analysis of unresolved problems in psychoeducational diagnosis and intervention and behavior modification; counseling, consulting, and advising parents.

#### PSIC 8007 School Psychology: Mental Health Consultation in Schools

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization, consortium student.

Consultation as a model of school psychological service. The student will become familiar with and trained in various modalities and levels of consultation to be used as a school psychologist. The investigative and evaluative aspects of consultation will be studied.

## PSIC 8015 Advanced Social Psychology II

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

Examines the historical forms of subjectivity in areas of daily life such as child rearing, morality, sexuality, and love relationships.

#### PSIC 8017 Seminar on Multiple Perspectives in Research II

Three credits. Three hours of lecture per week.

Prerequisite PSIC 6007

Examination of different theoretical fields in psychology and their research. Analysis of assumptions, research strategies, methods, and techniques most used.

# **PSIC 8018 Contemporary Social Research: Meeting with its Authors**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007, and PSIC 8017.

Various approaches in social science research by meeting researchers and discussing their research with them.

# PSIC 8019 The Social Scientist as a Judicial Expert

Three credits. Three hours of lecture per week.

Prerequisite: Master's degree in psychology or one of the social sciences

Theoretical and practical considerations in preparing the social scientist as a judicial expert.

# PSIC 8027 Advanced Psychobiology: Foundations, Uses, and Controversies

Three credits.

The discussion period considers the influences of modern biology, particularly evolutionary, ethological, and systemic currents on the psychological conceptualization of humans. Essential concepts such as evaluation, adaptation, species-typical behavior, biological niche, and systemic organization. The discussion period is complemented with a practical laboratory considering the controversies and applications of a psychobiological approach.

#### **PSIC 8028 Psychopharmacology**

Three credits. Three hours of lecture and seminar per week.

Prerequisites: PSIC 6317 or PSIC 8027.

The course will discuss aspects of psychopharmacology and neurophysiology. It will include lectures on Anatomy and Physiology of the nervous system, Synaptic Neurochemistry, Pharmacokinetics and Pharmacodynamics, and on the neuropharmacological impact of various drugs on states of consciousness and behavior. The neurobiological bases of mental disorders, the mechanisms of action of different medications, and the strategies used in experimental studies and in clinical psychopharmacology will be studied. Anxiolytics and antidepressants, antipsychotic drugs, sedative hypnotics, and narcotics will be analyzed. The content will be presented from both a basic science perspective and a clinical orientation combining lectures and discussions of readings. The course is specially designed for students in the Clinical Psychology graduate program and doctoral students specializing in Academic-Research Psychology.

#### **PSIC 8105 Psychology and Social Movements**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

The theoretical-practical contributions of psychology to social movements of the last decades in Puerto Rico are analyzed.

## **PSIC 8115 Social Psychology of Education**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105 or EDUC 6270.

Examination of the crises of education in contemporary capitalist society. Critical analysis of the most important theoretical fields for its explanation. The social construction of education and the new subjectivity.

#### **PSIC 8125 The Sociocultural Study of the Mind**

Three credits. One hour of lecture and one hour of discussion per week.

Analysis of the sociocultural approach as a conceptual framework in the study of the mind. Discussion of the historical background of the approach and its development to the present with an emphasis on the research program it has generated.

### **PSIC 8200 Foundations of Social Psychology and Current Topics**

Three credits. Three hours of lecture per week.

This course studies the theoretical and methodological foundations of social psychology. The course discusses classic and contemporary theories, specifically in social psychology research, as well as new trends, like the affective aspects of social behavior. This course is divided into four general units: epistemological and historical backgrounds, theorizing the individual in the social context, affective aspects of social dynamics, and power structures and contemporary related fields. In each unit, theoretical and methodological approaches are examined to provide students with the opportunity to develop an understanding of the field, as well as the research methodology from a social psychological perspective and integrate the social and affective aspects of behavior. Ethical issues related to theory, research, and psychosocial interventions are discussed. This course examines social and affective processes affecting behavior. In-person course.

#### PISC 8201 Human Development: The Life Cycle

Three credits. Three hours of lecture per week.

The course offers a general overview of the theories and research related to the development of the human subject. It will cover the relationship between physical, cognitive, and socio-emotional development of the subject from childhood to old age. Emphasis will be placed on the theoretical and scientific bases of developmental psychology. The student will not only have information concerning developmental processes but also a critical understanding of the underlying processes of human development. The course will emphasize the dynamic processes of development and the dialectic between psychological processes and development. In-person course.

# PSIC 8202: Psychological Approach to the Study of Cognitive and Affective Processes

Three credits. Three hours of lecture per week.

This course studies the main theoretical models used to explain human cognitive and affective aspects of behavior. The emergence of cognitive psychology is examined considering socio-



historical transformations. Information processing models, genetic epistemology, the historical-cultural perspective, and affective processes are analyzed. Cognitive processes such as attention, sensation, perception, memory, language, and problem-solving are discussed. In particular, how affective processes and cultural differences shape cognitive processes and human behavior is analyzed. In-person course.

## **PSIC 8203 Models and Techniques of Psychotherapy**

Three credits. Three hours of lecture per week.

This course focuses on the exposition of the different theoretical models of psychotherapy, as well as their origins and evolutions. Once the basis of the theoretical models is established, current therapeutic approaches will be examined from a critical viewpoint, emphasizing conceptual problems, methodology, and alternatives to address such issues. Evidence-based psychotherapeutic approaches used with different populations will also be discussed. In-person course.

### **PSIC 8204 Personality and Human Diversity**

Three credits. Three hours of lecture per week.

This course addresses the categories of personality, subjectivity, and subjectivation from a critical and complex approach. It examines the paradigmatic assumptions underlying personality theories and traditional approaches in the study of human beings. It proposes a conceptual approach including debates on humans from the complexity paradigm, constructivism, psychoanalytic theory, and updated foundational psychological premises. It explores the application of this conceptual approach to the human, relevant in contemporary clinical practice, as well as particular considerations of the Puerto Rican population and the unavoidable sensitivity towards differences and cultural and individual diversity necessary in psychological training. In-person course.

## PSIC 8205 Advanced Psychological Assessment

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 6401 and PSIC

Training in the administration and interpretation of various techniques used in personality assessment such as: TAT, Bender Gestalt, and Person Drawing. Includes supervised practical work, laboratory work, and the presentation of written reports. In-person course.

#### PSIC 8206 Advanced Practice in Psychological Assessment

One credit.

Prerequisites: PSIC 6401 and PSIC 6403.

Corequisite: PSIC 8205

Intensive practice in the administration and assessment of the following tests: Thematic Apperception Test (TAT), Children's Apperception Test (CAT), Bender Gestalt Visual-Motor Test, Human Figure Drawing among other tests. This includes tests contained in the course PSIC. 6401; Psychological Assessment I, worked on in the practice of this course, PSIC. 6403. Personality inventories such as the Personality Assessment Inventory (PAI), the Minnesota

Multiphasic Personality Inventory-2 (MMPI-2), and basic concepts of the Rorschach are also included. Emphasis is placed on the clinical approach to the responses of the subjects with whom one works, which are part of their discourse and life history. In-person course.

#### **PSIC 8215 Psychology and Law**

Three credits.

Analysis of basic concepts common to psychology and law.

#### PSIC 8216 Employment and Discrimination.

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

Critical analysis of employment discrimination and its consequences.

#### **PSIC 8300 Advanced Clinical Psychology Practice**

One credit. Three hours of supervised practice.

Prerequisites: PSIC 6434

This advanced clinical practice in psychotherapy (individual, group, couples, and/or families, and/or psychological assessments) allows students to increase their in-person clinical hours and refine their clinical skills. During this advanced practice, students will also increase exposure to diverse populations and rotate through external clinical practices. In-person course.

## **PSIC 8301 Advanced Family and Couples Therapy**

Three credits. Three lecture hours per week. Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8302

This course offers students an overview of the basic concepts and fundamentals of family and couples' therapy. They will also become familiar with the different systemic theoretical models. Different techniques used by the various theoretical models will be emphasized. Similarly, they will develop group research skills addressing some family or couple issues. In-person course.

#### **PSIC 8302 Advanced Practice in Family and Couples**

One credit. Supervised practice.

Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8301

This course is a clinical practice where the student has the opportunity to acquire advanced clinical skills to work with couples and families from a systemic perspective. During this clinical practice, the student will have interventions with clinical cases using one or several systemic theoretical models. This practice must be taken simultaneously with the theoretical course in advanced therapy for families and couples. In-person course.

#### **PSIC 8303 Research Practice**

One credit.

The aim of this course is to foster research experience in students. They will join a faculty member's project to acquire and refine research skills. They will be working under the supervision of a mentor/researcher. Students must attend weekly one hour research sessions under the mentorship of their supervisor. Each research project of the supervisor will have a brief description of their research. This course can be taken more than once to continue with a research project. In addition, their respective research supervisors will add additional references to the course. Inperson course.

# **PSIC 8304 Clinical Supervision Seminar**

One credit.

Prerequisite: PSIC 6433

This course provides students with an overview of clinical supervision and the different approaches and models of supervision applied to clinical psychology. The student is exposed to the development of supervision as a fundamental part of a psychologist's training. The student will appreciate different conceptualizations of clinical supervision according to each theoretical model and its particular objectives, approaches, and strategies. Additionally, they will learn the difference between supervision and consultancy. Moreover, the student will have the opportunity to create and develop instruments to measure variables that should be present in each psychotherapeutic model. There will be integration into theory and research in seeking research publications on psychotherapy and supervision. In-person course.

## PSIC 8335 Research Methods in Psychology on Human Development

One credit. Three lecture hours per week.

Prerequisite: PSIC 6006, 6007, 6301 and authorization from professor.

Discussion of the most frequently used methods in psychological research on human development. Examination of the central issues of time analysis, life changes, contributions of the evolutionary approach, and the relationship between research and theory development.

# PSIC 8405 Attachment Theory: Critical Analysis and Clinical Application

Three credits. Three lecture hours per week.

Analyzes the basic assumptions of the theory based on ethological study. It is compared with other dynamic approaches and clinical applications are derived.

#### **PSIC 8407 Rorschach Technique**

Four credits. Three lecture hours and three hours of supervised practice per week.

Prerequisites: PSIC 6020, 6401 and 6402.

Introductory course in the Rorschach psychological assessment technique. Includes the theoretical basis, principles of administration, scoring, and interpretation. Provides practical experience.

#### PSIC 8409 Psychotherapeutic Research: Process and Outcome

Three credits. Two hours of lecture and discussion and one hour of practice per week. Prerequisite: Professor's authorization.

Formal research on psychotherapy programs for children, adolescents, and adults in various modalities (such as individual, group, couples, and family). Examination of research on psychotherapeutic processes and outcomes.

### PSIC 8411 Seminar on Psychoanalysis Part I: Adult

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Study of Freud's writings, essential for understanding subjectivity.

# PSIC 8412 Seminar on Psychoanalysis Part II: Child

Three credits. Three hours of lecture per week.

Study of the basic texts of the most important psychoanalysts in the field of child psychoanalysis.

## PSIC 8415 Analysis and Reflection on the Practice of Clinical Psychology in Puerto Rico

Three credits. Three hours of lecture per week and nine hours of laboratory.

Prerequisites: PSIC 6431, 6432, 6433 and 6434.

Advanced supervised practice in psychotherapy (individual, group, couples and/or families, and/or psychological evaluations). It allows generating new approaches and intervention models, as well as refining clinical skills and deepening in specific populations or issues. This practice course consists of three credits per semester and can be repeated up to three times.

#### PSIC 8416 Psychological Evaluation of Children with Disabilities

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 3025, 6301, 6401, 6402, 6403 and 6404.

Theoretical and methodological controversies on the psychological evaluation of children with disabilities. Examination of disability effects on the development of children, on their families, and the issue of social and educational placement.

#### **PSIC 8420 Seminar: Study of Families**

Three credits.

Prerequisite: PSIC 6421

Critical study of theoretical and research literature on families and its applicability in Puerto Rico. Research techniques for studying families in Puerto Rico will be developed.

#### PSIC 8425 Seminar on Supervision in Psychotherapy

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: 60 graduate credits in clinical psychology or its equivalent.

Critical consideration of theoretical and practical aspects of psychotherapy supervision. Practical experience in observation, research, and supervision.

# **PSIC 8495 Internship in Clinical Psychology**

No credits.

Prerequisite: Authorization from the department director or graduate program coordinator and PSIC 6431, 6432, 6433, 6434.

Supervised practice in clinical psychology up to the accumulation of 2,000 hours of professional experience as the last requirement for the doctoral degree.

# **PSIC 8505 Psychology and Reason**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007

Analysis of the body/mind separation and the "software/hardware" split of labor and its consequences in the constitution and development of psychology.

## PSIC 8506 Advanced Seminar in Community Psychology: Contemporary Debates

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105, PSIC 6106.

Contemporary debates in community psychology and their realization in research and intervention. The discussion is framed within community psychology in Puerto Rico.

#### **PSIC 8507 Consultation in the School Context**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PSIC 6555

Study of the different roles and functions of the consultant in the school context. Deep discussion of the basic principles and intervention models in professional psychological consultancy. Emphasis on the stages of the consultancy relationship and the processes that develop during intervention.

#### PSIC 8508 Practice of Consultation in the School Context

Zero credits. Ten hours of supervised practice and three hours of supervision.

Prerequisite: PSIC 6555

Supervised practice in consultation in the school context where theoretical knowledge is applied, and discipline-specific skills are developed. This course complements consultation in the school context (PSIC 8507).

#### PSIC 8515 Biological Approaches to the Study of Psychopathology

Three credits. Three hours of seminar per week.

Prerequisite: PSIC 6408, PSIC 6317 or PSIC 8027...

Study of biological models proposed to explain various human psychopathological conditions. Emphasis on critical analysis of research supporting or contradicting these models and on pharmacological interventions derived from them. Analysis of the most important controversies in their application and their impact on psychology practice.

#### **PSIC 8516 Psychoeducational Evaluation**

Three credits. Three hours of lecture per week and two hours of supervised practice per week. Prerequisites: PSIC 6401, 6403 and 6555.

Analysis of concepts and psychological and educational strategies used in psychoeducational evaluation. Includes conceptualization of what evaluation is in the school context, evaluations of academic achievement, basic skills in writing, reading mathematics, as well as social performance and dynamic cognitive aspects, and pedagogical strategies. Integrating as fundamental aspects of the psychoeducational evaluation, modalities of corrective and remedial intervention strategies. Provide for the application of concepts and the development of specific skills that allow for psychoeducational evaluations.

# PSIC 8525 Play: Reflection, Analysis, and Intervention

Three credits. Two hours of lecture per week and two hours of supervised practice per week. Prerequisite: PSIC 8405 and PSIC 8412.

Study of children's play from a psychoanalytic and interactional perspective and its implications in clinical practice with children. Critical examination of other theoretical perspectives and their clinical application. Supervised practice in clinical intervention.

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#### **DEGREE:**

**Doctor of Philosophy in Psychology (Area of Emphasis: Clinical Psychology)** 

#### **FACULTY:**

**Cruz Bermúdez, Nelson D.**, Ph.D., Brandeis University, 2007, Professor. Research topics: Neuroscience of addiction and mental disorders; neuro-education.

**Dávila Marrero, Elixmahir**, Ph.D., University of Puerto Rico, 2005, Associate Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a tool for cognitive rehabilitation with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

**Espada Brignoni, Teófilo**, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Culture and subjectivity, Social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

**Galarza García, Laura**, Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace psychology; organizational strategy and change; Selection, development, and management of individual and organizational performance; Work engagement.

**García Ramos, Tania**, Ph.D., Complutense University of Madrid, 1995, Professor. Research topics: Industrial Organizational Psychology; Work and Organizational Psychology; Work and subjectivity; Theorization about work; research methodology; Epistemology of complexity.

**Gómez Escudero, María de los Ángeles**, Ph.D., Université de Paris V, 1991, Professor. Research topics: Parenthood and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

**Jiménez Torres, Aida**, Ph.D., University of Puerto Rico, 1993. Professor. Research topics: Family and Couples: Attachment: Multiculturalism and psychotherapy.

Martínez Mejias, Sylvia, Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in affective bonding and attachment theory; Expert testimony in custody and special education cases; Assessment in early intervention and developmental disabilities.

**Méndez Castillo, Milagros**, Ph.D., Fordham University, 1993, Associate Professor. Research topics: Adolescent sexuality, Violence in schools, Health psychology, Psychology teaching.

**Miranda Gierbolini, Dolores**, Ph.D., Temple University, 1987, Professor. Research topics: Development of sustainable communities, Social movements, Social policy, Political subjectivities, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

**Morales Arandes, Edgardo**, Ed.D., Boston University, 1986, Associate Professor. Research topics: Language and metaphor as models for constructing socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogical and collaborative practices; evidence-based psychotherapy; qualitative research.

**Nina Estrella, Ruth V**., Ph.D., National Autonomous University of Mexico, 1991, Professor. Research topics: Interpersonal communication, family, couple relationships, and sexuality and adolescence.

**Ruiz Alfaro, Frances**, Ph.D., University of Puerto Rico, 2014, Assistant Professor. Research topics: Research interests: Family bonds, special needs, relational constructionism, and generative practices in psychotherapy.

**Santiago Estrada, Sara**, Ph.D., University of Puerto Rico, 2013. Professor. Research topics: Transformations in work; Study of subjectivities in work scenarios, educational organizational settings; Organizational change.

**Tirado Santiago, Giovanni**, Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

#### **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **GRADUATION REQUIREMENTS:**

- 1. The minimum graduation GPA will be 3.00 on a 4.00 scale.
- 2. Passing (with a grade of A, B, C, or P) all required courses in the curriculum of the degree.
- 3. Passing the master's level comprehensive exam.
- 4. Faculty recommendation of the corresponding area for continuation towards the doctorate.

- 5. Pass doctoral comprehensive exam.
- 6. Approval of the dissertation proposal and the dissertation itself.
- 7. Approval of the Internship (for Clinical Psychology students) [no less than 2,000 hours of supervised practice, complying with the standards established in the document "Internship in Clinical Psychology," as approved on September 25, 1987, and revised in August 2007].
- 8. Graduation application submission.
- 9. Digital submission of the dissertation duly signed by the Dissertation Committee.
- 10. Publication of the dissertation in UMI.

#### **PROGRAM STUDY**

# Doctorate in Philosophy with Specialization in Psychology with a focus area in Clinical Psychology (PhD)

Code	Requisites	Credits
	Required Courses for the Master's Degree in Psychology with a Specialization in One of Four Areas	44
Cursos medulares de nivel doctoral		21
PSIC 8200	Foundations of Social Psychology and Current Topics	3
PSIC 6305	Advanced Statistical and Methodological Designs	3
PSIC 6317	Advanced Physiological Psychology	3
PSIC 8202	Psychological Approach to the Study of Cognitive and Affective Processes	3
PSIC 8000	Philosophical Foundations	3
PSIC 8017	Seminar on Multiple Perspectives in Research II	3
PSIC 8201	Human Development: The Life Cycle	3
Area of Emphasis in Clinical Psychology		17
PSIC 8495	Clinical Psychology Internship (2,000 hours. For Clinical Psychology students only)	0
Doctoral Candidacy Exams		0
Doctoral Dissertation		0
PSIC 8001	Dissertation Seminar	0
PSIC 6008	Thesis Work	0
	Tota	182

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **PSYC 6005 Theories of Personality**

Three credits.

Study of theories on the structure, dynamics, and development of personality, emphasizing contemporary approaches. Critical examination of the problems, theories, and research that help clarify the role of motivation in personality.

# PSYC 6006 Statistics Applied to Psychology

Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

#### PSYC 6007 Seminar: Methods of Psychological Research

Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection of areas, methods, and topics in psychological research.

#### PSYC 6008 Thesis Work

No credits. Independent studies.

Prerequisite: PSYC 6010

The course is designed for students needing guidance and advice from their thesis advisors regarding difficulties encountered in different phases of their thesis research, preparation, and writing. The student will enroll in the course each semester they are carrying out their thesis work.

# **PSYC 6009 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to give students a general examination of the eight areas of psychology encompassing general or introductory psychology courses. The areas to be covered are history and systems, sensation and physiological perception, learning, personality, abnormal, and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

#### **PSYC 6010 Thesis Seminar**

Three credits.

Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

# **PSYC 6015 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide a general overview of the eight areas of psychology typically covered in a general or introductory psychology course. The areas to be covered are history and systems, sensation and perception, physiological, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

# PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose students to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

# PSYC 6025 Psychosocial Approach to the Study of Organizational Behavior

Three credits. Three lecture hours per week.

Prerequisite: Admission to the Graduate Program.

The following topics are covered relatively quickly: organization design, motivation, satisfaction, communication, conflict, and others. The discussion deepens on some methods used to try to facilitate change in organizations. Current administrative practice is critically evaluated, and an attempt is made to identify and question the ideology or set of values that inform it. The negative consequences of such ideology are illustrated, and the possibility that the human tendency to unilaterally control one's situation leads precisely to organizational ineffectiveness is discussed. An invitation is made to invent and explore models of control that lead to effectiveness.

#### PSYC 6026 Psychological Approach to Development and Change in Organizations

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6025

Various models for producing information relevant to organizational development and change are explored. The aim is to compare and evaluate these models so that the student becomes familiar with them and feels capable of beginning to explore the application of some models.

PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology One credit. Sixteen lecture hours per semester.



The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various psychological models of human behavior as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

# **PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision** One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course modalities.

# PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultancy and advisory service models to know and apply the basic principles of these models to situations requiring the advice of a psychologist.

# PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.

# PSYC 6070 Proseminar in General and Applied Psychology: Society and Puerto Rican Culture

One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with the effect of variables resulting from Puerto Rican society and culture on individual and group behavior. An emphasis is placed on analyzing situations requiring the intervention of the clinical psychologist considering these variables.

# **PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation** One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course modalities.

# PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models for identifying community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

#### PSYC 6105 Advanced Social Psychology

Three credits. Three lecture hours per week.

The course is organized around the problem of the social construction of reality. It aims to develop both a theoretical and methodological framework for the study of this issue. To this end, various theories such as ethnomethodology, symbolic interactionism, and role theory are studied; there will be a deeper exploration in areas such as deviance and social control, attitudes, attribution, social comparison, social movements, and ideology. An effort will be made to use literature from Puerto Rico to illustrate and understand the social construction of reality.

#### **PSYC 6106 Community Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the Department Director.

The course aims to prepare future psychologists in the analysis and solution of psychosocial problems affecting the community.

## **PSYC 6107 Intercultural Social Psychology**

Three credits. Three lecture hours per week. Prerequisite: Bachelor's degree in psychology.

This seminar aims to demonstrate the extent to which social psychology may be subject to cultural variations. Social psychology research in different cultures is studied, analyzed comparatively, and considered for its implications on existing theories. Research within the Puerto Rican culture is emphasized, and there is an attempt to replicate at least one foreign study in our culture.

#### PSYC 6108 Psychology, Society, and Health

Three credits. One lecture hour and two discussion hours per week.

Prerequisite: PSYC 6106

Analysis of the socio-economic conditions, organizations, and social visions affecting the health and illness situation in Puerto Rico, and in other countries of the Americas. The role of the psychologist concerning this issue.

#### PSYC 6109 The Group as a Means of Social Intervention

Three credits. Two lecture hours and three lab hours per week.

Prerequisite: PSYC 6105, 6106.

The application of group theories to social life will be studied to facilitate psychological, social, organizational, institutional, and community change.



# PSYC 6110 Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico

Three credits. Three lecture hours per week.

The seminar aims to gather relevant information regarding change agents in Puerto Rico such as: the search for the historical background of Puerto Rican society in its basic outlines: population, emigration and immigration, urbanization, poverty, slums, social stratification, education, housing, employment and unemployment, industrialization, and modernization. These topics or indicators of change, among others, will be analyzed based on objective and verifiable information from the review of literature from studies conducted here and elsewhere, with a psychological emphasis. It will explore how changes in these areas affect interpersonal relationships, human development, the formation of beliefs and values, and coexistence in Puerto Rico.

# PSYC 6115 Analysis of Strategies for Conflict and Crisis Management

Three credits. Three lecture hours per week.

Conceptual and formal analysis for the management of interpersonal, group, and community conflicts.

# PSYC 6116 Practice in Strategies for Conflict and Crisis Management

No credit.

Prerequisite: Concurrent with PSYC 6115.

Supervised practice in interventions aimed at managing interpersonal, group, and community conflicts.

#### PSYC 6120 Seminar in Community Psychology and Social Policy

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director and the professor.

The course attempts to examine the content of public policy in the areas of health, education, and social welfare as it applies to community psychology in Puerto Rico. Full understanding will allow for the effective planning of psychosocial intervention strategies.

#### **PSYC 6131 Community Practice I**

Three credits.

The purpose of this practice is to expand the theoretical framework discussed in the courses of Advanced Social Psychology I and Community Psychology. It also aims to promote the acquisition of intervention skills in communities, formal groups, organizations, institutions, or geographical communities, data collection, and other aspects associated with research.

#### **PSYC 6132 Community Practice II**

Three credits.

This practice aims to expand the intervention and research skills acquired in Community Practice I.

# **PSYC 6133 Community Practice III**

Three credits.

Prerequisite: PSYC 6132

This practice aims to refine and expand the skills acquired in the Community Practice I and II courses and offers students the opportunity to acquire new community work skills in a new work setting.

# **PSYC 6195 Seminar on Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6105

Study of current problems and themes in social psychology and related areas.

#### PSYC 6201 Practicum I

Three credits. One lecture hour and twenty lab hours per week.

Students will invest at least 120 hours to practical work in an organization where they apply the concepts and techniques of the social-industrial program. Students will meet one hour weekly with the supervising professor to discuss problems and consult on references to study. As part of the course, each student will prepare a work that is publishable in a scientific journal.

#### **PSYC 6202 Practicum II**

Three credits. Three supervision hours and eight practice hours per week.

Prerequisite: PSYC 6201 and 6205.

Practice in government and private organizations with particular attention to the organizational problems of such institutions. The course includes 120 hours of practice, in addition to weekly meetings for supervision.

#### PSYC 6205 Industrial Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Graduate student status.

Topics relevant to the world of work with high social content are covered. Topics include historical significance of work and needs fulfilled by working, technology and job satisfaction, formal and informal organization, job analysis, recruitment and selection, introduction to performance evolution and training, as well as termination of employment (unemployment, retirement, and exit interviews).

#### **PSYC 6206 Construction of Psychological Tests**

Three credits. Two lecture hours per week.

Prerequisite: PSYC 6006

Theory of constructing aptitude, intelligence, achievement, personality, and interest tests. Practice in the preliminary development of one of these types of tests.

# PSYC 6209 Psychosocial Aspects of Labor Regulation

Three credits.

Prerequisite: Admission to the program.

Critical analysis of labor regulation in areas such as health, safety, schedules, wages, labor unions, and others.

# **PSYC 6215 Psychosocial Approach to Organizational Conflicts**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Analysis of psychological and sociological theories of organizational conflicts and strategies for their solutions.

# PSYC 6216 Psychological Test Construction Laboratory

One credit. One lab hour per week.

Prerequisite: To be taken concurrently with PSYC 6206.

Laboratory for drafting questions, item analysis, reliability determination, norms, equating, and validity in psychological tests.

#### **PSYC 6218 Psychology and Occupational Health**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6205 or equivalent.

The course explores the workplace with an emphasis on the health, safety, and well-being of the workforce. It focuses on the interaction between the worker and their workplace and its effects on the worker's life both inside and outside the company. The course explores topics such as: the healthy organization, work-life balance and spillover effect, health and productivity, stress and health, workplace violence, physiological aspects of illness, safety and accidents, as well as intervention alternatives in work settings. As part of the course activities, students will develop a group intervention in an organization identified by them as a contribution to the organization and the quality of life of its members.

#### PSYC 6225 Techniques of Psychological Evaluation in Personnel Selection

Three credits. Three lecture hours per week.

Discussion of the main psychological evaluation techniques used in personnel selection. Face-to-face, hybrid, and online course modalities are available.

# **PSYC 6227 Social Psychology of Work and Production in Contemporary Capitalist Society** Three credits. Three lecture hours per week.

Analysis of theories of alienation, communication, and organization in relation to changes in the economy and society, brought about by the contemporary crisis. The perspectives of social psychology in the technological era will be studied.

# PSYC 6301 Advanced Developmental Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in psychology or authorization from the advisor.

Study of the basic principles of human development with an emphasis on childhood and adolescence. Critical consideration of recent scientific findings. Special attention is given to the problems and peculiarities of childhood and adolescence in Puerto Rico.

## PSYC 6302 Advanced Developmental Psychology

Three credits.

Prerequisite: Bachelor's degree and with authorization from the professor.

Based on the study of the principles governing human development, from conception to the end of adolescence. Subsequent evolutionary stages, such as early adulthood, middle adulthood, and the onset of old age, will be considered. Parallel to the study of human evolution during these periods, the psychological circumstances accompanying the achievement of fulfillment, and the decline of life are discussed.

#### PSYC 6305 Advanced Statistical and Methodological Designs

Three credits. Three lecture hours per week.

Statistical analyses and designs, and the theory behind them.

## PSYC 6306 History and Systems of Psychology

Three credits. Three lecture hours per week.

Prerequisite: Admission to the graduate program.

The course examines the history of psychology, from ideas in the countries of the ancient East to contemporary psychology. It attempts to identify the historical links of the discipline. Finally, the state of the discipline and its history in Latin America are examined.

#### **PSYC 6311 Teaching Psychology**

Three credits. Three lecture hours per week.

This course focuses on the teaching and assessment of the general psychology course. Innovations in teaching and instructional methods are examined. The central themes and debates of general psychology, course content, ethics in teaching, and assessment of achievement are discussed.

#### PSYC 6312 Practice in Teaching Introductory Psychology

Three credits. Eight practice hours per week.

Prerequisite: PSYC 6311

A course designed to provide supervised experiences and skills in teaching psychology. The course includes supervised practice in different teaching methods.

# **PSYC 6315 Practice in Teaching Advanced Psychology Courses**

Three credits. Twelve supervised practice hours per week.

Prerequisites: PSYC 6312 and authorization from the professor.

Organization and teaching of an advanced undergraduate psychology course under the supervision of a professor. Includes discussion of the philosophical foundations of teaching and the most recent aspects of the topic to be taught.

#### PSYC 6317 Advanced Physiological Psychology

Three credits. Three lecture hours per week.

The course emphasizes the study of the relationship between an organism's physiological system and behavior. Special attention is given to the functioning of the central nervous system and its influence on behavior.

#### **PSYC 6318 Human Learning**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

The course will broadly cover verbal memory and verbal behavior of humans. It will include a brief study of historical backgrounds and general methodology; the rest of the course consists of the study of various models of interpolation of memory and/or language.

#### PSYC 6325 Psychological Approach to the Study of Cognitive Processes

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Basic theories on the relationship between mental events and human behavior and effectiveness. The importance of cognitive processes in psychological practice in Puerto Rico is emphasized.

#### PSYC 6327 Computer Use and Application in Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Introduction to terminology, principles, and common applications of computers in psychological work.

#### PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week. Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

# PSYC 6402 Psychological Assessment II

Three to four credits. Two hours. Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work, and the presentation of written reports.

#### PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408, and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

# PSYC 6404 Practice in Psychological Assessment II

Credits: 0Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403, and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

# PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

#### **PSYC 6406 Practice in Psychotherapy**

Credits: 0Eight hours of practice per week. Prerequisite: Enrolled in PSYC 6405.

Supervised practice in individual or group therapy. The practice is an integral part of the PSYC 6405 course.

#### PSYC 6407 Emergency Clinic and Short-Term Psychotherapy

Three credits. Three hours of lecture per week.



Prerequisite: Professor's authorization.

The course proposes the study of clinical and ethical knowledge that allows, beyond the so-called intervention, a positioning that centrally embraces the words of individuals who come to the consulting room at a time of intricate conscious and unconscious phenomena that exceed their handling capacity and tolerance for distress, and to facilitate their connection with their crisis and symptoms as one not only affected by external events but as a production of their own complexity, subjectivity, and discourse.

## **PSYC 6408 Principles of Psychopathology**

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

# **PSYC 6409 Practice in Psychopathology**

Credits: 0Four hours of practice. Prerequisite: Enrolled in PSYC 6408.

Observation, interviews, preparation of case histories, diagnosis, and clinical discussion of behavioral disorders. The practice is an integral part of the PSYC 6408 course.

#### **PSYC 6410 Advanced Seminar in Behavior Modification**

Three credits. Three hours of lecture per week; practice (optional).

Prerequisite: PSYC 6417.

Critical and intensive study of the theoretical framework of behavior modification principles and the therapeutic effectiveness of behavioral modification techniques.

#### **PSYC 6416 Group Therapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: Graduate student in psychology.

The course will emphasize the theoretical and practical aspects of group therapy and will offer a human laboratory to experience client and therapist roles in a group psychotherapy setting.

#### **PSYC 6417 Principles of Behavior Modification**

Three credits. Three hours of lecture and four hours of practicum.

Prerequisite: Graduate student in psychology.

Study of the basic psychological principles governing human behavior, particularly those derived from learning psychology. Emphasis will be placed on the application of social learning principles to the modification of psychotic, neurotic, and maladjusted behavior in clinical and educational institutions. Special attention will also be given to the critical discussion of recent scientific

findings in behavioral modification with particular interest in the applicability of these findings to adjustment problems in Puerto Rico.

#### **PSYC 6418 Disorders of Childhood Behavior**

Three credits. Two hours of lecture per week; Practicum by agreement.

Prerequisite: Authorization from the Department Director.

Issues of etiology, classification, and management of children exhibiting extreme isolation, boundaryless behavior, odd and chaotic tendencies, and behavior determined by organic disorders. Theoretical frameworks, assessment techniques, and diagnosis are considered. Opportunities for practice will be provided. Lectures by guest consultants will be offered.

#### **PSIC 6421 Family Therapy I**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: PSIC 6405, 6408.

Study of some family therapy systems, their theoretical models, techniques used, and case analysis. Students are offered the opportunity to experience simulated family therapy experiences (laboratory) and to conceptualize their own experiences within the different family systems they share personally and professionally.

# **PSIC 6423 Practice in Family Therapy I**

Three credits. Three to four hours of practice.

Prerequisite: PSIC 6405, 6408, and 6421

Observation experiences of family therapy sessions; opportunity to work with families as a cotherapist providing family therapy. Participation in Practice Center meetings, case discussions, and supervision meetings.

### PSIC 6431 Practice in Clinical Psychology I

Credits: 0Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

#### **PSIC 6432 Practice in Clinical Psychology II**

Two credits.

Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

# PSIC 6433 Practice in Clinical Psychology III

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

## **PSIC 6436 Intramural Practice in Clinical Psychology**

Three credits.

Prerequisite: Director's authorization.

Supervised practice in psychotherapy (individual, group, couples, and/or families) and psychological assessment. This practice is carried out at the facilities of the University Center for Psychological Services and Studies (CUSEP) during the summer sessions.

#### **PSIC 6437 Introduction to Clinical Practice**

Three credits. One hour of lecture, one hour of discussion, and five hours of supervised practice per week.

The clinic is structured around concepts and foundations that provide a basis and context for the experiential experience (practice). This course will present basic concepts in a theoretical-practical-therapeutic integration. This will be specifically carried out through the discussion of different aspects: theoretical frameworks, clinical observation, interview styles and processes, clinical conceptualization, therapeutic processes, and clinical contexts.

#### **PSIC 6505 Module on Dreams**

One credit. Three hours of lecture per week.

Prerequisite: Director's authorization.

The meaning of dreams from a physiological and psychological point of view, Jung's dream theory and Dr. Efrén Ramírez's theory. Dr. Ramírez's dream interpretation method, and its utility in terms of personal development, as a psychotherapy method, and as a group therapy method.

#### **PSIC 6506 Colloquium on Psychology Topics**

Credits: 0One hour of meeting per week.

Lectures, discussion, and exchange of ideas among department faculty, students, and invited speakers. Students will enroll each semester.

## PSIC 6507 The Psychology of Women

Three credits. Three hours of lecture per week.

This course is organized around the question of whether there is a distinctly female psychology and what its biological and social determinants are. It studies the acquisition of sexual roles and their historical determination and transcultural relativity. The literature related to biological, sexual, cognitive, and affective functioning of women is reviewed. In addition, the development of feminist movements, the sociopolitical situation of women in industrial society, and the impact of these changes on the relationships between sexes, family, and Puerto Rican society are studied.

#### **PSIC 6510 Seminar on the Family in Puerto Rico**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Director's authorization.

Analysis and research on the history and psychosocial aspects of the family in Puerto Rico. The primary purpose of the seminar is to promote psychosocial research on the family and its issues.

## PSIC 6515 Intelligence, Creativity, and Cognitive Complexity

Three credits. Three hours of lecture per week.

The concepts of intelligence, creativity, and cognitive complexity will be contrasted, and their relevance to contemporary Puerto Rican society will be determined.

#### **PSIC 6516 Supervised Reading Course**

Three credits.

Prerequisite: Professor's authorization.

Readings revolve around a topic chosen by the student and the professor. The student covers the concepts with the professor's approval and prepares a monograph on the concept of their choice.

# PSIC 6517 Advanced Psychopharmacology and Neurophysiology of Drug Use and Abuse

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This course delves into the knowledge of the psychophysiological system and its alteration through the use of chemical substances. Students will become familiar with the chemical and pharmacological aspects of substances that are subject to abuse, as well as those used in various treatment modalities (methadone, naltrexone, etc.). Particular attention will be given to the study of human behavior and its interaction with the action of substances on the psychophysiological system.

#### PSIC 6518 Psychology of Adolescence

Three credits. Two lecture hours and one discussion hour per week.

Prerequisite: PSIC 6301

Study of the theories and research explaining the typical processes of adolescence, considering the cultural variables that contribute to the formulation of such theories and the design of such research. Discussion of the physical, cognitive, social, and affective aspects of development, as well as the evolution of identity and sexuality in adolescence. Analysis of family processes, the school experience, peer relationships, and their influence on development.

#### PSIC 6525 Psychological Analysis of Power

Three credits. Three lecture hours per week.

Analysis of the concept of power at the individual level (power traits, power motivation, control foci), and at the group level (leadership, gender relations). Some emphasis will be given to communal and institutional levels.

#### **PSIC 6526 Spirituality in Psychology**

Three credits. One lecture hour, one discussion hour, and one workshop hour per week.

Prerequisites: PSCI 3005 or 3003.

This graduate-level course examines the conceptualizations and contemporary debates about the notion of spirituality in psychology, particularly its integration into therapeutic practice and in the training of helping professionals. It reviews the ethical premises for psychology as it integrates spirituality into its research and practice.

#### **PSIC 6527 Fundamentals of Human Sexuality**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This introductory course aims to provide an overview of human sexuality. It includes processes for clarifying personal sexual attitudes and values. The topic will be approached from both a personal perspective and its social dimension. Students will examine some sexual issues in Puerto Rican society.

#### **PSIC 6528 Violence and Complexity**

Three credits. Three seminar hours per week.

The purpose of this course is to contribute to the development of a conceptual framework in which to locate violence as a complex, socially constructed phenomenon. It will study the relationships between psychic life and social life from the centrality that the signifier of violence has acquired in our contemporaneity. This includes a detailed examination of the relationships between the history of subject constitution and identifications (subjectivation) and the world we share with others (intersubjectivity) and its relation to violence. Contributions from psychoanalytic discourse to the analysis of violence will be examined, and dialogical relations between psychoanalytic discourse and other contemporary fields of theorization such as poststructuralism, deconstruction, social constructivism, and Lacanian psychoanalysis will be fostered. Critical examination of the contributions of traditional psychology on the topic of violence.

# PSIC 6529 Review and Critical Analysis of Psychological Literature in Puerto Rico

Three credits. Three lecture hours per week.

Prerequisite: Having passed a minimum of 9 graduate credits.

Review of research and publications made in Puerto Rico, their theoretical frameworks, methodology, and implications for understanding the psychological reality of Puerto Ricans. An analytical and critical framework will be provided.

# PSIC 6535 Theoretical Controversies on Human Development: Early Childhood

Three credits.

Different aspects of human development from birth to seven years of age will be examined. The focus is epistemological, emphasizing the basic assumptions of the discipline, fundamental controversies, and the ideological and philosophical aspects of the theories examined.

# PSIC 6537 Psychopathology of Affective Development in Childhood: Psychoanalytic Perspective

Three credits.

Prerequisite: Director's authorization.

To provide a clinical view of the affective development of the child from a psychoanalytic perspective, allowing for an understanding of child psychopathology.

# **PSIC 6545 Program Evaluation and Consulting**

Three credits. Three lecture hours per week.

Introduction to the basic concepts and methods of consulting and program evaluation and to the ethical and value controversies surrounding them. Emphasis is placed on developing skills in these areas and their application in public service programs and private non-profit agencies.

# PSIC 6546 Analysis of Interventions in Organizations: Theory and Practice

Three credits. Three lecture hours per week.

Prerequisite: PSIC 6025 or its equivalent, permission of the director or PSIC 6026.

Analysis of interventions carried out in public and private organizations in and outside of Puerto Rico, in light of the conceptual models that guide them. Different intervention models, their purposes, conceptual frameworks, and ethical principles will be presented. Analysis of the current applications of these and other models, paying particular attention to the congruence between theory and practice.

# **PSIC 6555 School Psychology**

Three credits. Three discussion hours per week.

General orientation on school psychology, focusing the discussion on the public education system of Puerto Rico and on the ethical principles of the discipline. The various functions carried out in

professional practice in this area and its historical development and future of school psychology will be highlighted.

# PSIC 6591 School Psychology Practice I

Three credits. Eleven hours of supervised practice per week.

Prerequisite: PSIC 6555

# PSIC 8007 School Psychology: Mental Health Consultation in Schools

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization., consortium student.

Consultation as a model of school psychological service. The student will become familiar with and trained in various modalities and levels of consultation to be used as a school psychologist. The investigative and evaluative aspects of consultation will be studied.

# **PSIC 8015 Advanced Social Psychology II**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

Examines the historical forms of subjectivity in areas of daily life such as child rearing, morality, sexuality, and love relationships.

# PSIC 8017 Seminar on Multiple Perspectives in Research II

Three credits. Three hours of lecture per week.

Prerequisite PSIC 6007

Examination of different theoretical fields in psychology and their research. Analysis of assumptions, research strategies, methods, and techniques most used.

# **PSIC 8018 Contemporary Social Research: Meeting with its Authors**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007 and PSIC 8017.

Various approaches in social science research by meeting researchers and discussing their research with them.

# PSIC 8019 The Social Scientist as a Judicial Expert

Three credits. Three hours of lecture per week.

Prerequisite: Master's degree in psychology or one of the social sciences.

Theoretical and practical considerations in preparing the social scientist as a judicial expert.

PSIC 8027 Advanced Psychobiology: Foundations, Uses, and Controversies

Three credits.

The discussion period considers the influences of modern biology, particularly evolutionary, ethological, and systemic currents on the psychological conceptualization of humans. Essential

concepts such as evaluation, adaptation, species-typical behavior, biological niche, and systemic organization. The discussion period is complemented with a practical laboratory considering the controversies and applications of a psychobiological approach.

### PSIC 8028 Psychopharmacology

Three credits. Three hours of lecture and seminar per week.

Prerequisites: PSIC 6317 or PSIC 8027.

The course will discuss aspects of psychopharmacology and neurophysiology. It will include lectures on Anatomy and Physiology of the nervous system, Synaptic Neurochemistry, Pharmacokinetics and Pharmacodynamics, and on the neuropharmacological impact of various drugs on states of consciousness and behavior. The neurobiological bases of mental disorders, the mechanisms of action of different medications, and the strategies used in experimental studies and in clinical psychopharmacology will be studied. Anxiolytics and antidepressants, antipsychotic drugs, sedative hypnotics, and narcotics will be analyzed. The content will be presented from both a basic science perspective and a clinical orientation combining lectures and discussions of readings. The course is specially designed for students in the Clinical Psychology graduate program and doctoral students specializing in Academic-Research Psychology.

# **PSIC 8105 Psychology and Social Movements**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

The theoretical-practical contributions of psychology to social movements of the last decades in Puerto Rico are analyzed.

# **PSIC 8115 Social Psychology of Education**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105 or EDUC 6270.

Examination of the crises of education in contemporary capitalist society. Critical analysis of the most important theoretical fields for its explanation. The social construction of education and the new subjectivity.

#### **PSIC 8125 The Sociocultural Study of the Mind**

Three credits. One hour of lecture and one hour of discussion per week.

Analysis of the sociocultural approach as a conceptual framework in the study of the mind. Discussion of the historical background of the approach and its development to the present with an emphasis on the research program it has generated.

# **PSIC 8200 Foundations of Social Psychology and Current Topics**

Three credits. Three hours of lecture per week.

This course studies the theoretical and methodological foundations of social psychology. The course discusses classic and contemporary theories, major in social psychology research, as well

as new trends, like the affective aspects of social behavior. This course is divided into four general units: epistemological and historical backgrounds, theorizing the individual in the social context, affective aspects of social dynamics, and power structures and contemporary related fields. In each unit, theoretical and methodological approaches are examined to provide students with the opportunity to develop an understanding of the field, as well as the research methodology from a social psychological perspective and integrate the social and affective aspects of behavior. Ethical issues related to theory, research, and psychosocial interventions are discussed. This course examines social and affective processes that affect behavior. In-person course.

# PISC 8201 Human Development: The Life Cycle

Three credits. Three hours of lecture per week.

The course offers a general overview of the theories and research related to the development of the human subject. It will cover the relationship between physical, cognitive, and socio-emotional development of the subject from childhood to old age. Emphasis will be placed on the theoretical and scientific bases of developmental psychology. The student will not only have information concerning developmental processes but also a critical understanding of the underlying processes of human development. The course will emphasize the dynamic processes of development and the dialectic between psychological processes and development. In-person course.

# PSIC 8202: Psychological Approach to the Study of Cognitive and Affective Processes Three credits. Three hours of lecture per week.

This course studies the main theoretical models used to explain human cognitive and affective aspects of behavior. The emergence of cognitive psychology is examined considering sociohistorical transformations. Information processing models, genetic epistemology, the historical-cultural perspective, and affective processes are analyzed. Cognitive processes such as attention, sensation, perception, memory, language, and problem-solving are discussed. In particular, how affective processes and cultural differences shape cognitive processes and human behavior is analyzed. In-person course.

# **PSIC 8203 Models and Techniques of Psychotherapy**

Three credits. Three hours of lecture per week.

This course focuses on the exposition of the different theoretical models of psychotherapy, as well as their origins and evolutions. Once the basis of the theoretical models is established, current therapeutic approaches will be examined from a critical viewpoint, emphasizing conceptual problems, methodology, and alternatives to address such issues. Evidence-based psychotherapeutic approaches used with different populations will also be discussed. In-person course.

# **PSIC 8204 Personality and Human Diversity**

Three credits. Three hours of lecture per week.

This course addresses the categories of personality, subjectivity, and subjectivation from a critical and complex approach. It examines the paradigmatic assumptions underlying personality theories

and traditional approaches in the study of human beings. It proposes a conceptual approach that includes debates on humans from the complexity paradigm, constructivism, psychoanalytic theory, and updated foundational psychological premises. It explores the application of this conceptual approach to the human, relevant in contemporary clinical practice, as well as particular considerations of the Puerto Rican population and the unavoidable sensitivity towards differences and cultural and individual diversity necessary in psychological training. In-person course.

# **PSIC 8205 Advanced Psychological Assessment**

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 6401 and PSIC.

Training in the administration and interpretation of various techniques used in personality assessment such as: TAT, Bender Gestalt, and Person Drawing. Includes supervised practical work, laboratory work, and the presentation of written reports. In-person course

# PSIC 8206 Advanced Practice in Psychological Assessment

One credit.

Prerequisites: PSIC 6401 and PSIC 6403.

Corequisite: PSIC 8205

Intensive practice in the administration and assessment of the following tests: Thematic Apperception Test (TAT), Children's Apperception Test (CAT), Bender Gestalt Visual-Motor Test, Human Figure Drawing among other tests. This includes tests contained in the course Psic. 6401; Psychological Assessment I, worked on in the practice of this course, Psic. 6403. Personality inventories such as the Personality Assessment Inventory (PAI), the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and basic concepts of the Rorschach are also included. Emphasis is placed on the clinical approach to the responses of the subjects with whom one works, which are part of their discourse and life history. In-person course.

# **PSIC 8215 Psychology and Law**

Three credits.

Analysis of basic concepts common to psychology and law.

# PSIC 8216 Employment and Discrimination.

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

Critical analysis of employment discrimination and its consequences.

# **PSIC 8300 Advanced Clinical Psychology Practice**

One credit. Three hours of supervised practice.

Prerequisites: PSIC 6434

This advanced clinical practice in psychotherapy (individual, group, couples, and/or families, and/or psychological assessments) allows students to increase their in-person clinical hours and refine their clinical skills. During this advanced practice, students will also increase exposure to diverse populations and rotate through external clinical practices. In-person course.

# **PSIC 8301 Advanced Family and Couples Therapy**

Three credits. Three lecture hours per week. Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8302

This course offers students an overview of the basic concepts and fundamentals of family and couples therapy. They will also become familiar with the different systemic theoretical models. Different techniques used by the various theoretical models will be emphasized. Similarly, they will develop group research skills that address some family or couples issue. In-person course.

### **PSIC 8302 Advanced Practice in Family and Couples**

One credit. Supervised practice.

Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8301

This course is a clinical practice where the student has the opportunity to acquire advanced clinical skills to work with couples and families from a systemic perspective. During this clinical practice, the student will have interventions with clinical cases using one or several systemic theoretical models. This practice must be taken simultaneously with the theoretical course in advanced therapy for families and couples. In-person course.

# **PSIC 8303 Research Practice**

One credit.

The aim of this course is to foster research experience in students. They will join a faculty member's project to acquire and refine research skills. They will be working under the supervision of a mentor/researcher. Students must attend a weekly research hour under the mentorship of their supervisor. Each research project of the supervisor will have a brief description of their research. This course can be taken more than once to continue with a research project. In addition, their respective research supervisors will add additional references to the course. In-person course.

#### **PSIC 8304 Clinical Supervision Seminar**

One credit.

Prerequisite: PSIC 6433

This course provides students with an overview of clinical supervision and the different approaches and models of supervision applied to clinical psychology. The student is exposed to the development of supervision as a fundamental part of a psychologist's training. The student will appreciate different conceptualizations of clinical supervision according to each theoretical model and its particular objectives, approaches, and strategies. Additionally, they will learn the difference between supervision and consultancy. Moreover, the student will have the opportunity to create

and develop instruments to measure variables that should be present in each psychotherapeutic model. There will be integration into theory and research in seeking research publications on psychotherapy and supervision. In-person course.

# PSIC 8335 Research Methods in Psychology on Human Development

One credit. Three lecture hours per week.

Prerequisite: PSIC 6006, 6007, 6301 and permission.

Discussion of the most frequently used methods in psychological research on human development. Examination of the central issues of time analysis, life changes, contributions of the evolutionary approach, and the relationship between research and theory development.

# PSIC 8405 Attachment Theory: Critical Analysis and Clinical Application

Three credits. Three lecture hours per week.

Analyzes the basic assumptions of the theory based on ethological study. It is compared with other dynamic approaches and clinical applications are derived.

# **PSIC 8407 Rorschach Technique**

Four credits. Three lecture hours and three hours of supervised practice per week.

Prerequisites: PSIC 6020, 6401 and 6402.

Introductory course in the Rorschach psychological assessment technique. Includes the theoretical basis, principles of administration, scoring, and interpretation. Provides practical experience.

# PSIC 8409 Psychotherapeutic Research: Process and Outcome

Three credits. Two hours of lecture and discussion and one hour of practice per week.

Prerequisite: Professor's authorization.

Formal research on psychotherapy programs for children, adolescents, and adults in various modalities (such as individual, group, couples, and family). Examination of research on psychotherapeutic processes and outcomes.

# PSIC 8411 Seminar on Psychoanalysis Part I: Adult

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Study of Freud's writings, essential for understanding subjectivity.

#### PSIC 8412 Seminar on Psychoanalysis Part II: Child

Three credits. Three hours of lecture per week.

Study of the basic texts of the most important psychoanalysts in the field of child psychoanalysis.

# PSIC 8415 Analysis and Reflection on the Practice of Clinical Psychology in Puerto Rico

Three credits. Three hours of lecture per week and nine hours of laboratory.

Prerequisites: PSIC 6431, 6432, 6433 and 6434.

Advanced supervised practice in psychotherapy (individual, group, couples and/or families, and/or psychological evaluations). It allows generating new approaches and intervention models, as well as refining clinical skills and deepening in specific populations or issues. This practice course consists of three credits per semester and can be repeated up to three times.

# PSIC 8416 Psychological Evaluation of Children with Disabilities

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 3025, 6301, 6401, 6402, 6403 and 6404.

Theoretical and methodological controversies on the psychological evaluation of children with disabilities. Examination of the effects of the disability on the development of children, on their families, and the issue of social and educational placement.

#### **PSIC 8420 Seminar: Study of Families**

Three credits.

Prerequisite: PSIC 6421

Critical study of theoretical and research literature on families and its applicability in Puerto Rico. Research techniques for studying families in Puerto Rico will be developed.

# PSIC 8425 Seminar on Supervision in Psychotherapy

Three credits. Two hours of lecture and three hours of laboratory per week. Prerequisite: 60 graduate credits in clinical psychology or its equivalent.

Critical consideration of theoretical and practical aspects of psychotherapy supervision. Practical experience in observation, research, and supervision.

# **PSIC 8495 Internship in Clinical Psychology**

No credits.

Prerequisite: Permission from the department director or graduate program coordinator and PSIC 6431, 6432, 6433, 6434.

Supervised practice in clinical psychology up to the accumulation of 2,000 hours of professional experience as the last requirement for the doctoral degree.

### **PSIC 8505 Psychology and Reason**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007

Analysis of the body/mind separation and the "software/hardware" split of labor and its consequences in the constitution and development of psychology.

# PSIC 8506 Advanced Seminar in Community Psychology: Contemporary Debates

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105, PSIC 6106

Contemporary debates in community psychology and their realization in research and intervention. The discussion is framed within community psychology in Puerto Rico.

### **PSIC 8507 Consultation in the School Context**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PSIC 6555

Study of the different roles and functions of the consultant in the school context. Deep discussion of the basic principles and intervention models in professional psychological consultancy. Emphasis on the stages of the consultancy relationship and the processes that develop during intervention.

### PSIC 8508 Practice of Consultation in the School Context

Zero credits. Ten hours of supervised practice and three hours of supervision.

Prerequisite: PSIC 6555

Supervised practice in consultation in the school context where theoretical knowledge is applied, and discipline-specific skills are developed. This course complements consultation in the school context (PSIC 8507).

# PSIC 8515 Biological Approaches to the Study of Psychopathology

Three credits. Three hours of seminar per week. Prerequisite: PSIC 6408, PSIC 6317 or PSIC 8027.

Study of biological models proposed to explain various human psychopathology conditions. Emphasis on critical analysis of research supporting or contradicting these models and on pharmacological interventions derived from them. Analysis of the most important controversies in their application and their impact on psychology practice.

# **PSIC 8516 Psychoeducational Evaluation**

Three credits. Three hours of lecture per week and two hours of supervised practice per week.

Prerequisites: PSIC 6401, 6403 and 6555.

Analysis of concepts and psychological and educational strategies used in psychoeducational evaluation. Includes conceptualization of what evaluation is in the school context, evaluations of academic achievement, basic skills in writing, reading mathematics, as well as social performance and dynamic cognitive aspects, and pedagogical strategies. Integrating as fundamental aspects of the psychoeducational evaluation, modalities of corrective and remedial intervention strategies. Provide for the application of concepts and the development of specific skills that allow for psychoeducational evaluations.

# PSIC 8525 Play: Reflection, Analysis, and Intervention

Three credits. Two hours of lecture per week and two hours of supervised practice per week.

Prerequisite: PSIC 8405 and PSIC 8412.

Study of play in children from a psychoanalytic and interactional perspective and its implications in clinical practice with children. Critical examination of other theoretical perspectives and their clinical application. Supervised practice in clinical intervention.

Mailing Address: 9 University Ave., Ste. 901 San Juan PR 00925-2529

**Direct phone**: (787) 763-5499

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#### **DEGREE:**

Doctor of Philosophy in Psychology (Area of emphasis: Neurocognition and Development)

#### **FACULTY:**

**Cruz Bermudez, Nelson D.,** Ph.D., Brandeis University, 2007, Assistant Professor. Research topics: Neuroscience of drug addiction and mental disorders; neuroeducation.

**Dávila Marrero, Elixmahir,** Ph.D., University of Puerto Rico, 2005, Assistant Professor. Research topics: Neuropsychological assessment and neurocognitive rehabilitation of neurodegenerative diseases and TBI. Use of video games as a cognitive rehabilitation tool with children and adolescents. Alternative education as a current educational strategy. Standardization of psychological tests for the Puerto Rican population.

**Espada Brignoni, Teófilo,** Ph.D., University of Puerto Rico, 2015. Assistant Professor Research topics: Culture and subjectivity, Social movements, Empathy, Attributions and discourses in everyday life, Processes of subjectivation, Art and community intervention, Psychology and literature, Music and society.

**Galarza García, Laura,** Ph.D., Rice University, 2000, Professor. Research topics: Industrial-Organizational Psychology; Comparative and International I/O Psychology; Aerospace Psychology; Organizational Strategy and Change; Selection, Development and Management of Individual and Organizational Performance; Work Engagement.

**Gómez Escudero, María de los Ángeles,** Ph.D., Université de Paris V, 1991, Professor. Research topics: Parentality and filiation; the body in discourses; problems of psychopathology, psychoanalytic clinic.

**Jiménez Torres, Aida,** Ph.D., University of Puerto Rico, 1993. Associate Professor. Research topics: Family and Couples: Attachment: Multiculturality and psychotherapy.

Martínez Mejías, Sylvia, Ph.D., University of Puerto Rico, 1998, Professor. Research topics: Studies in attachment bonding and attachment theory; Court expertise in custody and special education cases; Evaluation in early intervention and developmental deficits.

**Méndez Castillo, Milagros,** Ph.D., Fordham University, 1993, Associate Professor. Research topics: Sexuality in adolescents, Violence in schools, Health psychology, Teaching psychology.

Miranda Gierbolini, Dolores, Ph.D., Temple University, 1987, Professor. Research interests:

Development of sustainable communities, Social movements, Social policy, Political subjectivations, critical citizenship and social change, The human in the ecological complex, The hidden faces of violence.

**Morales Arandes, Edgardo,** Ed.D., Boston University, 1986, Associate Professor. Research topics: Language and metaphor as models of construction of socio-organizational and personal realities; participation and democracy at work; relational constructionism; constructionist approaches in psychotherapy; dialogic and collaborative practices; evidence-based psychotherapy; qualitative research.

**Nina Estrella, Ruth V.,** Ph.D., National Autonomous University of Mexico, 1991, Professor. Research topics: interpersonal communication, family, couple relationships, and sexuality and adolescence.

**Ruiz Alfaro, Frances,** Ph.D., University of Puerto Rico, 2014. Assistant Professor. Research topics: Affective bonding; Discourse and literature, Subjectivity; Assessment of Autism Spectrum Disorder.

**Santiago Estrada, Sara,** Ph.D., University of Puerto Rico, 2013. Associate Professor. Research topics: Transformations at work; Study of subjectivities in work scenarios, educational organizational scenarios; Change in organizations.

**Tirado Santiago, Giovanni,** Ph.D., McGill University, 2006, Associate Professor. Research topics: Neural plasticity; biopsychology of learning and memory; neuroimaging of cognitive functions in major depression.

**Vale Nieves, Otomie,** Ph.D., University of Puerto Rico, 1993, Professor. Research topics: Technology and learning; development, subjectivity and historical context; critical psychology; language and subjectivity; construction of the young, technology and gender.

# **ADMISSION REQUIREMENTS:**

### General Requirements at Rio Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Requirements for the Program**

- 1. The minimum graduation GPA will be 3.00 on a 4.00 scale.
- 2. Passing (with a grade of A, B, C, or P) all required courses in the curriculum of the degree sought.
- 3. Passing the master's level comprehensive exam.
- 4. Faculty recommendation in the corresponding area to continue towards the doctoral program.
- 5. Passing the doctoral qualifying exam.
- 6. Approval of the dissertation proposal and the doctoral dissertation.



- 7. Submission of a graduation application.
- 8. Digital submission of the dissertation duly signed by the Dissertation Committee.
- 9. Publication of the dissertation in UMI.

# **Required documents for Admission:**

- 1. Complete the application for admission process using the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. Two oficial transcripts.
- 3. Provide a *curriculum vitae*.
- 4. Prepare an essay.

# Other Requirements (those candidates that qualify)

1. Group interview to be scheduled.

# **STUDY PROGRAM:**

30 credits from the Master's courses in Neurocognition and Development (30 credits) Doctoral Level Core Courses (12 credits)			
PSIC 8000	Philosophical Foundations	3	
PSIC 8200	Foundations of Social Psychology and Current Issues	3	
PSIC 6030	Ethics Module	1	
PSIC 6040	Two of the following Proseminar in General and Applied		
PSIC 6050	Psychology:	2	
PSIC 6060	<ul> <li>Principles of Supervision</li> </ul>		
	<ul> <li>Principles of Consulting</li> </ul>		
	<ul> <li>Program and Services Evaluation</li> </ul>		
PSIC 8126	Human Learning	3	
Courses in the emphasis area of Neurocognition and Development (23 credits)			
PSIC 8127	Contemporary Debates on Youth Psychology	3	
PSIC 6995	Research Practicum III	3	
PSIC 6401	Psychological Assessment I	3	
PSIC 6403	Practicum in Psychological Assessment	1	
PSIC 8128	Neuropsychological Assessment	3	
PSIC 8130	Practicum in Neuropsychological Assessment	1	
PSIC 8101	Human Neurodevelopment	3	
PSIC 8129	Psychology of Adulthood and Aging	3	
PSIC 8509	Cognitive Neuroscience	3	
Electives course (15 credits)			
XXXX		3	

XXXX		3	
Candidacy Exam			
XXXX	Qualifying Exam	0	
Dissertation			
PSIC 8001	Dissertation Seminar	0	
PSIC 8002	Dissertation Work	0	

#### **COURSE DESCRIPTIONS:**

The course descriptions below are the last ones registered in the Student Information System of the Office of the Registrar of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **PSYC 6005 Theories of Personality**

Three credits.

Study of theories on the structure, dynamics, and development of personality, emphasizing contemporary approaches. Critical examination of the problems, theories, and research that help clarify the role of motivation in personality.

# PSYC 6006 Statistics Applied to Psychology

Three credits.

Statistical methods and their applications in psychological research. The collection, organization, and analysis of data; frequency distribution; measures of central tendency, variation, skewness, and kurtosis; theoretical distributions, binomial, normal, and "Poisson"; sampling, sampling distribution, hypothesis testing for large and small samples; point and interval estimates.

#### PSYC 6007 Seminar: Methods of Psychological Research

Three credits. Three lecture hours per week.

Discussion of the basic methods of research in the field of psychology, with examples of the most frequently used techniques. Discussion of topics such as controls in psychological research, the concept of explanation and prediction, practical aspects of different research problems, selection of areas, methods, and topics in psychological research.

#### **PSYC 6008 Thesis Work**

No credits. Independent studies.

Prerequisite: PSYC 6010

The course is designed for those students who need guidance and advice from their thesis advisors regarding difficulties encountered in different phases of thesis research and in the preparation and



writing of the thesis. The student will enroll in the course each semester in which they are carrying out their thesis work.

# **PSYC 6009 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide students with a general examination of the eight areas of psychology typically taught in a general or introductory psychology course. The areas to be covered are history and systems, sensation and physiological perception, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

#### **PSYC 6010 Thesis Seminar**

Three credits.

Prerequisite: PSYC 6007

Aims to refine the creative and critical abilities of the participants through the cultivation of dialogue and both oral and written scientific exposition. Requires the preparation of candidates for critical examination before the faculty panel and peers.

# **PSYC 6015 Proseminar in General Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

The purpose of this course is to provide a general overview of the eight areas of psychology that are typically covered in a general or introductory psychology course. The areas to be covered are history and systems, sensation and perception, physiological, learning, personality, abnormal and social development. These areas will be covered over two semesters of teaching. Five weeks will be dedicated to each area.

# PSYC 6020 Proseminar in General and Applied Psychology: Principles of Psychological Measurement

One credit. Sixteen lecture hours per semester.

This module aims to expose the student to the basic principles of psychological assessment in its broadest sense. Emphasis will be placed on the discussion of concepts of validity, reliability, normalization, and standardization, among others.

# PSYC 6025 Psychosocial Approach to the Study of Organizational Behavior

Three credits. Three lecture hours per week.

Prerequisite: Admission to the Graduate Program.

The following topics are covered relatively quickly: organization design, motivation, satisfaction, communication, conflict, and others. The discussion deepens on some methods that have been used to try to facilitate change in organizations. Current administrative practice is critically evaluated,

and an attempt is made to identify and question the ideology or set of values that informs it. The negative consequences of such ideology are illustrated, and the possibility that the human tendency to unilaterally control one's situation leads precisely to organizational ineffectiveness is discussed. An invitation is made to invent and explore models of control that lead to effectiveness.

# PSYC 6026 Psychological Approach to Development and Change in Organizations

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6025

Various models for producing information relevant to organizational development and change are explored. The aim is to compare and evaluate these models so that the student becomes familiar with them and feels capable of beginning to explore the application of some.

# **PSYC 6030 Proseminar in General and Applied Psychology: Ethical Issues in Psychology** One credit. Sixteen lecture hours per semester.

The course will familiarize the student with the problems and considerations to be taken in the construction, development, and application of an ethical system for the profession, the basic premises, notions, and ethical implications of using various psychological models of human behavior as illustrated by the various psychological paradigms will be analyzed. The discussion of cases, situations, and paradoxes in the practice of professional psychology will be used.

# **PSYC 6040 Proseminar in General and Applied Psychology: Principles of Supervision** One credit. Sixteen lecture hours per semester.

Some of the most relevant theories about management and supervision and important aspects of supervision such as objectives, work planning, control, coordination, and evaluation will be discussed. The unit will be conducted mostly through lectures, case discussions, and simulation of roles and real situations. Face-to-face, hybrid, and online course.

# PSYC 6050 Proseminar in General and Applied Psychology: Principles of Consulting One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with consultant and advisory service models with the purpose of knowing and applying the basic principles of these models to situations requiring the advice of a psychologist.

# PSYC 6060 Proseminar in General and Applied Psychology: Evaluation of Programs and Services

One credit. Sixteen lecture hours per semester.

In this module, an invitation is made to review the literature on evaluation techniques and strategies in different contexts: government agencies, educational programs, community action programs, and generally preventive or corrective services.



# PSYC 6070 Proseminar in General and Applied Psychology: Society and Puerto Rican Culture

One credit. Sixteen lecture hours per semester.

In this module, the student is familiarized with the effect of variables resulting from Puerto Rican society and culture on individual and group behavior. An emphasis is placed on analyzing situations requiring the intervention of the clinical psychologist considering these variables.

# **PSYC 6080 Proseminar in General and Applied Psychology: Employee Evaluation** One credit. One lecture hour per week.

Study of employee evaluation as a system: its methods and techniques. Face-to-face, hybrid, and online course.

# PSYC 6090 Proseminar in General and Applied Psychology: Identification of Needs and Resources

One credit. One lecture hour per week and one lab hour per week.

The course attempts to familiarize the student with various methods or models for identifying community needs and resources. It also aims to provide critical elements to evaluate different models and to introduce them to the various options used by public agencies.

# **PSYC 6105 Advanced Social Psychology**

Three credits. Three lecture hours per week.

The course is organized around the problem of the social construction of reality. It aims to develop both a theoretical and methodological framework for the study of this issue. To this end, various theories such as ethnomethodology, symbolic interactionism, and role theory are studied; and there will be a deeper exploration in areas such as deviance and social control, attitudes, attribution, social comparison, social movements, and ideology. An effort will be made to use literature from Puerto Rico to illustrate and understand the social construction of reality.

# **PSYC 6106 Community Psychology**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the Department Director.

The course aims to prepare future psychologists in the analysis and solution of psychosocial problems affecting the community.

### PSYC 6107 Intercultural Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in psychology.

This seminar aims to demonstrate the extent to which social psychology may be subject to cultural variations. Social psychology research in different cultures is studied, analyzed comparatively, and



considered for its implications on existing theories. Research within the Puerto Rican culture is emphasized, and there is an attempt to replicate at least one foreign study in our culture.

# PSYC 6108 Psychology, Society, and Health

Three credits. One lecture hour and two discussion hours per week.

Prerequisite: PSYC 6106

Analysis of the socio-economic conditions, organizations, and social visions affecting health in Puerto Rico, and in other countries of the Americas. The role of the psychologist in relation to this issue.

# PSYC 6109 The Group as a Means of Social Intervention

Three credits. Two lecture hours and three lab hours per week.

Prerequisite: PSYC 6105, 6106.

The application of group theories to social life will be studied to facilitate psychological, social, organizational, institutional, and community change.

# PSYC 6110 Seminar on the Psychological Analysis of Social and Cultural Change in Puerto Rico

Three credits. Three lecture hours per week.

The seminar aims to gather relevant information regarding change agents in Puerto Rico such as the search for the historical background of Puerto Rican society in its basic outlines: population, emigration and immigration, urbanization, poverty, slums, social stratification, education, housing, employment and unemployment, industrialization, and modernization. These topics or indicators of change will be analyzed based on objective and verifiable information from the review of literature from studies conducted here and elsewhere, with a psychological emphasis. It will explore how changes in these areas affect interpersonal relationships, human development, the formation of beliefs and values, and coexistence in Puerto Rico.

# PSYC 6115 Analysis of Strategies for Conflict and Crisis Management

Three credits. Three lecture hours per week.

Conceptual and formal analysis for the management of interpersonal, group and community conflicts.

# PSYC 6116 Practice in Strategies for Conflict and Crisis Management

Credits: 0

Prerequisite: Concurrent with PSYC 6115.

Supervised practice in interventions aimed at managing interpersonal, group and community conflicts.

# PSYC 6120 Seminar in Community Psychology and Social Policy

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director and the professor.

The course attempts to examine the content of public policy in the areas of health, education, and social welfare as it applies to community psychology in Puerto Rico. Full understanding will allow for the effective planning of psychosocial intervention strategies.

# **PSYC 6131 Community Practice I**

Three credits.

The purpose of this practice is to expand the theoretical framework discussed in the courses of Advanced Social Psychology I and Community Psychology. It also aims to promote the acquisition of intervention skills in communities, formal groups, organizations, institutions, or geographical communities, data collection, and other aspects associated with research.

# **PSYC 6132 Community Practice II**

Three credits.

This practice aims to expand the intervention and research skills acquired in Community Practice I.

# **PSYC 6133 Community Practice III**

Three credits.

Prerequisite: PSYC 6132

This practice aims to refine and expand the skills acquired in the Community Practice I and II courses and offers students the opportunity to acquire new community work skills in a new work setting.

# **PSYC 6195 Seminar on Social Psychology**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6105

Study of current problems and themes in social psychology and related areas.

#### PSYC 6201 Practicum I

Three credits. One lecture hour and twenty lab hours per week.

Students will dedicate at least 120 hours to practical work in an organization where they apply the concepts and techniques of the social-industrial program. Students will meet one hour weekly with the supervising professor to discuss problems and consult on references to study. As part of the course, each student will prepare a work that is publishable in a scientific journal.

#### PSYC 6202 Practicum II

Three credits. Three supervision hours and eight practice hours per week.

Prerequisite: PSYC 6201 and 6205.

Practice in government and private organizations with particular attention to the organizational problems of such institutions. The course includes 120 hours of practice, in addition to weekly meetings for supervision.

# PSYC 6205 Industrial Social Psychology

Three credits. Three lecture hours per week.

Prerequisite: Being a graduate student.

Topics relevant to the world of work with high social content are covered. Topics include historical significance of work and needs fulfilled by working, technology and job satisfaction, formal and informal organization, job analysis, recruitment and selection, introduction to performance evolution and training, as well as employment termination (unemployment, retirement, and exit interviews).

### **PSYC 6206 Construction of Psychological Tests**

Three credits. Two lecture hours per week.

Prerequisite: PSYC 6006

Theory of constructing aptitude, intelligence, achievement, personality, and interest tests. Practice in the preliminary development of one of these types of tests.

# PSYC 6209 Psychosocial Aspects of Labor Regulation

Three credits.

Prerequisite: Admission to the program.

Critical analysis of labor regulation in areas such as health, safety, schedules, wages, labor unions, and others.

# PSYC 6215 Psychosocial Approach to Organizational Conflicts

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Analysis of psychological and sociological theories of organizational conflicts and strategies for their solutions.

# PSYC 6216 Psychological Test Construction Laboratory

One credit. One lab hour per week.

Prerequisite: To be taken concurrently with PSYC 6206.

Laboratory for drafting questions, item analysis, reliability determination, norms, equating, and validity in psychological tests.

# **PSYC 6218 Psychology and Occupational Health**

Three credits. Three lecture hours per week.

Prerequisite: PSYC 6205 or equivalent.

The course explores the workplace with an emphasis on the health, safety, and well-being of the workforce. It focuses on the interaction between the worker and their workplace and its effects on the worker's life both inside and outside the company. The course explores topics such as: the healthy organization, work-life balance and spillover effect, health and productivity, stress and health, workplace violence, physiological aspects of illness, safety and accidents, as well as intervention alternatives in work settings. As part of the course activities, students will develop a group intervention in an organization identified by them as a contribution to the organization and the quality of life of its members.

# PSYC 6225 Techniques of Psychological Evaluation in Personnel Selection

Three credits. Three lecture hours per week.

Discussion of the main psychological evaluation techniques used in personnel selection. Face-to-face, hybrid, and online course.

# **PSYC 6227 Social Psychology of Work and Production in Contemporary Capitalist Society** Three credits. Three lecture hours per week.

Analysis of theories of alienation, communication, and organization in relation to changes in the economy and society, brought about by the contemporary crisis. The perspectives of social psychology in the technological era will be studied.

# PSYC 6301 Advanced Developmental Psychology

Three credits. Three lecture hours per week.

Prerequisite: Bachelor's degree in psychology or authorization from the advisor.

Study of the basic principles of human development with an emphasis on childhood and adolescence. Critical consideration of recent scientific findings. Special attention is given to the problems and peculiarities of childhood and adolescence in Puerto Rico.

# PSYC 6302 Advanced Developmental Psychology

Three credits.

Prerequisite: Bachelor's degree and with authorization from the professor

Based on the study of the principles governing human development, from conception to the end of adolescence. Subsequent evolutionary stages, such as early adulthood, middle adulthood, and the onset of old age, will be considered. Parallel to the study of human evolution during these periods, the psychological circumstances accompanying fulfillment achievement, and the decline of life are discussed.

#### PSYC 6305 Advanced Statistical and Methodological Designs

Three credits. Three lecture hours per week.

Statistical analyses and designs, and the theory behind them.

# PSYC 6306 History and Systems of Psychology

Three credits. Three lecture hours per week.

Prerequisite: Admission to the graduate program.

The course examines the history of psychology, from ideas in the countries of the ancient East to contemporary psychology. It attempts to identify the historical links of the discipline. Finally, the state of the discipline and its history in Latin America are examined.

# **PSYC 6311 Teaching Psychology**

Three credits. Three lecture hours per week.

This course focuses on the teaching and assessment of the general psychology course. Innovations in teaching and instructional methods are examined. The central themes and debates of general psychology, course content, ethics in teaching, and assessment of achievement are discussed.

### PSYC 6312 Practice in Teaching Introductory Psychology

Three credits. Eight practice hours per week.

Prerequisite: PSYC 6311

A course designed to provide supervised experiences and skills in teaching psychology. The course includes supervised practice in different teaching methods.

# **PSYC 6315 Practice in Teaching Advanced Psychology Courses**

Three credits. Twelve supervised practice hours per week.

Prerequisites: PSYC 6312 and authorization from the professor.

Organization and teaching of an advanced undergraduate psychology course under the supervision of a professor. Includes discussion of the philosophical foundations of teaching and the most recent aspects of the topic to be taught.

# PSYC 6317 Advanced Physiological Psychology

Three credits. Three lecture hours per week.

The course emphasizes the study of the relationship between an organism's physiological system and behavior. Special attention is given to the functioning of the central nervous system and its influence on behavior.

# **PSYC 6318 Human Learning**

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

The course will broadly cover verbal memory and verbal behavior of humans. It will include a brief study of historical backgrounds and general methodology; the rest of the course consists of the study of various models of interpolation of memory and/or language.

# PSYC 6325 Psychological Approach to the Study of Cognitive Processes

Three credits. Three lecture hours per week.

Prerequisite: Authorization from the director.

Basic theories on the relationship between mental events and human behavior and effectiveness. The importance of cognitive processes in psychological practice in Puerto Rico is emphasized.

# PSYC 6327 Computer Use and Application in Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Introduction to terminology, principles, and common applications of computers in psychological work.

### PSYC 6401 Psychological Assessment I

Three credits. Two hours of lecture per week.

Prerequisite: PSYC 6020, 6405 and 6408.

Critical analysis of the theoretical and practical aspects of psychological assessment through intelligence testing. Includes historical, conceptual, and ideological aspects of this evaluation method; the Stanford-Binet and Wechsler tests (for children and adults); their uses, scope, limitations, administration, scoring, and interpretation.

# PSYC 6402 Psychological Assessment II

Three to four credits. Two hours. Prerequisite: PSYC 6401, 6403.

Training in the administration and interpretation of various techniques used in personality assessment, such as TAT, Bender-Gestalt, and Draw a Person. Includes supervised practical work, laboratory work, and the presentation of written reports.

# PSYC 6403 Practice in Psychological Assessment I

One credit. Three weekly hours of supervision sessions and twelve hours of practice.

Prerequisite: PSYC 6020, 6405, 6408 and being enrolled in PSYC 6501.

Supervised experience in the administration, scoring, and interpretation of intelligence tests, as well as the writing of psychological reports.

# PSYC 6404 Practice in Psychological Assessment II

Credits: 0Four to eight hours of practice.

Prerequisite: PSYC 6401, 6403 and being enrolled in PSYC 6402.

Supervised practice in the administration and interpretation of tests such as TAT, CAT, Bender-Gestalt, Draw a Person, among others.

# PSYC 6405 Theories of Personality and Psychotherapy

Three credits.

Discussion of basic concepts in personality theory and psychotherapy with particular emphasis on existential and phenomenological approaches. Emphasis is placed on the relevance and applicability of the concepts and techniques discussed, considering our diverse social idiosyncrasies and the real situation in which the Puerto Rican psychotherapist provides their services.

# PSYC 6406 Practice in Psychotherapy

Credits: 0Eight hours of practice per week. Prerequisite: Enrolled in PSYC 6405.

Supervised practice in individual or group therapy. The practice is an integral part of the PSYC 6405 course.

# PSYC 6407 Emergency Clinic and Short-Term Psychotherapy

Three credits. Three hours of lecture per week.

Prerequisite: Professor's authorization.

The course proposes the study of clinical and ethical knowledge that allows, beyond the so-called intervention, a positioning centrally embracing individuals' words who come to the consulting room at a time of intricate conscious and unconscious phenomena that exceed their handling capacity and tolerance for distress, and to facilitate their connection with their crisis and symptoms as one not only affected by external events but as a production of their own complexity, subjectivity, and discourse.

# **PSYC 6408 Principles of Psychopathology**

Three credits. Three hours of lecture per week.

Discussion of various models of psychopathology (biophysical, intrapsychic, phenomenological, behavioral, and sociocultural) with particular emphasis on antecedents, development, and symptom patterns. Psychotherapeutic aspects, when relevant to various patterns of psychopathology and sociocultural idiosyncrasies, are also discussed.

### **PSYC 6409 Practice in Psychopathology**

Credits: 0Four hours of practice. Prerequisite: Enrolled in PSYC 6408.

Observation, interviews, preparation of case histories, diagnosis, and clinical discussion of behavioral disorders. The practice is an integral part of the PSYC 6408 course.

#### PSYC 6410 Advanced Seminar in Behavior Modification

Three credits. Three hours of lecture per week; practice (optional).

Prerequisite: PSYC 6417

Critical and intensive study of the theoretical framework of behavior modification principles and the therapeutic effectiveness of behavioral modification techniques.



# **PSYC 6416 Group Therapy**

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: Graduate student in psychology.

The course will emphasize the theoretical and practical aspects of group therapy and will offer a human laboratory to experience client and therapist roles in a group psychotherapy setting.

# **PSYC 6417 Principles of Behavior Modification**

Three credits. Three hours of lecture and four hours of practicum.

Prerequisite: Graduate student in psychology.

Study of the basic psychological principles governing human behavior, particularly those derived from learning psychology. Emphasis will be placed on the application of social learning principles to the modification of psychotic, neurotic, and maladjusted behavior in clinical and educational institutions. Special attention will also be given to the critical discussion of recent scientific findings in behavioral modification with particular interest in the applicability of these findings to adjustment problems in Puerto Rico.

#### PSYC 6418 Disorders of Childhood Behavior

Three credits. Two hours of lecture per week; Practicum by agreement.

Prerequisite: Authorization from the Department Director.

Issues of etiology, classification, and management of children exhibiting extreme isolation, boundaryless behavior, odd and chaotic tendencies, and behavior determined by organic disorders. Theoretical frameworks, assessment techniques, and diagnosis are considered. Opportunities for practice will be provided. Lectures by guest consultants will be offered.

# PSIC 6421 Family Therapy I

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: PSIC 6405, 6408.

Study of some family therapy systems, their theoretical models, techniques used, and case analysis. Students are offered the opportunity to experience simulated family therapy experiences (laboratory) and to conceptualize their own experiences within the different family systems they share personally and professionally.

# **PSIC 6423 Practice in Family Therapy I**

Three credits. Three to four hours of practice.

Prerequisite: PSIC 6405, 6408 and 6421.

Observation experiences of family therapy sessions; opportunity to work with families as a cotherapist providing family therapy. Participation in Practice Center meetings, case discussions, and supervision meetings.



# PSIC 6431 Practice in Clinical Psychology I

Credits: 0Twelve hours of supervised practice per week.

Supervised practice in clinical observation, interviewing, report and history preparation, and participation in case conferences. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

# **PSIC 6432 Practice in Clinical Psychology II**

Two credits.

Prerequisite: PSIC 6431

Supervised practice in assessments of intellectual and personality functioning, diagnostic interviews, participation in case conferences, counseling, and individual psychotherapy with special attention to short-term problem-solving and crisis intervention. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

### PSIC 6433 Practice in Clinical Psychology III

Two credits.

Prerequisite: PSIC 6432

Supervised practice in evaluations of individual and group psychological functioning and individual psychotherapy. This practice will emphasize supervised experiences in individual psychotherapy, psychodiagnosis, and group therapy. The practice requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

#### PSIC 6434 Practice in Clinical Psychology IV

Two credits.

Prerequisite: PSIC 6433

Practice requires 12 hours of work per week in addition to appointment meetings. Requires twelve hours of work per week, in addition to meetings with the clinical supervisor.

# **PSIC 6436 Intramural Practice in Clinical Psychology**

Three credits.

Prerequisite: Director's authorization.

Supervised practice in psychotherapy (individual, group, couples, and/or families) and psychological assessment. This practice is carried out at the facilities of the University Center for Psychological Services and Studies (CUSEP) during the summer sessions.

#### **PSIC 6437 Introduction to Clinical Practice**

Three credits. One hour of lecture, one hour of discussion, and five hours of supervised practice per week.

The clinic is structured around concepts and foundations providing a basis and context for the experiential experience (practice). This course will present basic concepts in a theoretical-

practical-therapeutic integration. This will be specifically carried out through the discussion of different aspects: theoretical frameworks, clinical observation, interview styles and processes, clinical conceptualization, therapeutic processes, and clinical contexts.

#### **PSIC 6505 Module on Dreams**

One credit. Three hours of lecture per week.

Prerequisite: Director's authorization.

The meaning of dreams from a physiological and psychological point of view, Jung's dream theory and Dr. Efrén Ramírez's theory. Dr. Ramírez's dream interpretation method, and its utility in terms of personal development, as a psychotherapy method, and as a group therapy method.

# **PSIC 6506 Colloquium on Psychology Topics**

Credits: 0One hour of meeting per week.

Lectures, discussion, and exchange of ideas among department faculty, students, and invited speakers. Students will enroll each semester.

### PSIC 6507 The Psychology of Women

Three credits. Three hours of lecture per week.

This course is organized around the question of whether there is a distinctly female psychology and what its biological and social determinants are. It studies the acquisition of sexual roles and their historical determination and transcultural relativity. The literature related to women's biological, sexual, cognitive, and affective functioning is reviewed. In addition, the development of feminist movements, the sociopolitical situation of women in industrial society, and the impact of these changes on the relationships between sexes, family, and Puerto Rican society are studied.

# **PSIC 6510 Seminar on the Family in Puerto Rico**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: Director's authorization.

Analysis and research on the history and psychosocial aspects of the family in Puerto Rico. The primary purpose of the seminar is to promote psychosocial research on the family and its issues.

# PSIC 6515 Intelligence, Creativity, and Cognitive Complexity

Three credits. Three hours of lecture per week.

The concepts of intelligence, creativity, and cognitive complexity will be contrasted, and their relevance to contemporary Puerto Rican society will be determined.

# **PSIC 6516 Supervised Reading Course**

Three credits.

Prerequisite: Professor's authorization.

Readings revolve around a topic chosen by the student and the professor. The student covers the concepts with the professor's approval and works on a monograph on the concept of their choice.

# PSIC 6517 Advanced Psychopharmacology and Neurophysiology of Drug Use and Abuse

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This course delves into the knowledge of the psychophysiological system and its alteration through the use of chemical substances. Students will become familiar with the chemical and pharmacological aspects of substances subject to abuse, as well as those used in various treatment modalities (methadone, naltrexone, etc.). Particular attention will be given to the study of human behavior and its interaction with the action of substances on the psychophysiological system.

# **PSIC 6518 Psychology of Adolescence**

Three credits. Two lecture hours and one discussion hour per week.

Prerequisite: PSIC 6301

Study of the theories and research explaining the typical processes of adolescence, considering the cultural variables that contribute to the formulation of such theories and the design of such research. Discussion of the physical, cognitive, social, and affective aspects of development, as well as the evolution of identity and sexuality in adolescence. Analysis of family processes, school experience, peer relationships, and their influence on development.

# PSIC 6525 Psychological Analysis of Power

Three credits. Three lecture hours per week.

Analysis of the concept of power at the individual level (power traits, power motivation, control foci), and at the group level (leadership, gender relations). Some emphasis will be given to communal and institutional levels.

### PSIC 6526 Spirituality in Psychology

Three credits. One lecture hour, one discussion hour, and one workshop hour per week.

Prerequisites: PSCI 3005 or 3003.

This graduate-level course examines conceptualizations and contemporary debates about the notion of spirituality in psychology, particularly its integration into therapeutic practice and in the training of helping professionals. It reviews the ethical premises for psychology as it integrates spirituality into its research and practice.

# **PSIC 6527 Fundamentals of Human Sexuality**

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

This introductory course aims to provide an overview of human sexuality. It includes processes for clarifying personal sexual attitudes and values. The topic will be approached from both a



personal perspective and its social dimension. Students will examine some sexual issues in Puerto Rican society.

# **PSIC 6528 Violence and Complexity**

Three credits. Three seminar hours per week.

The purpose of this course is to contribute to the development of a conceptual framework in which to locate violence as a complex, socially constructed phenomenon. It will study the relationships between psychic life and social life from the centrality that the signifier of violence has acquired in our contemporaneity. This includes a detailed examination of the relationships between the history of subject constitution and identifications (subjectivation) and the world we share with others (intersubjectivity) and its relation to violence. Contributions from psychoanalytic discourse to the analysis of violence will be examined, and dialogical relations between psychoanalytic discourse and other contemporary fields of theorization such as poststructuralism, deconstruction, social constructivism, and Lacanian psychoanalysis will be fostered. Critical examination of the contributions of traditional psychology on the topic of violence.

# PSIC 6529 Review and Critical Analysis of Psychological Literature in Puerto Rico

Three credits. Three lecture hours per week.

Prerequisite: Having passed a minimum of 9 graduate credits.

Review of research and publications made in Puerto Rico, their theoretical frameworks, methodology, and implications for understanding the psychological reality of Puerto Ricans. An analytical and critical framework will be provided.

# **PSIC 6535 Theoretical Controversies on Human Development: Early Childhood** Three credits.

Different aspects of human development from birth to seven years of age will be examined. The focus is epistemological, emphasizing the basic assumptions of the discipline, fundamental controversies, and the ideological and philosophical aspects of the theories examined.

# PSIC 6537 Psychopathology of Affective Development in Childhood: Psychoanalytic Perspective

Three credits. Prerequisite: Director's authorization.

To provide a clinical view of the affective development of the child from a psychoanalytic perspective, allowing for an understanding of child psychopathology.

# **PSIC 6545 Program Evaluation and Consulting**

Three credits. Three lecture hours per week.

Introduction to the basic concepts and methods of consulting and program evaluation and to the ethical and value controversies surrounding them. Emphasis is placed on developing skills in these areas and their application in public service programs and private non-profit agencies.

# PSIC 6546 Analysis of Interventions in Organizations: Theory and Practice

Three credits. Three lecture hours per week.

Prerequisite: PSIC 6025 or its equivalent, authorization from the director or PSIC 6026.

Analysis of interventions carried out in public and private organizations in and outside of Puerto Rico, considering the conceptual models that guide them. Different intervention models, their purposes, conceptual frameworks, and ethical principles will be presented. Analysis of the current applications of these and other models, paying particular attention to the congruence between theory and practice.

# PSIC 6555 School Psychology

Three credits. Three discussion hours per week.

General orientation on school psychology, focusing the discussion on the public education system of Puerto Rico and on the ethical principles of the discipline. The various functions carried out in professional practice in this area and its historical development and future of school psychology will be highlighted.

# PSIC 6591 School Psychology Practice I

Three credits. Eleven hours of supervised practice per week.

Prerequisite: PSIC 6555

Supervised practice in the provision of services in the school context, including experiences such as: direct observation in the classroom, health promotion and prevention, community relations, interventions with academic and disciplinary problems.

# PSIC 6592 School Psychology Practice II

Three credits. Three hours of direct supervision and ten hours of practice per week in the school setting.

Prerequisites: PSIC 6401, 6403, 6555 and 6591.

Continuation of supervised practice in the provision of psychological services in a school setting. Students will gain experience in intervention strategies such as crisis and conflict intervention, management of specific behaviors in groups, interdisciplinary teamwork, psychoeducational evaluations, and program evaluations. This course complements PSIC 6591.

#### **PSIC 6995 Research Practicum**

One to four credits per semester.

Prerequisite: Enrollment in the graduate program and Professor's authorization.

The course is aimed at developing the student's skills necessary for psychological research through active participation in the development of research projects, under the supervision of a professor. The course can be repeated for credit, with no limit with the approval of the research professor.

# PSIC 7005 Seminar in School Psychology: The Roles of the School Psychologist

Three credits. Fifteen hours of lecture per week.



Prerequisite: Director's authorization.

Study of the clinical process with learning and behavior problems. Emphasis on the integration of data from case histories, interviews, and psychometric tests.

# PSIC 8000 Philosophical Foundations of Psychology

Three credits. Three hours of lecture per week.

Prerequisite: Admission to the graduate program.

Changes in the paradigms of science and their consequences in psychology.

#### **PSIC 8001 Dissertation Seminar**

Credits: 0Three hours of discussion per week.

Prerequisite: Master's degree or PSIC 6007. Authorization from the director and/or graduate program coordinator.

The dissertation is an original investigation demonstrating the student's capabilities as an independent researcher. During the dissertation seminar, the student will choose their research topic and problem, review the literature (relevant theoretical and empirical findings), and develop the research design or action plan. A formal proposal will be submitted to the dissertation committee for approval.

#### **PSIC 8002 Dissertation Work**

Credits: 0Three hours of discussion per week.

Prerequisite: PSIC 8001

This course is designed to follow up on the work done in the dissertation seminar. The proposed research will be completed, meaning that information will be collected and interpreted with the advice of the dissertation committee. The student will enroll in the course every semester they are working on their dissertation and will periodically submit written reports of their progress. The thesis work is completed by submitting the final draft of the dissertation.

# PSIC 8005 Seminar in School Psychology: Professional Problems in School Psychology

Three credits. Three hours of lecture per week.

Examination and in-depth analysis of unresolved problems in psychoeducational diagnosis and intervention and behavior modification; counseling, consulting, and advising parents.

# PSIC 8007 School Psychology: Mental Health Consultation in Schools

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization, consortium student.

Consultation as a model of school psychological service. The student will become familiar with and trained in various modalities and levels of consultation to be used as a school psychologist. The investigative and evaluative aspects of consultation will be studied.

# PSIC 8015 Advanced Social Psychology II

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

Examines the historical forms of subjectivity in areas of daily life such as child rearing, morality, sexuality, and love relationships.

# PSIC 8017 Seminar on Multiple Perspectives in Research II

Three credits. Three hours of lecture per week.

Prerequisite PSIC 6007

Examination of different theoretical fields in psychology and their research. Analysis of assumptions, research strategies, methods, and techniques most used.

# **PSIC 8018 Contemporary Social Research: Meeting with its Authors**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007 and PSIC 8017.

Various approaches in social science research by meeting researchers and discussing their research with them.

# PSIC 8019 The Social Scientist as a Judicial Expert

Three credits. Three hours of lecture per week.

Prerequisite: Master's degree in psychology or one of the social sciences.

Theoretical and practical considerations in preparing the social scientist as a judicial expert.

# PSIC 8027 Advanced Psychobiology: Foundations, Uses, and Controversies

Three credits.

The discussion period considers the influences of modern biology, particularly evolutionary, ethological, and systemic currents on the psychological conceptualization of humans. Essential concepts such as evaluation, adaptation, species-typical behavior, biological niche, and systemic organization. The discussion period is complemented with a practical laboratory considering the controversies and applications of a psychobiological approach.

# PSIC 8028 Psychopharmacology

Three credits. Three hours of lecture and seminar per week.

Prerequisites: PSIC 6317 or PSIC 8027.

The course will discuss aspects of psychopharmacology and neurophysiology. It will include lectures on Anatomy and Physiology of the nervous system, Synaptic Neurochemistry, Pharmacokinetics and Pharmacodynamics, and on the neuropharmacological impact of various drugs on states of consciousness and behavior. The neurobiological bases of mental disorders, the

mechanisms of action of different medications, and the strategies used in experimental studies and in clinical psychopharmacology will be studied. Anxiolytics and antidepressants, antipsychotic drugs, sedative hypnotics, and narcotics will be analyzed. The content will be presented from both a basic science perspective and a clinical orientation combining lectures and discussions of readings. The course is specially designed for students in the Clinical Psychology graduate program and doctoral students specializing in Academic-Research Psychology.

# **PSIC 8105 Psychology and Social Movements**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105

The theoretical-practical contributions of psychology to social movements of the last decades in Puerto Rico are analyzed.

# **PSIC 8115 Social Psychology of Education**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105 or EDUC 6270.

Examination of the crises of education in contemporary capitalist society. Critical analysis of the most important theoretical fields for its explanation. The social construction of education and the new subjectivity.

# **PSIC 8125** The Sociocultural Study of the Mind

Three credits. One hour of lecture and one hour of discussion per week.

Analysis of the sociocultural approach as a conceptual framework in the study of the mind. Discussion of the historical background of the approach and its development to the present with an emphasis on the research program it has generated.

# PSIC 8200 Foundations of Social Psychology and Current Topics

Three credits. Three hours of lecture per week.

This course studies the theoretical and methodological foundations of social psychology. The course discusses classic and contemporary theories, primarily in social psychology research, as well as new trends, like the affective aspects of social behavior. This course is divided into four general units: epistemological and historical backgrounds, theorizing the individual in the social context, affective aspects of social dynamics, and power structures and contemporary related fields. In each unit, theoretical and methodological approaches are examined to provide students with the opportunity to develop an understanding of the field, as well as the research methodology from a social psychological perspective and integrate the social and affective aspects of behavior. Ethical issues related to theory, research, and psychosocial interventions are discussed. This course examines social and affective processes affecting behavior. In-person course.

# PISC 8201 Human Development: The Life Cycle

Three credits. Three hours of lecture per week.



The course offers a general overview of the theories and research related to the development of the human subject. It will cover the relationship between physical, cognitive, and socio-emotional development of the subject from childhood to old age. Emphasis will be placed on the theoretical and scientific bases of developmental psychology. The student will not only have information concerning developmental processes but also a critical understanding of the underlying processes of human development. The course will emphasize the dynamic processes of development and the dialectic between psychological processes and development. In-person course.

# PSIC 8202: Psychological Approach to the Study of Cognitive and Affective Processes Three credits. Three hours of lecture per week.

This course studies the main theoretical models used to explain human cognitive and affective aspects of behavior. The emergence of cognitive psychology is examined considering sociohistorical transformations. Information processing models, genetic epistemology, the historical-cultural perspective, and affective processes are analyzed. Cognitive processes such as attention, sensation, perception, memory, language, and problem-solving are discussed. In particular, how affective processes and cultural differences shape cognitive processes and human behavior is analyzed. In-person course.

# PSIC 8203 Models and Techniques of Psychotherapy

Three credits. Three hours of lecture per week.

This course focuses on the exposition of the different theoretical models of psychotherapy, as well as their origins and evolutions. Once the basis of the theoretical models is established, current therapeutic approaches will be examined from a critical viewpoint, emphasizing conceptual problems, methodology, and alternatives to address such issues. Evidence-based psychotherapeutic approaches used with different populations will also be discussed. In-person course.

# **PSIC 8204 Personality and Human Diversity**

Three credits. Three hours of lecture per week.

This course addresses the categories of personality, subjectivity, and subjectivation from a critical and complex approach. It examines the paradigmatic assumptions underlying personality theories and traditional approaches in the study of human beings. It proposes a conceptual approach that includes debates on humans from the complexity paradigm, constructivism, psychoanalytic theory, and updated foundational psychological premises. It explores the application of this conceptual approach to the human, relevant in contemporary clinical practice, as well as considerations of the Puerto Rican population and the unavoidable sensitivity towards differences and cultural and individual diversity necessary in psychological training. In-person course.

# PSIC 8205 Advanced Psychological Assessment

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 6401 and PSIC 6403.

Training in the administration and interpretation of various techniques used in personality assessment such as: TAT, Bender Gestalt, and Person Drawing. Includes supervised practical work, laboratory work, and the presentation of written reports. In-person course

# PSIC 8206 Advanced Practice in Psychological Assessment

One credit.

Prerequisites: PSIC 6401 and PSIC 6403.

Corequisite: PSIC 8205

Intensive practice in the administration and assessment of the following tests: Thematic Apperception Test (TAT), Children's Apperception Test (CAT), Bender Gestalt Visual-Motor Test, Human Figure Drawing among other tests. This includes tests contained in the course Psic. 6401; Psychological Assessment I, worked on in the practice of this course, Psic. 6403. Personality inventories such as the Personality Assessment Inventory (PAI), the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and basic concepts of the Rorschach are also included. Emphasis is placed on the clinical approach to the responses of the subjects with whom one works, which are part of their discourse and life history. In-person course.

# **PSIC 8215 Psychology and Law**

Three credits.

Analysis of basic concepts common to psychology and law.

# PSIC 8216 Employment and Discrimination.

Three credits. Three lecture hours per week.

Prerequisite: Director's authorization.

Critical analysis of employment discrimination and its consequences.

# **PSIC 8300 Advanced Clinical Psychology Practice**

One credit. Three hours of supervised practice.

Prerequisites: PSIC 6434

This advanced clinical practice in psychotherapy (individual, group, couples, and/or families, and/or psychological assessments) allows students to increase their in-person clinical hours and refine their clinical skills. During this advanced practice, students will also increase exposure to diverse populations and rotate through external clinical practices. In-person course.

# **PSIC 8301 Advanced Family and Couples Therapy**

Three credits. Three lecture hours per week. Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8302

This course offers students an overview of the basic concepts and fundamentals of family and couples' therapy. They will also become familiar with the different systemic theoretical models.

Different techniques used by the various theoretical models will be emphasized. Similarly, they will develop group research skills that address some family or couple issues. In-person course.

# **PSIC 8302 Advanced Practice in Family and Couples**

One credit. Supervised practice.

Prerequisites: PSIC 6432 and PSIC 8203.

Corequisites: PSIC 8301

This course is a clinical practice where the student has the opportunity to acquire advanced clinical skills to work with couples and families from a systemic perspective. During this clinical practice, the student will have interventions with clinical cases using one or several systemic theoretical models. This practice must be taken simultaneously with the theoretical course in advanced therapy for families and couples. In-person course.

#### **PSIC 8303 Research Practice**

One credit.

The aim of this course is to foster research experience in students. They will join a faculty member's project to acquire and refine research skills. They will be working under the supervision of a mentor/researcher. Students must attend weekly one hour research sessions under the mentorship of their supervisor. Each research project of the supervisor will have a brief description of their research. This course can be taken more than once to continue with a research project. In addition, their respective research supervisors will add additional references to the course. Inperson course.

#### **PSIC 8304 Clinical Supervision Seminar**

One credit.

Prerequisite: PSIC 6433

This course provides students with an overview of clinical supervision and the different approaches and models of supervision applied to clinical psychology. The student is exposed to the development of supervision as a fundamental part of a psychologist's training. The student will appreciate different conceptualizations of clinical supervision according to each theoretical model and its particular objectives, approaches, and strategies. Additionally, they will learn the difference between supervision and consultancy. Moreover, the student will have the opportunity to create and develop instruments to measure variables that should be present in each psychotherapeutic model. There will be integration into theory and research in seeking research publications on psychotherapy and supervision. In-person course.

# PSIC 8335 Research Methods in Psychology on Human Development

One credit. Three lecture hours per week.

Prerequisite: PSIC 6006, 6007, 6301 and authorization from the professor.

Discussion of the most frequently used methods in psychological research on human development. Examination of the central issues of time analysis, life changes, contributions of the evolutionary approach, and the relationship between research and theory development.

# PSIC 8405 Attachment Theory: Critical Analysis and Clinical Application

Three credits. Three lecture hours per week.

Analyzes the basic assumptions of the theory based on ethological study. It is compared with other dynamic approaches, and clinical applications are derived.

#### **PSIC 8407 Rorschach Technique**

Four credits. Three lecture hours and three hours of supervised practice per week.

Prerequisites: PSIC 6020, 6401 and 6402.

Introductory course in the Rorschach psychological assessment technique. Includes the theoretical basis, principles of administration, scoring, and interpretation. Provides practical experience.

# PSIC 8409 Psychotherapeutic Research: Process and Outcome

Three credits. Two hours of lecture and discussion and one hour of practice per week.

Prerequisite: Professor's authorization.

Formal research on psychotherapy programs for children, adolescents, and adults in various modalities (such as individual, group, couples, and family). Examination of research on psychotherapeutic processes and outcomes.

#### PSIC 8411 Seminar on Psychoanalysis Part I: Adult

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Study of Freud's writings, essential for understanding subjectivity.

#### PSIC 8412 Seminar on Psychoanalysis Part II: Child

Three credits. Three hours of lecture per week.

Study of the basic texts of the most important psychoanalysts in the field of child psychoanalysis.

#### PSIC 8415 Analysis and Reflection on the Practice of Clinical Psychology in Puerto Rico

Three credits. Three hours of lecture per week and nine hours of laboratory.

Prerequisites: PSIC 6431, 6432, 6433 and 6434.

Advanced supervised practice in psychotherapy (individual, group, couples and/or families, and/or psychological evaluations). It allows generating new approaches and intervention models, as well as refining clinical skills and deepening in specific populations or issues. This practice course consists of three credits per semester and can be repeated up to three times.

# PSIC 8416 Psychological Evaluation of Children with Disabilities

Three credits. Three hours of lecture per week.

Prerequisites: PSIC 3025, 6301, 6401, 6402, 6403 and 6404.

Theoretical and methodological controversies on the psychological evaluation of children with disabilities. Examination of the effects of disability on the development of children, on their families, and the issue of social and educational placement.

# **PSIC 8420 Seminar: Study of Families**

Three credits.

Prerequisite: PSIC 6421

Critical study of theoretical and research literature on families and its applicability in Puerto Rico. Research techniques for studying families in Puerto Rico will be developed.

#### PSIC 8425 Seminar on Supervision in Psychotherapy

Three credits. Two hours of lecture and three hours of laboratory per week.

Prerequisite: 60 graduate credits in clinical psychology or its equivalent.

Critical consideration of theoretical and practical aspects of psychotherapy supervision. Practical experience in observation, research, and supervision.

# **PSIC 8495 Internship in Clinical Psychology**

No credits.

Prerequisite: Authorization from the department director or graduate program coordinator and PSIC 6431, 6432, 6433, 6434.

Supervised practice in clinical psychology up to the accumulation of 2,000 hours of professional experience as the last requirement for the doctoral degree.

#### **PSIC 8505 Psychology and Reason**

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6007

Analysis of the body/mind separation and the "software/hardware" split of labor and its consequences in the constitution and development of psychology.

#### PSIC 8506 Advanced Seminar in Community Psychology: Contemporary Debates

Three credits. Three hours of lecture per week.

Prerequisite: PSIC 6105; PSIC 6106.

Contemporary debates in community psychology and their realization in research and intervention. The discussion is framed within community psychology in Puerto Rico.

#### **PSIC 8507 Consultation in the School Context**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: PSIC 6555

Study of the different roles and functions of the consultant in the school context. Deep discussion of the basic principles and intervention models in professional psychological consultancy. Emphasis on the stages of the consultancy relationship and the processes developed during the intervention.

#### **PSIC 8508 Practice of Consultation in the School Context**

Zero credits. Ten hours of supervised practice and three hours of supervision.

Prerequisite: PSIC 6555

Supervised practice in consultation in the school context where theoretical knowledge is applied, and discipline-specific skills are developed. This course complements consultation in the school context (PSIC 8507).

### PSIC 8515 Biological Approaches to the Study of Psychopathology

Three credits. Three hours of seminar per week.

Prerequisite: PSIC 6408, PSIC 6317 or PSIC 8027.

Study of biological models proposed to explain various human psychopathological conditions. Emphasis on critical analysis of research supporting or contradicting these models and on pharmacological interventions derived from them. Analysis of the most important controversies in their application and their impact on psychology practice.

#### **PSIC 8516 Psychoeducational Evaluation**

Three credits. Three hours of lecture per week and two hours of supervised practice per week. Prerequisites: PSIC 6401, 6403 and 6555.

Analysis of concepts and psychological and educational strategies used in psychoeducational evaluation. Includes conceptualization of evaluation in the school context, evaluations of academic achievement, basic skills in writing, reading mathematics, as well as social performance and dynamic cognitive aspects, and pedagogical strategies. The course integrates fundamental aspects of psychoeducational evaluation, modalities of corrective and remedial intervention strategies. Provide for the application of concepts and the development of specific skills that allow for psychoeducational evaluations.

#### PSIC 8525 Play: Reflection, Analysis, and Intervention

Three credits. Two hours of lecture per week and two hours of supervised practice per week. Prerequisite: PSIC 8405 and PSIC 8412.

Study of children's play from a psychoanalytic and interactional perspective and its implications in clinical practice with children. Critical examination of other theoretical perspectives and their clinical application. Supervised practice in clinical intervention.

Mailing Address: 9 University Ave., Ste 901, San Juan PR 00925-2529

Interim Director: Dr. Jaime M. Pérez Rivera, Graduate Program

Coordinator: Dr. Félix López Román

**Telephone:** (787) 764-0000, extensions 87695, 87696

Website: http://socigrad.weebly.com

**DEGREE:** 

#### **Master of Arts in Sociology**

#### **FACULTY:**

**Jorge Giovannetti,** Ph.D., University of North London, 2002. Professor. Ethnic and racial relations; nationalism; popular culture; Caribbean migratory movements; area studies; Intellectual History of Caribbean Anthropology.

**Lidia Marte,** Ph.D., University of Texas, Austin, 2008. Assistant Professor. Cultural Anthropology; Caribbean, Afro-diasporic and cultural studies; food justice, migration and gender; structural violence, trauma, and colonization; globalization and neoliberalism; Politics of Difference, Local Micro-Histories/Place Studies.

**Jesús Tapia Santamaría**, Docteur, École des Hautes Etudes en Sciences Sociales, Paris, 1982. Professor. Theory and methodology; sociology of culture; Sociology of Religion.

**Félix López Román,** Ph.D., University Complutense of Madrid, 2016.

**Jaime M. Pérez Rivera,** Ph.D., University of Puerto Rico, Río Piedras, 2002.

#### **ADMISSION REQUIREMENTS:**

General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Program Admission Requirements**

In addition to meeting the general admission requirements for graduate studies at the Río Piedras Campus, they must meet the following:

- 1. Bachelor's degree (not necessarily in Sociology) from an accredited university.
- 2. Sociological Theory and Statistics courses at the high school level.
- 3. Spanish and English Proficiency.
- 4. Possess basic computer skills (Windows or Macintosh and a statistics program, such as SAS or SPSS).
- 5. Composite Academic Index weighted by: General Grade Point Average.
- 6. Quality of a written work (monograph, essay or research work that you have done during

- high school).
- 7. Required Documents for the Admission Application
- 8. Application for Admission to Graduate Studies in electronic format through the <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a> platform.
- 9. Payment for the application fee.
- 10. Two official academic transcripts completed up to the date of application.

# **GRADUATION REQUIREMENTS:**

Comply with the general requirements for graduation from the Río Piedras Campus and with the Sociology Study Program.

#### **PROGRAM OF STUDY:**

Program Requirements	Credits
Core Courses	12
SOCI 6001 Theory Forum	3
SOCI 6002 Research Forum	3
SOCI 6008 Qualitative Methods	3
SOCI 6015 Quantitative Methods in Sociology	3
Master's Project	8
SOCI 6801 Graduate Seminar I	3
SOCI 6802 Graduate Seminar II	3
SOCI 6911 Master's Project I	1
SOCI 6912 Master's Project II	1
Free Electives	9
Total de Créditos	29

#### Master's Project

The final master's project will be the production of a thesis, defined as a quality article that can be published in a peer-reviewed academic journal. To this end, it will also produce an annotated bibliography and a short proposal.

# **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **SOCI 6001 Theory Forum**

Three credits. Three hours of seminar per week.

Seminar of reading and discussion on the most relevant social theories of current relevance, their intellectual lineages, the debates in which they are inserted, their impact on methodologies and their approaches to the objects of study. Each week one or more theoretical works will be read, recommended by a professor who in turn will visit the seminar to present their lines of theorizing and research related to the assigned readings. Face to-face, hybrid and online course.

#### **SOCI 6002 Research Forum**

Three credits. Three hours of seminar per week.

Pro-seminar discussion of the current research of the teaching staff, its theoretical bases, its methodological approaches and its empirical findings. Each week the group will read a paper by the faculty, participate in a discussion with the author and reflect on the reading in writing.

#### **SOCI 6008 Qualitative Methods in Sociology**

Three credits. One hour of lecture and two hours of workshop per week.

Systematic and practical study of the main qualitative methods in sociology. Emphasis on specific research techniques: interviews, participant observation, textual analysis, among others. Review of the methodological and epistemological bases.

### **SOCI 6015 Quantitative Methods in Sociology**

Three credits. Three hours of lecture and two hours of laboratory time per week.

Prerequisite: Admission to the graduate program Study of descriptive and inferential.

statistics, computer programming techniques, and the management of databases for social analysis. This course is offered in face-to-face, hybrid, and online modalities.

#### **SOCI 6801 Graduate Seminar I**

Three credits. Three hours of seminar per week.

Corequisite: SOCI 6911

Seminar of presentations and discussion on the processes of searching for sources and their bibliographic organization, the definition of the objects of study, the formulation of research problems and questions, the theoretical and methodological approaches, the ethical considerations and the writing of the thesis proposal. Emphasis on participation and effective communication in the group. This course is offered in face-to-face, hybrid, and online modalities.

#### **SOCI 6802 Graduate Seminar II**

Three credits. Three hours of seminar per week.

Prerequisite: SOCI 6801 Corequisites: SOCI 6912.

Seminar of presentations and discussion of research designs, data collection techniques, methods of analysis, ethical protocols, the process of writing and reviewing drafts, and the final writing of the thesis. Emphasis on participation and effective communication in the group.

#### **SOCI 6911 Master's Project I**

A credit. One hour of tutoring per week.

Corequisites: SOCI 6801

Tutoring in the search for bibliographic sources, the compilation of an annotated bibliography, the definition of the objects of study, the formulation of research problems and questions, possible theoretical and methodological approaches, ethical considerations and the writing of a thesis research proposal, defined as an article that can be published in a peer-reviewed academic journal.

#### **SOCI 6912 Master's Project II**

A credit. One hour of tutoring per week.

Tutoring in the research and writing of a thesis, defined as an article publishable in a peer-reviewed academic journal.

#### OTHER COURSE DESCRIPTIONS:

#### **SOCI 5009 Critique of Science from a Gender Perspective**

Three credits. Three hours of lecture a week.

Prerequisite: SOCI 3245, (Principles of Sociology) CISO 3121 (Introduction to Social Sciences).

Study of the creation of scientific knowledge and how the production and consumption of this knowledge reflect social inequalities. Examination of the democratic deficit in the science of key concepts and of the application of and resistance against scientific norms since the nineteenth century. Exploration of new paradigms responding to these criticisms from a gender perspective.

#### **SOCI 6005 Research Methods**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the graduate program.

Study of the Scientific Method in Sociological Analysis. It poses the problem of scientific practice, its epistemology and its socio-historical context. It pays main attention to the construction of the object of study and the use of research techniques.

# SOCI 6006 Complexity and Social Theory: Second-Order Cybernetics and Social Analysis

Three credits. Three hours of seminar per week.

Seminar-type graduate course aimed at performing an in-depth examination of the implications the emergence of new paradigms in science and knowledge, linked to second-order cybernetics, has for the theorization and social examination, as well as its meeting points with other contemporary theoretical currents. The seminar revolves around the discussion of a number of readings common to all participants, who in turn must select a topic to develop throughout the semester, in presentations to the group.

**SOCI 6007: Theoretical Debates in Contemporary Sociology** 



Three credits. Three hours of lecture a week.

Prerequisite: Admission to the Graduate Program in Sociology or Director's authorization.

Study of the historical development and current trends of advanced capitalist societies, the analysis of socioeconomic transformations and the State from the perspective of contemporary schools of sociological thought.

#### **SOCI 6025 Peripheral and Dependent Social Formations**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the Graduate Program in Sociology or permission from the Director of the Sociology Program.

#### **SOCI 6076 Historical Sociology of Race and Ethnicity**

Three credits. An hour and a half of discussion and an hour and a half of seminar.

Race and ethnicity are two important concepts in sociology, as in other fields of knowledge. Both concepts are also very significant in the daily lives of human beings and their interactions in and through various social and historical formations. This course examines these concepts through a comparative and historical approach, and the construction of them critically at a theoretical and conceptual level. It considers how the diverse understandings of race and ethnicity are in relation to diverse knowledge, other concepts (class, nation), and social processes and dynamics (nationalism, racism, migration). The examination of these concepts, ideas, and dynamics is done by considering case studies and research in various regions and societies from, for example, the Caribbean and the Southern United States to Nazi Germany. The course is designed for a high level of discussion debate, integrating theoretical knowledge and existing historical research, but at the same time interacting with students' research projects and processes. (This course has HIST 6076 equivalents in the Department of History).

# SOCI 6105 Theoretical and Practical Problems in the Analysis of Crime

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the graduate program in sociology or Authorization from the director.

Study of Debates Linked to the Analysis of Crime in Contemporary Societies.

#### SOCI 6107 Sociology of Economic-Social Development in the Caribbean

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the Sociology Graduate Program or authorization from the director

Study of the state of economic and social development of the region in the context of the current crisis.

#### **SOCI 6108 The Urban and the State**

Three credits. Three hours of lecture a week.

Elaboration of interpretative frameworks of the contemporary state, as well as of the urban, focused on post-industrial societies.

#### **SOCI 6109 Social Analysis in Puerto Rico**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the Graduate Program in Sociology or Authorization from the director.

Systematic study of the history of sociology and the trajectory of social analysis in Puerto Rico since the nineteenth century.

#### **SOCI 6110 Migration and Marginality**

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Master's student.

Critical reinterpretation of contemporary theories of migration with particular emphasis on the repetitive and circular population movement from, to, and between Caribbean countries, within a framework of cultural globalization. Emphasis on the analytical reevaluation of the concepts of community and identity for Puerto Rican society with a frame of reference not limited to the geographical boundaries of the island. Focus on social analysis, policy formulation and planning, recognizing the central importance of population mobility in modern society. Theoretical paradigms are problematized beyond demographic theories, with particular attention to debates on marginality and its relationship with the concepts of community, nation and identity.

#### **SOCI 6115 The Social Construction of Gender Relations**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the sociology graduate program or Director's authorization.

An examination of recent theoretical approaches to analyzing sexual differences and the social organization of the functioning of men and women. Examination of specific controversies arising from these theoretical approaches.

# **SOCI 6116 Topics of Sociology**

Three credits. Three hours of seminar per week.

Seminar focused on various current topics in sociology.

#### **SOCI 6117 Migratory Movements and Populations in the Caribbean**

Three credits. Three hours of lecture and discussion per week.

Analysis of the migratory flow to the Caribbean during the nineteenth century. The process of emigration to the United States and Europe and the migratory movement within the area during the twentieth century. This course is offered in face-to-face, hybrid, and online modalities.

### **SOCI 6118 Sociology of Meaning**

Three credits. Three hours of lecture a week.

Introduction to the most relevant concepts of the theory of meaning in interpretive sociology. Traditions of the study of meaning that have had the greatest influence on the social sciences:

analytical, structuralism, pragmatism, phenomenology, and hermeneutics. Influence of these approaches on interpretive and structuralist sociology. Topics discussed: relationship between language, thought and reality; the relationship between sign, signified and referent; meaning and truth; linguistic relativism; semantic holism; speech act theory; meaning as use.

#### **SOCI 6125 Political Economy of Health Systems**

Three credits. Three hours of seminar per week.

Critical analysis of the historical and social development of the various health systems from the perspective of political economy. Examination of professionalization, medical domain, medical-industrial complex, and medicalization.

#### SOCI 6126 Social Production of Health and Disease

Three credits. Three hours of lecture a week.

Critical analysis of the production and social construction of health and disease from a historical perspective. Examination of the links between the development of capitalist and socialist modes of production, the social context, and the distribution of infectious and chronic diseases.

#### **SOCI 6135 Criminality and Everyday Life**

Three credits. Three hours of lecture a week.

Exploration of the impact of the problem of criminality in the realm of everyday life in contemporary societies.

#### **SOCI 6137 Social Movements**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

Critical examination of theories on social movements proposed in Europe, the United States and Latin America (the Caribbean and Puerto Rico) with different theoretical-ideological positions. Emphasis on the various ways of articulating the relationship between social movements and the state.

### SOCI 6139 Intellectuals, Knowledge and Power

Three credits. Three hours of lecture a week.

Prerequisite: Bachelor's degree or authorization from the course professor and the director.

Study of the intellectual's identity with respect to knowledge-power in their transition to the postmodern condition. Ideological representations, social belonging and knowledge of willpower will be addressed.

### SOCI 6145 Developmental Strategies in the Caribbean

Three credits. A few hours of lecture and two hours of discussion a week.

Analysis of the models of industrialization and economic development implemented in the area and the impact of these processes on the formation of a new framework of the social and economic

structure. Discussion of the main analytical perspectives (modernization, dependency, world systems, neoliberalism) arising in uneven and combined development at the global level. Discussion and analysis of the theoretical and practical bases of the economic integration of the Caribbean in the context of the new international division of labor (i.e. globalization processes).

#### SOCI 6147 Subject, Movements and Contemporary Social Processes

Three credits. Three hours of lecture and discussion per week.

The aim is to theoretically exalt the category of subject based on a reflection on the discursivity that accompanies the notion of the unitary subject, its crisis, as part of the modernity and bourgeois political project. It contemplates a reflection on how this process configures new fields of theorization of the category of subject, in particular the notion of the decentered subject. The ways in which this debate affects the practices of the diversity of social movements, particularly those that are shaped by the politics of identities, are studied. Reflection on the relationships between debates about the subject and the diversity of contemporary social processes and their broad cultural and political references.

#### **SOCI 6205 Independent Study**

Three credits. Three hours of lecture a week.

Prerequisite: Professor authorization and independent study of special topics according to the interests of the student and the professor.

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**DEGREE:** 

# **Master of Rehabilitation Counseling**

#### **ACCREDITATION**

Council on for Accreditation of Counseling and Related Educational Programs (CACREP)

#### **FACULTY:**

**Maribel Báez Lebrón,** Ph.D., CRC, IPEC, CVE. University of Puerto Rico, 2012, Professor. Rehabilitation counseling, vocational counseling, psychiatric rehabilitation; psychosocial adjustment of people with disabilities, labor legislation, professional ethics, work and disability, work ideologies, subjectivity of disability, job placement.

**Reinaldo Berríos**, Ed.D., CPL. University of Puerto Rico, 1999. Professor. Professional counseling; professional ethics; development of spirituality; qualitative research; pediatric cancer; prostate cancer; development of vocational interests from a longitudinal perspective; happiness in Puerto Ricans; school and inequality after catastrophic events; young people in Puerto Rico: employment, migration and public policy.

**Roberto L. Frontera Benvenutti**, Ph.D., CRC. Texas A & M University, 1991, Associate Professor. Rehabilitation counseling, special education, measurement, psychological and psychoeducational evaluation, developmental deficiencies, intellectual disability, behavior modification, emotional intelligence, differentiated evaluation, non-standardized evaluation and transition.

**Lesley O. Irizarry Fonseca,** Ph.D., CRC, CVE. University of Iowa, 2011, Associate Professor. Rehabilitation counseling, professional ethics, vocational counseling, Vocational Evaluation, Public Policy and Disability, Professional identity, reasonable accommodation.

**Raúl Rivera Colón,** Ph.D., CRC, CVE. Interamerican University of PR, 2011, Associate Professor. Rehabilitation Counseling, Psychology Counseling; special education and transition of young people to adulthood; group counseling; psychosocial adjustment of people with disabilities; Case management; vocational evaluation; vocational counseling; sexuality of people with disabilities; ethical aspects.

**Gladys Soto López,** PsyD., DFCD, MRC, CRC. Doxa International University. Assistant Professor. Rehabilitation counseling; Domestic Violence, Group Counseling, Family Counseling, Crisis Intervention, Addiction Counseling.



**Robinson A. Vázquez Ramos**, Ph.D., CRC. University of Iowa, 2003, Professor. Rehabilitation counseling, rehabilitation statistics and research, evaluation in rehabilitation counseling, professional ethics and psychosocial adjustment. Rehabilitation counseling, psychosocial aspects of disability, psychiatric rehabilitation, group counseling, sexuality of the person with disabilities, therapeutic adherence and health education.

#### **ADMISSION REQUIREMENTS:**

# **General Requirements of the Rio Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### Specific Requirements of the master's program

- 1. Bachelor's degree or its equivalent from a recognized university. The program will only consider applications from applicants with a bachelor's degree before the start of registration for the semester for which admission is requested.
- 2. General academic index of 3.00 on a scale of 4.00. The school may grant conditional admission to students with a general bachelor's degree index of 2.75 or more that when combined with their specialty index results in 3.00.
- 3. Basic course in Statistics or Scientific Research or its equivalent.
- 4. Nine (9) credits in courses on human behavior with a general grade of no less than "B".
- 5. Motivation to work with people with disabilities.
- 6. Interview with two faculty members from the program which includes a writing exercise aimed to evaluate the applicants' written communication skills.

#### **Documents Required for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format (NEXT portal)
- 2. An official academic transcript with final grades.
- 3. Degree Certification
- 4. Essay on how your interest in the professional field originated.

#### **GRADUATION REQUIREMENTS:**

Students must meet the following requirements to receive the Master's degree in Rehabilitation Counseling:

- 1. Pass the Qualifying Exam
- 2. Pass a total of 60 credits.
- 3. Maintain an index of no less than 3.00 points in each academic semester.
- 4. Maintain ethical conduct and a favorable attitude toward serving people with disabilities.
- 5. Complete all requirements within a period of no more than four years from the date of admission.

Once the student completes the Master's degree in Rehabilitation Counseling, they must be governed by the provisions of Law 58 of 1976, as amended. To practice rehabilitation counseling in Puerto Rico, you must pass the revalidation exam of the Board of Examiners of Rehabilitation Counselors and become registered through the College of Rehabilitation Counseling Professionals.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Core Courses	46
RECO 6001 - Seminar on Medical and Psychosocial Aspects of Disability RECO 6002 - Seminar on Psychosocial and Psychiatric Aspects of	3
Rehabilitation	3
RECO 6003 - Functional Capacity Diagnosis for Independent Living and Employment	1
RECO 6005 - Psychometric and Evaluation in Rehabilitation Seminar	3
RECO 6006 - Scientific Research Seminar in Rehabilitation	3
RECO 6007 - Fundamentals of Rehabilitation Counseling	3
RECO 6008 - Seminar on Occupational Information and its Application to the World of Employment	3
RECO 6011 - Principles and Techniques of Rehabilitation Counseling I CORE 6012 - Principles and Techniques of Rehabilitation Counseling I II.	3 4
RECO 6016 - Seminar on Techniques for the Evaluation and Employment of People with Functional Diversity	3
RECO 6017 - Practicum in Rehabilitation Counseling	2
RECO 6020 - Human Development and the Rehabilitation of People with Developmental Deficiencies	3
RECO 6035 - Group and Family Counseling	3
RECO 6039 – Reasonable Accommodations in Employment	1
RECO 6052 – Multicultural Counseling in Rehabilitation	2
RECO 6053 - Crisis Intervention, Trauma Management and Protective Techniques	2
RECO 6054 - Case Management and Professional Ethics	3
RECO 6060 - Independent Living Seminar: Philosophy, Legislation, and Services	1
Internship	10
RECO 6090 - Internship in Rehabilitation Counseling and Professional	10

Integration Seminar	
RECO 6091-92 Internship in Rehabilitation Counseling and Professional	
Integration Seminar I and II	
Electives Courses	4
RECO 6051 – Assistive Technology	1
RECO 6056 - Managing People with Disabilities in a Disaster	1
RECO 6059 – Recovery Models for Individuals with a History of Substance Use Addiction	1
RECO 6995 – Independent Study	1-3
RECO 6900 Degree Exam	0
Total de Créditos	60

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# RECO 6001 Seminar on Medical and Psychosocial Aspects of Disability

Three credits. Three hours of lecture and discussion per week.

This seminar will provide students with essential knowledge about bodily functions, medical terminology, basic diagnostic processes, physical disability assessment, and the treatments used in the rehabilitation process of the people who suffer some physical disability whether congenital or acquired. In addition, it will analyze the effects of diseases and the most frequent traumas in Puerto Rico in the integral functioning of the individual; occupational adjustment and psychosocial implications. Students are trained in the use of models of teamwork in the rehabilitative process of the person with functional diversity of work as a team in the rehabilitation of the individual.

#### RECO 6002 Seminar on Psychosocial and Psychiatric Aspects of Rehabilitation

Three credits. Three hours of lecture and discussion per week.

The course is based on the study of the development and normal and pathological behavior of the individual. Students are trained in the use of medical-psychiatric diagnostic terminology and the use of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the most common mental disorders in Puerto Rico. The basic processes of treatment and their use in the rehabilitation process of the individual are discussed. The individual, family, multicultural and social effects that in Puerto Rico are associated with the development of psychopathology are also considered. Students are trained in the use of teamwork models in the rehabilitation process to achieve a better psychological, family, social, and vocational adjustment.

# RECO 6003 Functional Capacity Diagnosis for Independent Living and Employment

Credit. Three hours per week for a period of five weeks for a total of 15 hours.

Requisites: RECO 6001, 6002, 6005, 6008 y 6011.



Corequisites: RECO 6016

In this course the functional capacity diagnosis (FCD) is presented as an essential task in rehabilitation counseling and forensic rehabilitation practice. The international classification of functioning, disability and health (ICF) is presented as a tool to determine functional capacity for independent living and employment. This system provides for analysis of functionality from a biopsychosocial perspective making use of evidence-based practice. It emphasizes the importance of FCD to promote wellness from a holistic perspective, prevention of secondary conditions, service plans development and public policy.

# RECO 6005 Psychometric and Evaluation in Rehabilitation Seminar.

Three credits. Three hours of lecture and discussion per week.

This seminar will provide students with essential knowledge about psychological measurement. The students will apply the core concepts of the construction of tests and the observations of the behavior of hypothetical clients in the interpretation of tests that measure various behaviors and constructs typical of the field of rehabilitation of people with functional diversity. Students will identify criteria to formulate an appropriate evaluation referral and will learn to interpret qualitatively and quantitatively, the results of evaluative reports from various professionals in the field of rehabilitation. You will become familiar with the psychological and vocational tests available to the Puerto Rican population. The challenges presented by psychological measurement in Puerto Rico will be discussed, with particular emphasis on the field of Rehabilitation Counseling, among them the need for reasonable accommodation in the evaluation processes of people with functional diversity and the ethical implications of non-standardized evaluation. The main method used in teaching will consist of workshops and activities aimed at developing assessment and interpretation skills directly supervised by the professor.

#### RECO 6006 Scientific Research Seminar in Rehabilitation.

Three credits. Three hours of seminar a week.

The seminar provides experiences for students to develop critical thinking and recognize the importance of statistical procedures, research design and practices based on scientific evidence as essential tools in the field of rehabilitation counseling. Through the topics discussed in the seminar, students recognize the value of applying scientific knowledge in their professional training, in the evaluation of programs and in the presentation of services to populations with functional diversity. Similarly, students will be exposed to academic-research experiences that allow them to apply the ethical-legal and cultural components that regulate the participation of human beings in research. Among the learning experiences are group discussions, oral presentations, critical analysis of unpublished and published research, as well as the presentation of a research project, in a climate of collaboration and feedback with the professor.

#### **RECO 6007 Fundamentals of Rehabilitation Counseling**

Three credits. Three hours of conference a week.

Prerequisite: Active graduate student.

The seminar discusses the paradigms of rehabilitation, its historical and philosophical background, as well as the legislation that protects the rights of people with functional diversity. Service delivery systems are studied. The student body will present critical analysis on aspects related to the professional identity and ethical conduct of rehabilitation counselors. The course evaluates the role and functions played by the rehabilitation counselor in serving people with functional diversity.

# **RECO 6008 Seminar on Occupational Information and its Application to the World of Employment**

Three credit hours.

The CORE 6008 course aims to examine the different theoretical approaches and models for decision making in vocational selection. Similarly, the course tries to explore and analyze the implications of each of the theories and models discussed in the vocational development of the person with disabilities or functional diversity. Within the themes, knowledge of the world is incorporated occupational, educational facilities, socioeconomic projections and the use of this information in individual and group career counseling. The course offers special emphasis on the study and use of classification and occupational information sources such as the Dictionary of Occupational Titles (DOT) and "O'Net" in the process of occupational information. In addition, the course discusses and analyzes psychosocial, economic and ecological factors influencing the selection and vocational adjustment of people with and without impediments. The main focus of the seminar is to raise graduate students' awareness to understand and promote the nature of vocational development as part of the integral development of the human being and recognize the value of this concept in orientation programs in schools, rehabilitation facilities and in the community.

#### **RECO 6011 Principles and Techniques of Rehabilitation Counseling I**

Three credits. Three hours of conference a week.

This course introduces the student to the philosophical and psychological approaches that give rise to the study of human behavior. Various psychological theories are studied based on the service provided to the disabled individual. The intervention techniques inherent in these theories are discussed; as well as scientific findings relevant to them. The study of such theories is deepened with the purpose of making possible in the student the future development of a style of conceptualization and intervention.

#### RECO 6012 Principles and Techniques of Rehabilitation Counseling II

Four credits. Three hours of lecture and discussion per week.

Prerequisite: RECO 6011

This course introduces the student to interview techniques and the therapeutic counseling process in the field of rehabilitation counseling. The aim is to promote the understanding and application of the micro counseling skills of exploration and intention to be used at different stages of the crisis counseling and intervention process, but with a particular emphasis on the initial interview. The process will use the models and techniques of rehabilitation counseling by integrating evidence-

based treatment (EBT) to develop evidence-based practice (EBP). The conceptualization skills of the case or the problem presented will also be reinforced, so that the student can achieve a dynamic understanding of the client's behavior with functional diversity and develop basic intervention skills. The course also includes a laboratory that will provide the conditions for practice, development of micro-counseling skills, self-evaluation and development of an individual intervention style where ethics and good practice permeate.

# **RECO 6016 Seminar on Techniques for the Evaluation and Employment of People with Functional Diversity**

Three credits. Three hours of conference a week.

Prerequisite: RECO 6005, 6008.

In the course the techniques of vocational evaluation and determination of readiness for employment are discussed. The aspects of counseling related to work and placement modalities are analyzed. In addition, through fieldwork and research, emphasis is placed on occupational analysis, the study of the employment market and other aspects related to employability, job placement and adjustment to work of people with disabilities. Aspects such as the use of technological assistance and reasonable accommodation in the job placement and retention processes are discussed. Emphasis is placed on the role and responsibility of the counselor / evaluator and counselor / setter in the process of evaluating and placing the person with functional diversity.

# **RECO 6017 Practicum in Rehabilitation Counseling**

Two credit hours.

This course will provide a clinical experience that will help refine skills basic case management from rehabilitation counseling a Preparing for boarding school. It will also allow you to gain experience in the application of theories and models of counseling in the rehabilitative process of people with impediments. It will also help the student know the importance of a practice professional based on ethics. By observing initial and follow-up interviews, in community rehabilitation services offices, the student will be exposed to people with disabilities and to the delivery systems of services. That experience will help the student refine conceptualization skills of cases, including the evaluation and recommendation of reasonable accommodations, determination of residual / functional capacity, consulting, intercessory, as well as transition services and independent living. The student will begin to integrate the knowledge acquired in academic content courses with the practice of the profession. The experience includes 100 hours of practice.

# **RECO 6020 Human Development and the Rehabilitation of People with Developmental Deficiencies**

Three credits. Three hours of seminar a week.

The course will provide students with essential and practical knowledge about the process of human development throughout life with emphasis on the rehabilitation of people with developmental deficiencies. Students will apply and adapt human development theories to the particularities of people with developmental disabilities. Importance will be given to intervention

with children and adolescents in the school/university environment and to the processes of inclusion, transition and reasonable accommodation. The student body will be exposed to conditions typically classified as developmental disabilities, individual and family psychosocial adjustment, relevant legislation, and the provision of services for this population. Inter- and transdisciplinary intervention models framed in the comprehensive rehabilitation process will be analyzed and applied, which in turn will be sensitive to diversity.

### **RECO 6035 Group and Family Counseling**

Three credits. Three hours of seminar a week.

The Seminar highlights the importance of group work as a therapeutic resource. The group process is presented from an evolutionary or staged perspective in which each stage fulfills a mission or purpose in the help process. The behavior of the members is analyzed through the stages of group development and the functions of the leader in each one. During the course, ethical and diversity dilemmas in group and family counseling are discussed. Students can also study and apply the group therapeutic process through various teaching strategies.

# **RECO 6039 Reasonable Accommodation for Employment**

Credit. Three hours of lecture a week for 5 weeks.

The course presents the historical background and legislation that impacts reasonable accommodation processes. The current session will discuss reasonable accommodation as a resource to improve the quality of life and integrate people with functional diversity into employment. We will work with different strategies to develop a reasonable accommodation plan. This course will be offered under in-person, hybrid and online modalities.

#### **RECO 6052 Multicultural Counseling in Rehabilitation**

Two credits. Three hours of conference a week.

Prerequisites: RECO 6012

The course presents the historical background of diversity, demographic changes, and social dynamics that impact counseling processes. It seeks to promote the development of multicultural counseling competencies through self-awareness of biases, beliefs, values, and attitudes that may impact counseling processes. Students will be exposed to current issues and constructions of diversity such as culture, national origin, language, physical appearance and ability, sexual orientation, spirituality, socioeconomic status, among others. This course will be offered in-person, hybrid, and online.

#### RECO 6053 Crisis Intervention, Trauma Management and Protective Techniques

Two credits. Three hours of conference a week. Prerequisite: CORE 6011 and CORE 6012.

The course will provide the student with the opportunity to explore various topics related to traumatic events and crises at different stages of life. Within crises, a variety of topics can manifest, including grief, suicide, homicide, psychosis, natural disasters, man-made disasters, and the person's coping mechanisms for the diversity of situations they face. They will be exposed to

various evidence-based crisis intervention models in order to acquire skills to manage risk situations to which they may be exposed in the professional setting. The student will have the opportunity to prepare for a controlled environment with the purpose of knowing strategies for managing emotions, using protective techniques and at the same time escalating situations to avoid violence with clients, consumers, participants or patients.

#### **RECO 6054 Case Management and Professional Ethics**

Three credits. Three hours of seminar a week.

Prerequisites: CORE 6001, CORE 6002, CORE 6005, CORE 6006, CORE 6008, CORE 6011, CORE 6012, CORE 6016, CORE 6020 AND CORE 6035.

This course is designed to provide an overview of case management practices and rehabilitation services in the vocational rehabilitation system, in private practice, as well as in other settings that provide counseling services to people with functional diversity. The work of case management is discussed as a critical component of the rehabilitation counselor's role and the ethical dilemmas that the professional may face. The Code of Ethics of the Puerto Rico Rehabilitation Counselors Examining Board and some models of ethical decision-making are critically examined with the purpose of applying them in various situations. The course will explore the role of the rehabilitation counselor in developing and maintaining effective work relationships, addressing case management situations, time management and organization, conceptualization analysis, case documentation, coordination and planning.

# RECO 6060 Independent Living Seminar: Philosophy, Legislation, and Services

One Credit. Three hours of seminar a week for 5 weeks

Prerequisites: CORE 6001, CORE 6002, CORE 6007 AND CORE 6011.

This seminar will provide students with essential knowledge about independent living services as an integral part of rehabilitation goals for people with more significant impairments. The philosophical, legal and theoretical components of the independent living movement will be analyzed in order to understand the programmatic and practical bases of service programs. The assessment instruments most used to evaluate the need for independent living services will be discussed. The student will learn about the state structure of independent living services. The student will identify and analyze the challenges that people with disabilities usually face in their process of social reintegration, community life, interdependent life, autonomy, self-advocacy and self-determination. The main method used in teaching will consist of workshops and activities aimed at developing critical analysis of independent living services.

# **RECO 6090 Internship in Rehabilitation Counseling and Professional Integration Seminar** Ten credits. Prerequisite: CORE 6017.

This course exposes the student to supervised practice experience on the different aspects of the process of helping people with disabilities or with special needs of a physical, mental, emotional and social nature. It is carried out in rehabilitation facilities, as well as in other institutions. The internship has a minimum of 600 hours, of which 240 hours are direct service.



# **RECO 6091- 6092 Rehabilitation Counseling Internship and Professional Integration Seminar**

Five credits. Prerequisite: CORE 6017.

This course constitutes a supervised practice experience through which the student is exposed to the different aspects of the process of helping a person with disabilities or special needs. The nature of such impairments or needs may be physical, mental, emotional or social. It also offers the opportunity to apply the theoretical knowledge learned. The experience will take place in rehabilitation facilities, as well as other institutions and programs providing services to people with disabilities and populations with special needs, at high risk of developing disabilities, or among whom there may be undiagnosed impairments. The experience will include a minimum of 300 hours, equivalent to 5 academic credits, of which 120 hours are direct service. This practicum experience will be supervised by a faculty member with the Certified Rehabilitation Counselor credential.

### **RECO 6051 Technological Assistance in Rehabilitation Processes**

Credit. Three hours of conference a week.

The course presents the historical background and legislation that impacts the assistive technology (AT) recommendation and use processes. Technological assistance will be discussed as a resource to improve the quality of life and integrate people with functional diversity in employment, school and the community in general.

#### RECO 6056 Management of People with Disabilities in a Disaster

Credit. Three hours of conference a week.

The course deals with rehabilitation counseling and its rationale when intervening with the population at risk in a natural or man-made disaster scenario. It also deals with the ministerial duty of this profession in carrying out various interventions with the population before, during and after the event, as established by the Accrediting Agency (CACREP) and the Codes of Ethics that govern the profession (PR and CRC Examining Board).

# **RECO 6059 Recovery Models for People with a History of Substance Use Addiction** Credit. Three hours of seminar a week.

The course deals with the recovery process of a person diagnosed with a substance use disorder (licit and illicit). The basic concepts, terminology, neurobiological foundations of addiction, levels of treatment, the recovery process, deinstitutionalization and social insertion and strategies for managing the problems associated with substance use are emphasized. Through the module, the basic concepts and terminology associated with substance use, abuse, and substance-induced disorders are discussed as described in the DSM V.

#### **RECO 6995 Independent Study**

Three credits. Three hours of conference a week.

(Note: The program will submit modification to the registered course with variable credits from one to three).



Study of a topic of student preference in the field of rehabilitation counseling. The selected topic must be investigated from a theoretical and investigative perspective. Emphasis will be placed on the development of advanced knowledge in the selected topic.

#### OTHER COURSES DESCRIPTIONS

# **RECO 6018 Emerging Placement Modalities: Solidarity Self-Management with and Without Support**

Credit. One hour of conference a week.

Prerequisite: CORE 6008

The course discusses emerging placement modalities. These include supportive self-management with or without support for the population with functional diversity in Puerto Rico in the industrial, manufacturing and service sectors. Emphasis is placed on occupational analysis, the study of the employment market and other aspects related to employability and adjustment to work of people with disabilities under these placement modalities using the performance management system.

#### **RECO 6028 Rehabilitation of the Drug Addict**

Three credits. Three hours of conference a week.

Basic guidance is offered on the problem of drug addiction, both in Puerto Rico and internationally. The results of this disease in an individual are analyzed, emphasizing the harmful effect of drugs on the body, their pharmacological properties, implications of misuse or abuse of drugs from a legal point of view and their detrimental effects in the individual's vocational and employment areas. The student is familiarized with the social and psychological conditions that promote drug abuse. The rehabilitation process to be offered to this type of disabled person is analyzed in detail, including existing treatments and facilities offered in the community.

#### **RECO 6029 Inmate Rehabilitation.**

Three credits. Three hours of conference a week.

The purpose of this course is to present the inmate as a person who suffers from some emotional conflict or behavioral disorder. Using social information, the course will focus on individual prior development, considering different theories on crime and social deviance. Corrective methods and prevention and rehabilitation programs existing in the community and the role of the rehabilitation counselor are also discussed.

# **RECO 6040 Sexuality of Persons with Disabilities**

Three credits. Three hours of conference a week.

Prerequisite: Director's authorization.

A holistic perspective on the sexuality of the person with disabilities and the sexual counseling process. An evolutionary vision of the concept of sexuality and disability will be offered; as well as etiology, dysfunctions and counseling regarding the sexual area.

#### RECO 6041 Models of Ethical Decision Making in Rehabilitation Counseling.

One Credit. One hour of conference, one hour of discussion and one hour of workshop per week. Prerequisite: CORE 6007, CORE 6011, CORE 6012.

This course addresses the ethical decision-making processes and critical thinking skills that rehabilitation counselors must cultivate. The student is taken on a journey from the theoretical conceptual principles and issues involved in ethical reasoning to the practical considerations that lead to ethical decision making in rehabilitation counseling. The course focuses on ethical decision making in rehabilitation counseling and the importance of applying the principles of autonomy, beneficence, non-maleficence, justice, fidelity, and truthfulness when reflecting on each ethical issue that arises. Critically examines the code of ethics of the Puerto Rico Rehabilitation Counseling Examining Board and a variety of ethical decision-making models with the purpose of applying them in various situations that the rehabilitation counseling professional may face.

# RECO 6042 Transition of the Person with Functional Diversity from School to Adult Life One Credit. One hour of conference, one hour of discussion and one hour of workshop per week. Prerequisites: CORE 6007, CORE 6005, CORE 6008.

This course provides students with a conceptual framework to understand the philosophy and principles guiding transition services in rehabilitation counseling. As a result, students will articulate the fundamentals of interdependence, inclusion, self-determination, empowerment, access, and respect for individual differences. Legislation, taxonomy, standards, and public policies associated with transition services are critically examined. Models for transition and person-centered transition planning are studied and analyzed. The course also emphasizes the importance of collaboration between professionals to ensure a successful transition. The student is expected to apply their knowledge through discussion and critical analysis of readings, the design of a transition model and transition plans.

# RECO 6048 Independent Living: Rehabilitation Alternative for People with Severe Disabilities.

Three credits. Two hours of conference and one hour of visits outside the U.P.R. facilities.

Study of people with severe impairments, emphasizing the independent living models and services available to ensure that they can enjoy a full, productive and independent life. Additionally, the importance of assistive technology services for this population and the rehabilitation process of people with severe impairments are presented and discussed.

# RECO 6050 Reasonable Accommodation and Technological Assistance in Rehabilitation Processes.

Three credits. Three hours of conference a week.

The course presents the historical background and legislation that impacts reasonable accommodation processes and the use of assistive technology. The current study analyzes reasonable accommodation and technological assistance as resources to improve the quality of life and integrate people with functional diversity in employment, school and the community in

general. Different strategies are also applied in the development of a reasonable accommodation plan incorporating the use of technological assistance.

#### **RECO 6085 Professional Ethics**

Three credits. Three hours of seminar a week. Prerequisite: CORE 6007 and CORE 6011 – 6012.

It aims to help the student understand the Codes of Ethics that govern their profession. Ethical principles and professional controversies relevant to the counseling relationship and clinical records will be discussed. The ethical principle of Confidentiality and its legal concomitants related to Privileged Communication and the Obligation to Warn will be extensively analyzed. Ethical aspects related to disability and AIDS will also be discussed.

# **RECO 6095 Consulting and Advocacy in Rehabilitation Processes**

Three credits. Three hours of conference a week.

The course provides for the development of analysis and critical thinking skills. During the course, available literature in the areas of consulting and advocacy is analyzed. The teacher provides feedback on the work presented in class orally and in writing. The course also provides the opportunity for the student to develop basic skills in consulting and advocacy processes through projects in the community.

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Website: <a href="https://sociales.uprrp.edu/consejeria-rehabilitacion/">https://sociales.uprrp.edu/consejeria-rehabilitacion/</a>

#### **DEGREE:**

Doctor of Philosophy in Rehabilitation Counseling and Emphasis on Psychiatric Rehabilitation, Neurodevelopmental Disorders and Chronic Illness

#### **FACULTY:**

**Maribel Báez Lebrón**, Ph.D., CRC, IPEC, CVE. University of Puerto Rico, 2012, Professor. Rehabilitation counseling, vocational counseling, psychiatric rehabilitation; psychosocial adjustment of people with disabilities, labor legislation, professional ethics, work and disability, work ideologies, subjectivity of disability, job placement.

**Reinaldo Berríos**, Ed. D., CPL. University of Puerto Rico, 1999. Professor. Professional counseling; professional ethics; development of spirituality; qualitative research; pediatric cancer; prostate cancer; development of vocational interests from a longitudinal perspective; happiness in Puerto Ricans; school and inequality after catastrophic events; young people in Puerto Rico: employment, migration and public policy.

**Roberto L. Frontera Benvenutti**, Ph.D., CRC. Texas A & M University, 1991, Associate Professor. Rehabilitation counseling, special education, measurement, psychological and psychoeducational evaluation, developmental deficiencies, intellectual disability, behavior modification, emotional intelligence, differentiated evaluation, non-standardized evaluation and transition.

**Lesley O. Irizarry Fonseca,** Ph.D., CRC, CVE. University of Iowa, 2011, Associate Professor. Rehabilitation counseling, professional ethics, vocational counseling, Vocational Evaluation, Public Policy and Disability, Professional identity, reasonable accommodation.

**Raúl Rivera Colón,** Ph.D., CRC, CVE. Interamerican University of PR, 2011, Associate Professor. Rehabilitation Counseling, Psychology Counseling; special education and transition of young people to adulthood; group counseling; psychosocial adjustment of people with disabilities; Case management; vocational evaluation; vocational counseling; sexuality of people with disabilities; ethical aspects.

**Gladys Soto López,** PsyD., DFCD, MRC, CRC. Doxa International University. Assistant Professor. Rehabilitation counseling; Domestic Violence, Group Counseling, Family Counseling, Crisis Intervention, Addiction Counseling.

**Robinson A. Vázquez Ramos**, Ph.D., CRC. University of Iowa, 2003, Professor. Rehabilitation counseling, rehabilitation statistics and research, evaluation in rehabilitation counseling, professional ethics and psychosocial adjustment. Rehabilitation counseling, psychosocial aspects

of disability, psychiatric rehabilitation, group counseling, sexuality of the person with disabilities, therapeutic adherence and health education.

### **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Rio Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Requirements of the Doctoral Program**

- 1. Master's degree in Rehabilitation Counseling or related area from an accredited institution.
- 2. Academic index of 3.00 on a scale of 4.00.
- 3. Minimum of two (2) years of professional experience in rehabilitation counseling or in a position where their functions are related to direct service or the provision of rehabilitation services for people with functional diversity.
- 4. Students who do not hold a master's degree in Rehabilitation Counseling will be required to pass a minimum of 21 credits in fundamentals of Rehabilitation Counseling.
- 5. Course in statistics or research and human development, at the graduate level, prior to beginning doctoral studies.

# **Required Documents for Admission**

- 1. Complete the admission application for Graduate Studies through the NEXT portal
- 2. Updated Curriculum Vitae (CV).
- 3. Letter of Intent where you elaborate the reasons why you wish to request admission to the Doctoral Program.
- 4. Submit 3 letters of recommendation from professors or professionals related to the field you are applying for.

#### **GRADUATION REQUIREMENTS:**

Students must meet the following requirements to receive the Master's degree in Rehabilitation Counseling:

- 1. Pass the Qualifying Exam
- 2. Pass a total of 65 credits.
- 3. Maintain a general academic index (GPA) of no less than 3.00 points on a scale of 4.00 in each academic semester.
- 4. Comply with the requirements related to clinical and professional experiences in the teaching, supervision, research and service component as stipulated by the accrediting agency.
- 5. Complete all requirements within a period of no more than seven years from the date of admission.
- 6. Present, defend before the Committee and publish the doctoral dissertation in "University Microfilms International" or place it in the corresponding institutional repository.

Once the student completes the Doctorate in Philosophy degree with a specialty in Rehabilitation Counseling, they must be governed by the provisions of Law 58 of 1976, as amended. To practice Rehabilitation Counseling in Puerto Rico, students must pass the revalidation exam of the Board of Examiners of Rehabilitation Counselors and become registered through the College of Rehabilitation Counseling Professionals.

#### **STUDY PROGRAM**

Program Requirements	Credit hours
RECO 8001 Advanced Seminar on Theories and Techniques of Rehabilitation Counseling:	3
RECO 8003 Advanced Seminar on Group, Family and Systems	3
RECO 8005 Consulting, Leadership and Advocacy	1
RECO 8009 Clinical Supervision in Rehabilitation Counseling and Health Professions	2
RECO 8011 Applied Intermediate Statistics for Rehabilitation Counselors	3
RECO 8013 Advanced Seminar on Quantitative Research Methodology	2
RECO 8015 Advanced Seminar on Qualitative Research Methodology:	2
RECO 8017 Seminar on Development of Rehabilitation Tests and Scales	3
RECO 8019 Administration and Evaluation of Rehabilitation Programs	2
RECO 8021 Advanced Rehabilitation Counseling Seminar	3
RECO 8023 Advanced Seminar in Vocational Counseling for the Population with Functional Diversity	2
RECO 8025 Advanced Seminar on Evaluation and Placement in Employment of People with Disabilities	3
RECO 8027 Psychosocial Models of Adjustment to Disability and Diagnosis of Functional Capacity in People with Disabilities	3
RECO 8030 Psychopathology, Addiction and Mental Health	3
RECO 8035 Intervention, Treatment and Recovery in Psychiatric Rehabilitation	3
RECO 8039 Correctional Rehabilitation and Social Reintegration	3
RECO 8040 Neurodevelopmental Disorders Across the Lifespan	3
RECO 8045 Advanced Seminar on Transitional Processes and Services and Independent Living for Young People, Adults and Old People with Neurodevelopmental Disorders	3
RECO 8055 Adherence to Treatment and Coping Strategies on Chronic Diseases	3
RECO 8058 Implications of Pharmacological Treatment in the Rehabilitation and Recovery Process	3
RECO 8070 Practicum on Teaching and Research	1
RECO 8072 Advanced Practicum on Clinical Supervision	2

Program Requirements	Credit hours
CORE 8074 Doctoral Internship in Rehabilitation Counseling:	6
RECO 8075 Doctoral Internship in Rehabilitation Counseling I	3
RECO 8076 Doctoral Internship on Rehabilitation Counseling II:	3
RECO 8990 Doctoral Dissertation	3
CORE 8081 Doctoral Dissertation Continuation	0

#### **COURSE DESCRIPTIONS**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# RECO 8001 Advanced Seminar on Theories and Techniques of Rehabilitation Counseling

The course is designed to provide the student with specialized knowledge of the main theories of counseling and psychotherapy and their applicability in individual clinical interventions with populations with functional diversity. The critical evaluation of these theories and associated techniques related to the student's own value system and the rehabilitation process will be promoted, considering the treatment based on evidence and the use of scientific research carried out in the Puerto Rican context in the development of the evidence-based practice. Understanding of the ways in which techniques and strategies can be used to facilitate personal, professional life and social adaptation of people with functional diversity will be promoted. Critical appraisal of theories and techniques associated with clients and therapists from different cultural backgrounds will be encouraged. This course will be offered under the face-to-face and hybrid modalities.

#### **RECO 8003 Advanced Seminar on Group, Family and Systems**

This course is designed to provide an in-depth analysis of the behavior of specialized small groups and group interventions including families and systems integrating people with functional diversity oriented for doctoral students in rehabilitation counseling. Theories and research in the group process (EBT, EBP) and aspects such as: leadership, power and influence, cohesion, group pressure, roles, conformity and change are studied; structures and multicultural aspects, among others. The implications of group theory are analyzed with emphasis on the Puerto Rican context. The learning methodology is through demonstration and experimentation. This course will be offered under the face-to face and hybrid modalities.

#### **RECO 8005 Consulting, Leadership and Advocacy**

The course discusses consulting and intercessory as indirect service models for the population of people with functional diversity. Through the analysis of various consulting models, the importance of this function for the rehabilitation counselor and the population to which they attend. The course provides for the development of basic consulting and intercessory skills and their relationship with leadership, through experience in the development of an intervention plan.

Instead, the course promotes an understanding of the factors that can influence consultation interventions. In addition, ethical and cultural dilemmas are discussed in the consulting and intercessory. This course will be offered under the face-to-face and hybrid modalities.

### **RECO 8009 Clinical Supervision in Rehabilitation Counseling and Health Professions**

The course presents the fundamentals of clinical supervision in the field of rehabilitation counseling and other health professions as a means of ensuring the well-being of the population with which the services are provided. Supervision models and their considerations are discussed regarding multicultural aspects, employment scenarios and research. In addition, aspects are worked related to ethics in supervision processes framed in the vision of supervision as an important resource in the development of professionals and in turn the development of professions. This course will be offered under the face-to-face and hybrid modalities.

### **RECO 8011 Applied Intermediate Statistics for Rehabilitation Counselors**

Course designed to train doctoral students in the use, management and application of descriptive and inferential statistics to address the formulation of research problems within the discipline of rehabilitation counseling. They will develop knowledge and technical skills on the foundations and origin of inferential and multivariate statistics to attend to the hypothesis tests associated with the estimation and prediction processes of inferential statistics. In addition, you will develop skills in the analysis and interpretation of pure descriptive, descriptive-exploratory, descriptive-correlational and experimental research. Critical thinking skills related to the development of scientific investigations of the discipline will be promoted and the design, construction and interpretation of diagrams, tables and graphs will be worked in depth. This course will be offered under the face-to-face and hybrid modalities

#### **RECO 8013 Advanced Seminar on Quantitative Research Methodology**

Through the course, the student will develop skills in the management of the theory and application of the design, analysis and interpretation of experimental, quasi-experimental and mixed investigations. Similarly, critical thinking skills related to the development of experimental research for the solution of situations that arise in the clinical and community environment when evaluating the quality of rehabilitation services will be promoted. Through the study and application of the scientific method, students will be able to design and carry out studies that contribute to the development of empirical evidence that supports legitimate practices, interventions and the quality of rehabilitation services for people with functional diversity. In addition, they will know and evaluate the threats to internal validity, as well as the ethical and legal aspects for the protection of human beings in an investigation. This course will be offered under the face-to-face and hybrid modalities.

#### **RECO 8015 Advanced Seminar on Qualitative Research Methodology**

This seminar will examine elements of qualitative research from the perspective of rehabilitation counseling. Through the approach of qualitative methodology, the student body will explore the life experiences of people with functional diversity and the people and systems with which they

interact. Various qualitative research designs will be discussed and critically analyzed. Information gathering techniques and strategies will be examined in qualitative research to identify their strengths and weaknesses when working with people with functional diversity and rehabilitation systems. In addition, methods of analysis and interpretation in qualitative research and some existing programs to work with the analysis of qualitative data will be discussed. The ethical and legal principles related to qualitative research will also be discussed. This course will be offered under the face-to-face and hybrid modalities.

#### **RECO 8017 Seminar on Development of Rehabilitation Tests and Scales**

The seminar will provide students with practical experiences and structured academic activities aimed at expanding theoretical and practical knowledge about the test development process. The student will develop the skills and knowledge to professionally evaluate the adequacy of existing assessment systems and develop new systems or tests. For this purpose, the student body will acquire conceptual and practical mastery of the psychometric properties that describe the adequacy and effectiveness of the tests. In turn, students will be exposed to item analysis and factor analysis. Non-standardized measurement and evaluation will be a central part of the course as an instrument of social justice for the population of people with disabilities or functional diversity. Legal, ethical and multicultural aspects related to standardized and non standardized assessment will be analyzed. This course will be offered under the face-to-face and hybrid modalities.

#### **CORE 8019 Administration and Evaluation of Rehabilitation Programs**

This course offers an overview of the administration and evaluation models of programs and services. The different approaches in program administration and evaluation will be discussed, including needs assessment, formative research, process evaluation, product and results monitoring, impact evaluation, and cost analysis. Through theoretical conceptualization and practical experiences in the classroom, the student will learn to design, administer and evaluate rehabilitation programs. In addition, you will discern the types of assessment, systems measurement, and data analysis that exist to address the needs of people with disabilities. This course will be offered under the face-to-face and hybrid modalities.

### **RECO 8021 Advanced Rehabilitation Counseling Seminar**

This is an advanced course, designed to educate and involve students in the analysis of the characteristics that define the profile of professionals in Rehabilitation Counseling. The course examines various factors that affect the structure and dynamics of social welfare policies and services used in the profession. The course content includes philosophy, social values, ethics, legislation, disability adjustment, diversity and multiculturalism, social and economic justice, in service delivery. A critical-reflective approach to evidence-based knowledge is promoted as the guiding principle in the provision of services for social and vocational integration and development of human capital in the population with functional diversity. This course will be offered under the face-to-face and hybrid modalities.

# RECO 8023 Advanced Seminar in Vocational Counseling for the Population with Functional Diversity

The course is part of the vision of work as a source of social integration for individuals. A critical analysis is made of the main theories and models of career development and their application to the population with functional diversity, with emphasis on the population with neurodevelopmental disorders, chronic conditions and psychiatric conditions and the psychosocial, economic and ecological factors that influence in vocational selection and adjustment. The implications of career development in terms of public policy setting, resource allocation, local and national opportunities, and independent living skills are discussed. Factors that impact individual career development and the job market are explored in order to design a comprehensive and individualized career counseling plan. Ethical and legal aspects are discussed in career counseling processes. The course will be offered under the face-to-face and hybrid modalities.

# **RECO 8025** Advanced Seminar on Evaluation and Placement in Employment of People with Disabilities

The course is designed to explore the evaluation processes that allow us to know the functional capacity of people with functional diversity, facilitating the promotion, search and placement in employment. It will provide practical experience in assessing the skills and abilities of people with functional diversity and in designing rehabilitation plans for job placement. In addition, other strategies will be discussed including, but not limited to identification of support systems, preplacement analysis, job analysis, skills transfer, and reasonable accommodation. Emphasis will be placed on advocacy skills development, interviewing, test interpretation, and report writing. The ethical and legal issues of the evaluation processes and job placement of people with functional diversity will also be addressed. This course will be offered under the face-to-face and hybrid modalities.

# **RECO 8027** Psychosocial Models of Adjustment to Disability and Diagnosis of Functional Capacity in People with Disabilities

This course emphasizes the evaluation of the stage of psychosocial adjustment in which the person with disabilities and his / her family are, considering psychosocial and cultural aspects. For this task the student will analyze from a critical perspective various adjustment models based on the following: profile of the individual and family, context, necessary skills and scientific evidence. They will also carry out a diagnosis of functional capacity from a biopsychosocial perspective considering the strengths, barriers, compensatory skills, transferable skills and internal and external moderating variables to the individual, among others with the purpose of promoting their quality of life, potential and social integration. The student will carry out at least one real intervention during the course, conceptualization and presentation of the case promoting evidence-based practice and following the ethical canons of the profession. This course will be offered under the face-to-face and hybrid modalities.

# RECO 8030 Psychopathology, Addiction and Mental Health

The course will discuss the most prevalent psychopathologies in P.R., their effects on personal, social, family and work areas. The symptomatology, diagnostic criteria and etiological perspectives of mental health disorders will be examined, including the influence of psychosocial, cultural and biological factors on them. Emphasis will be placed on the evolutionary perspective of mental health disorders, which provides for an integration of the various factors that must be considered when designing a psychosocial rehabilitation plan. The subject of concurrent diseases, addictions to illegal or legal substances, and the examination of the mental state will be studied as the basic tool for the collection of information on psychopathology. Diagnostic classification systems such as DSM and ICD, and effective treatments and psychotherapies according to EBP will be worked on. This course will be offered under the face-to-face and hybrid modalities

#### RECO 8035 Intervention, Treatment and Recovery in Psychiatric Rehabilitation

The course is designed to develop skills in the intervention, treatment and recovery of people with serious and persistent mental health conditions. The importance of treatment, case management and rehabilitation as facilitators of recovery will be conceptually emphasized. The support systems necessary for the person to have an independent life, maintain a job and develop meaningful interpersonal relationships will be analyzed. The course will work with the design and implementation of person-centered biopsychosocial rehabilitation plans and life care planning. In addition, a variety of interventions will be examined, including, but not limited to social and behavioral skills training, peer support and monitoring, club houses, psychoeducational intervention, and individual supportive therapy, group and family. This course will be offered under the face-to-face and hybrid modalities.

#### **RECO 8039 Correctional Rehabilitation and Social Reintegration**

This is an advanced seminar, designed to educate and engage students in analyzing the role of the Rehabilitation Counselor in the practice of correctional rehabilitation. Several factors are examined that influence criminal predisposition, its management and transition services aimed at social reintegration adequate. Course content includes philosophy, intervention models, legislation, ethics, and trends emerging legal / therapeutic services in the provision of services. A critical-reflective approach to evidence-based knowledge as the guiding principle in the provision of social reintegration services for confined people. The course emphasizes intervention with the population with functional diversity. This course will be offered under the face-to-face and hybrid modalities.

#### RECO 8040 Neurodevelopmental Disorders Across the Lifespan

The course will provide students with academic activities aimed at expanding theoretical and practical knowledge about neurodevelopmental disorders. Among the disorders that will be studied are intellectual disability, autism spectrum disorders, epilepsy, cerebral palsy, learning disorders and attention deficit hyperactivity disorder. These will be critically analyzed in terms of their evolution throughout life taking into consideration natural and structured support systems. Each disorder will be examined in terms of the effects it may have on the perceptual, cognitive, sensorimotor and neurobehavioral capacities of the person to identify the functional, social,

educational, vocational and emotional challenges that they suggest when developing rehabilitation plans. Related legal, ethical and multicultural aspects will be analyzed. This course will be offered under the face-to-face and hybrid modalities.

# RECO 8045 Advanced Seminar on Transitional Processes and Services and Independent Living for Young People, Adults and Old People with Neurodevelopmental Disorders

The seminar provides students with an evolutionary, in-depth and practical approach in the application of transition services and independent living in people with neurodevelopmental disorders. The students will develop their capacity to adapt, create and apply models of transition services and independent living for people with disabilities throughout the life span. The challenges that neurodevelopmental disorders present to people, their support systems, and government and private service structures will be systematically analyzed. From an evolutionary, ecological and critical perspective, students will reformulate transitional and independent living services to propose person-centered rehabilitation plans that respond to the challenges associated with neurodevelopmental disorders. This course will be offered under the face-to-face and hybrid modalities.

#### **CORE 8055** Adherence to Treatment and Coping Strategies on Chronic Diseases

The seminar will discuss the different factors that can influence a person to present adherence to treatment, or compliance with medical prescriptions. Changes in lifestyles, the demands associated with the most prevalent chronic diseases on the island, the different coping styles that a person uses to manage the stress caused by knowing their disease, the prognosis of the disease, the required treatments, among others, will be studied. The student will identify, through the initial interview and / or various measurement instruments, the factors that influence whether the patient presents the expected behaviors and the coping styles that they are using to comply with what is stipulated by the medical team. They will develop an intervention/rehabilitation plan to work with the objective of improving their treatment. This course will be offered under the face-to-face and hybrid modalities.

# RECO 8058 Implications of Pharmacological Treatment in the Rehabilitation and Recovery Process

In the seminar, the student will identify the physical, emotional and social implications of the effects of the pharmacological treatment prescribed for the chronic diseases (physical and mental) with the highest prevalence in PR. This includes knowing the side effects of medications and the possible interactions between some of them. In addition, it will work with the selection of appropriate strategies so that the patient can manage the side effects and interactions between some of the medications and start their recovery process. The student will work with the stabilization of the symptoms, empowerment and management of the disease leading to social, family and community integration. This course will be offered under the face-to-face and hybrid modalities.

# **RECO 8070 Practicum on Teaching and Research**

This seminar focuses on various models, perspectives, research, and techniques related to learning to teach in higher education. Issues related to values, beliefs, pedagogical techniques, learning styles, as well as how to structure, deliver and evaluate teaching will be examined. Students will develop essential concepts and strategies related to the organization and presentation of concepts in a practical and effective style applicable to the Rehabilitation Counseling field. During their 75-hour practical experience, the student will be responsible for teaching a course (graduate or undergraduate in co-teaching mode) of 3 credits, under the mentorship of a faculty supervisor. Activities include, but are not limited to, course observation, developing class samples, developing rubrics, and more. This course will be offered under the face-to-face and hybrid modalities.

#### **RECO 8072 Advanced Practicum on Clinical Supervision**

During the course, doctoral students will have the opportunity to apply the concepts learned in the CORE 8009 course - Clinical Supervision in Rehabilitation Counseling and Health Professions. The student will examine the Council for Accreditation of Counseling & Related Educational Programs (CACREP) standards and how they apply to advanced clinical experience monitoring processes. During the 100-hour practical experience, the student will be responsible for establishing a supervision model, developing evaluation methods, as well as the documents necessary for effective supervision, under the direction of a professor. This course will be offered in face-to-face and hybrid modalities.

#### **RECO 8074 Doctoral Internship in Rehabilitation Counseling**

This course is an integrative experience in which students are provided the opportunity to demonstrate, under supervision, that they possess the ability to integrate knowledge and skills by offering a variety of rehabilitation services. The practice setting will provide the student body with the opportunity to work with a diversity of situations or participants, a variety of problems under different types of rehabilitation service programs, using different rehabilitation counseling interventions. The student will be able to direct their practical experience towards an area of specialty, so they can choose between: Psychiatric Rehabilitation, Neurodevelopmental Disorders or Chronic Diseases. The experience will comprise a minimum of 600 hours, of which 250 are direct service. It constitutes a full load for the student. The course will be offered in face-to-face and hybrid modalities.

#### **RECO 8075 Doctoral Internship in Rehabilitation Counseling I**

This course is an integrative experience in which students are provided the opportunity to demonstrate, under supervision, that they possess the ability to integrate knowledge and skills by offering a variety of rehabilitation services. The practice setting will provide the student body with the opportunity to work with a diversity of situations or participants, a variety of problems under different types of rehabilitation service programs, using different rehabilitation counseling interventions. The student will be able to direct their practical experience towards an area of specialty, so they can choose between: Psychiatric Rehabilitation, Neurodevelopmental Disorders or Chronic Diseases. The experience will comprise a minimum of 300 hours, of which 125 are direct service. It constitutes a full load for the student. The course will be offered in face-to-face and hybrid modalities.

# RECO 8076 Doctoral Internship on Rehabilitation Counseling II

This course is an integrative experience in which students are provided the opportunity to demonstrate, under supervision, that they possess the ability to integrate knowledge and skills by offering a variety of rehabilitation services. The practice setting will provide the student body with the opportunity to work with: a diversity of situations or participants, a variety of problems under different types of rehabilitation service programs, using different rehabilitation counseling interventions. The student will be able to direct their practical experience towards an area of specialty, so they can choose between: Psychiatric Rehabilitation, Neurodevelopmental Disorders or Chronic Diseases. The experience will comprise a minimum of 300 hours, of which 125 are direct service. It constitutes a full load for the student. The course will be offered in face-to-face and hybrid modalities.

#### **RECO 8990 Doctoral Dissertation**

The course will allow the student to demonstrate their competencies in quantitative, qualitative or mixed research processes, committing them to make an original contribution to the body of knowledge of the rehabilitation counseling profession with an emphasis on psychiatric rehabilitation, neurodevelopmental disorders and chronic diseases. The work will be designed, developed, analyzed and written by the student. The student will choose a dissertation director from among the members of the faculty and together with them will select two other members to constitute the committee. It constitutes a full load for the student. This course will be offered in face-to-face, hybrid and online modality.

# **RECO 8081 Doctoral Dissertation Continuation**

This course is designed to allow students to complete their dissertation work. At this stage the student must complete the compilation of the necessary data and work on the information processing. Once the analysis is done, they will interpret the results considering the literature review and their experience. Upon completion of this process, they will present the conclusions, implications, and recommendations for rehabilitation counseling. The student will make a presentation and defend their work before their Dissertation Committee. It constitutes a full load for the student. This course may be offered under the face-to-face, hybrid and online modalities

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**Acting director:** Dr. Elithet Silva Martínez

Master's Degree Program Coordinator: Dr. Hilda Rivera Rodríguez

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Website: <a href="mailto:http://sociales.uprrp.edu/egts/">http://sociales.uprrp.edu/egts/</a>

**DEGREE:** 

#### Master of Social Work

Accreditation: Council on Social Work Education

#### **FACULTY:**

**Esterla Barreto Cortés,** Ph.D., Brandeis University, 1999. Professor. Participatory social research; social policy analysis; race; oppression and diversity.

**Angélica Varela Llavona**, Ph.D., Ohio State University, 1981. Associate Professor. Management; proposal development.

**Elithet Silva Martínez, MSW,** Ph.D., University of Iowa, 2009. Associate Professor. Models of intervention with families, migration, women and gender, social research methods, art and social work.

**Hilda Rivera Rodríguez, MSW,** Ph.D., Columbia University, 2000. Professor. Social policy, program design and management, community organizing and art, women and child welfare, and human rights.

**Diana Padilla Medina,** LMSW, Ph.D., New York University, 2017. Assistant Professor. Intimate partner violence, social determinants of health, cardiovascular health, development and evaluation of programs and measurement instruments.

**Jannette Rodríguez Ramírez,** Ph.D., University of Puerto Rico, 2008. Assistant Professor. Social policy evaluation, statistics for social sciences, population studies.

**Jenice M. Vázquez Pagán, MSW,** JD, Ph.D., University of Puerto Rico, 2013. Assistant Professor. Social policy, social work administration, gender, gender violence, labor, poverty, and human rights.

**Larry Alicea-Rodríguez,** MSW, JD, Ph.D., University of Puerto Rico, 2021. Assistant Professor. Clinical and forensic social work, children, youth, judicial social policy.

**Eduardo J. Zavala-Mendoza,** Ph.D., University of Puerto Rico, 2018. Assistant Professor. Development, social policy and the state, social program design and management, governance and planning, health and psychoactive substances, intersectionality and social *justice*.

## Master's degree in Social Work

The master's Program is accredited by *the Council on Social Work* Education and the Puerto Rico Board of Education. Its objective is to train social work professionals with the theoretical, practical and ethical-political competence to explore, understand and critically and rigorously analyze the social, economic, political and cultural dimensions present in their professional action. With theoretical-practical competence, students will critically use theories, models and strategies in their professional action stimulating individual and collective empowerment andtransformation. It prepares students to enter professional practice from three areas of emphasis:Social Program Administration, Family Social Work, and Community Social Work.

The master's Program has a generalist core curriculum and an advanced curriculum that allows students to competently apply specific methodologies within the field of social work. The master's Program has two programs of study: the **Regular Program** and the **Accelerated Program**.

The <u>Regular Program</u> is aimed at students who have a bachelor's degree in disciplines otherthan social work and those from an accredited bachelor's degree in social work who do not qualify to enter the accelerated program. Completing this program takes from 2 years full-time to 3 1/2 years part-time (minimum).

The <u>Accelerated Program</u> is intended for students who hold a bachelor's degree in social work from a program accredited by the *Council on Social Work Education*. Its objective is tomake it easier for people who qualify for it to complete their master's degree without the need to repeat core content of the discipline. This program reduces the time needed to complete degree requirements to one and a half (1 1/2) years if the student enrolls full-timeand to two and a half (2 1/2) years if enrolling part-time. The decrease in the time needed tocomplete the requirements is due to the reduction of the number of credits required to obtain the master's degree in social work from 54 to 42.

In both, the curriculum can be full-time or part-time. For both, there are the same three curricular components: courses, supervised practice and thesis. Regardless of the programin which they enroll, each student selects in their first semester of studies one of the three areas of interest of professional practice that stand out in the curriculum: Social Workwith Families, Community Social Work and Administration of Social Programs. The years required to complete the master's degree depend on the program of study and whether the student studies full-time or part-time.

#### **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/



## Specific master's program

## RequirementsRegular Program\*

- 1. Bachelor's degree or its equivalent from a recognized university.
- 2. Academic index of 3.00 on a 4.00 scale.
- 3. Completed and passed courses in each of the following areas of liberal arts or general education: Mathematics and Natural Sciences (mathematics, statistics, physical sciences, or biological sciences), Humanities (Spanish, English, history of Puerto Rico and another course in the Humanities), Social Sciences (sociology, psychology, and two other courses in the social sciences). Liberal Arts courses must total 36 credits.
- 4. If necessary, students must complete an interview with the Admissions Committee.

## **Accelerated Program\***

- 1. Bachelor's degree in social work from a university accredited by the *Council on Social Work Education* (CSWE) with an academic index of 3.00 on ascale of 4.00.
- 2. Complied with each of the following areas of liberal arts or general education: Mathematics and Natural Sciences (mathematics, statistics, physical sciences, or biological sciences), Humanities (Spanish, English, history of Puerto Rico, and another course in the humanities), Social Sciences (sociology, psychology, and two other courses in the social sciences). Liberal Arts courses must total 36 credits.
- 3. Satisfactorily passed supervised practical instruction at the undergraduatelevel.
- 4. If necessary, you may be summoned to an interview with the Admissions Committee.

\*The School will admit applicants from other countries in accordance with the provisionsof the University of Puerto Rico. They will not have to take the Puerto Rican History course. Two official copies of credit transcripts, an essay, and an undergraduate coursein statistics will be required. The international student (foreigner who needs a visa) has adeadline to apply of December 3 of the year prior to starting their master's studies.

### **Required Documents for the Application for Admission**

- 1. Application for Admission to Graduate Studies in electronic format <a href="https://solicitud.upr.edu/">https://solicitud.upr.edu/</a>
- 2. Two official academic transcripts.
- 3. Two letters of recommendation from professors.
- 4. Writing a short essay on a topic of particular interest to the social work profession as determined by the Admissions Committee.

## **GRADUATION REQUIREMENTS:**

In addition to meeting the general admission requirements for graduate studies at the RíoPiedras Campus, they must meet the following:

- 1. In the regular program, each student must Complete successfully a minimum of 54 credits, which include theoretical courses, practical instruction and thesis. To pass the practice instruction, you must complete a minimum of 900 hours of daytime practice. Students in the accelerated program must Complete successfully a minimum of 42 credits, the thesis and 600 hours of hands-on daytime instruction. \*\*
- 2. Maintain a required minimum retention rate of 3.00 points at the end of the first and second semesters of the first academic year.
- 3. Maintain an overall GPA of 3.00 points or higher upon completion of all courseworkand other graduation requirements.
- 4. Comply with all requirements of their area of specialty (required courses, electives, hands-on instruction).
- 5. Satisfactorily presented, before the faculty representatives and the community in general, an original research as a thesis for the master's degree.

\*\*The total number of credits approved at another institution and that may be validated willnot exceed one third (18) of the credits required by the program. To be accepted, these credits must have been completed in a duly accredited program, must not have been used to complete an academic degree, and their content will be evaluated by the program.

## **PROGRAM OF STUDY:**

Program Requirements	Credits
Core Courses	21
TSOC 6006 Social Research from Social Work	3
TSOC 6055 Social Reality Analysis	3
TSOC 6057 Comparative Analysis of Theories of Human Behavior	3
TSOC 6065 Analysis of Social Welfare Policy and Services	3
TSOC 6091 Advanced Professional Practice in SocialWork I (Individuals and Families)***	3
TSOC 6092 Advanced Professional Practice in Social Work II (Community)***	3
TSOC 6093 Advanced Professional Practice in SocialWork III (Administration of Social Programs)	3
Professional Emphasis Area Courses	12
Hands-On Instruction Courses	9
TSOC 6021 Supervised Practical Instruction I:Generalist ***	3
TSOC 6027 Supervised Practical Instruction II	3
TSOC 6028 Supervised Practical Instruction III.	3
Elective	6
Thesis	6
TSOC 6131 Social Research Seminar and Thesis I	3

TSOC 6132 Social Research Seminar and Thesis II	3
TSOC 6896 Research Seminar and Thesis III	0
Total Credits	54

These courses are not accelerated program requirements.

## Professional Areas of Emphasis Social Work with Families

Program Requirements	Credits
TSOC 6095 Theory and Methodology of Social Workwith Families I	3
TSOC 6165 Theory and Methodology of Social Work with Individuals	3
TSOC 6152 Theory and Methodology of Social Workwith Families II	3
TSOC 6146 Theory and Methodology of Small GroupSocial Work	3
Total Credits	12

## **Community Social Work**

Program Requirements	Credits
TSOC 6097 Community Development and Processes	3
TSOC 6108 Policy Process and CommunitySocial Action in Social Work Practice	3
TSOC 6126 Social Work with Community Groups	3
TSOC 6327 Social Work in the Promotion of Local Economic Development	3
Total Credits	12

## **Administration of Social Programs**

Program Requirements	Credits
TSOC 6099 Management in the Organizational Context of Social	3
Programs	
TSOC 6229 Supervision in Social Work	3
TSOC 6117 Social Work with Groups in the Administration of Social Programs	3
TSOC 6288 Program Evaluation and ProposalDevelopment	3

Total Credits	12
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**Full-Time Accelerated Program** 

FIRST YEAR - FIRST SEMESTER			
TSOC 6055	Social Reality Analysis	3	
TSOC	Social Research in Social Work (Directed Elective	3	
6006**	Course)		
TSOC 6057	Comparative Analysis of Theories of Human Behavior	3	
TSOC 6093	Core Professional Practice in Social Work III	3	
	(Administration)		
TSOC 6065	Analysis of Social Welfare Policy and Services	3	
	FIRST YEAR - SECOND SEMESTER		
TSOC 6027	Advanced Professional Practice in Social Work II	3	
TSOC 6131	Research Seminar and Thesis I	3	
TSOC	Area of Emphasis Required Course	3	
TSOC	Area of Emphasis Required Course	3	
TSOC	Area of Emphasis Required Course		
SECOND YEAR - THIRD SEMESTER			
TSOC 6132	Research Seminar and Thesis II	3	
TSOC 6028	Advanced Professional Practice in Social Work III	3	
TSOC	Area of Emphasis Required Course	3	
TSOC	Elective Course	3	
TSOC	Elective Course	3	
TOTAL: 42 CREDITS			

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## TSOC 6006 Social Research from Social Work

Three credits. One hour of lecture and two hours of discussion per week. Prerequisite: Graduate School's admission.

It provides the student with the fundamental knowledge of quantitative and qualitative research in social work. Quantitative research discusses the positivist paradigm, problem formulation and hypothesis, sampling, design, and methods of data collection and analysis. Qualitative research includes the constructivist paradigm, problem formulation, designs, data collection methods, and qualitative analysis.

## TSOC 6055 Social Reality Analysis

Three credits. Three hours of lecture a week.

Critical and reflexive study of the macrostructure in the economic, political and social order. Analysis of the economic development model, economic, political and psychological dependence, as well as its impact on social policy and the quality of life of oppressed and vulnerable groups in society. Elaboration of a diagnosis of the Puerto Rican social reality and alternatives for change.

## TSOC 6057 Comparative Analysis of Theories of Human Behavior

Three credits. Three hours of lecture per week.

Critical and comparative analysis of theories of human behavior from different perspectives in their applicability to the professional context and their relevance to the development and analysis of social policy, emphasizing the preventive and interdisciplinary aspect. Research and literature pertinent to the Puerto Rican social reality will be analyzed.

## TSOC 6065 Analysis of Social Welfare Policy and Services

Three credits. Three hours of lecture a week.

Study of the conceptual, theoretical and methodological basis for the analysis of social welfare policy and services. Critical examination of explanatory theses on the origin of social policies, approaches to the social welfare system and the growing intervention of the Statein this area. Study of the types of analysis of social policy with emphasis on scientific research.

## TSOC 6091 Professional Practice in Social Work I (Ind. & Fam.)

Three credits. Three hours of lecture a week.

This is one of seven core courses in the Master of Social Work program and the first in a three-course sequence on Advanced Professional Practice. It is focused on the discussionand analysis of theoretical and conceptual frameworks that guide and support intervention with various human systems: individuals, families and groups. The course is interested in deepening knowledge and refining skills to define issues, needs, gather and weigh information, plan and hire, identify intervention alternatives, select and implement appropriate courses of action, and use research to evaluate processes and their outcomes. The aim is to give particular attention to preventive intervention, with particular emphasis on interdisciplinary work. The student will have the opportunity to examine and critically analyze models of direct intervention that can be used with human systems (individuals, families, and groups).

## **TSOC 6092 Core Professional Practice in Social Work II (Community)**

Three credits. Three hours of lecture a week.

Second year of the Advanced Professional Practice in Social Work sequence. It examines avariety of aspects of community organization in the historical context of community work in Puerto Rico, highlighting the role of social work in this process. A diversity of theoretical foundations is applied to intervention models promoting the capacity of the community improve their living conditions

through participation and concerted efforts in those mattersthat impact them. Intervention models, such as community development, planning and social action, applied to geographical and functional communities are presented. The relevance of these in working with oppressed and vulnerable sectors is critically analyzed. Emphasis is placed on people's participation in decision-making, self-management, empowerment and leadership processes. The roles of the practitioner and collaboration withother professions are clarified.

# TSOC 6093 Core Professional Practice in Social Work III (Administration of Social Programs)

Three credits. Three hours of lecture a week.

This is the third course in the introductory sequence to the concept of Advanced Professional Practice in Social Work at the graduate level. In Puerto Rico, professional practice has been in a process of change from a majority practice in government settings tothe rise of positions in non-governmental organizations and autonomous practice where the social worker is its employer. This course provides the student with the opportunity to critically examine and analyze social administration from different philosophical, theoretical, and conceptual paradigms; as well as controversies that arise such as diversity in its broadform. The course aims to provide students with an understanding of the need to exercise transformative professional leadership that contributes towards a competent organization and that administration in social work is part of the practice. Human services professionals committed to individual, group, communal, and social transformation.

## TSOC 6021 Practical Instruction in Social Work I

Three credits.

Prerequisite: Core Courses.

A laboratory-like experience whose purpose is to integrate classroom knowledge and offerthe student the opportunity to engage with the programs and services of various practice centers.

## TSOC 6027 Advanced Practical Instruction in Social Work II

Three credits. Three hours of lecture a week.

Prerequisite: TSOC 6021 and Director's authorization.

Professional intervention in more complex situations of vulnerable and oppressed groups from a scientific perspective. Critical analysis of social policies impacting these groups and of the action for change.

#### TSOC 6028 Advanced Practical Instruction in Social Work III

Three credits. Twenty hours of lab or workshop per week.

Prerequisite: TSOC 6021 and 6027.

Development of a scientific, critical and objective orientation of social reality and social policies



as a basis for the intervention of the social worker. This orientation should lead to concrete proposals that will contribute to reducing or eliminating the dependency on large sectors served by social workers.

#### TSOC 6131 Scientific Research Seminar and Thesis I

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: TSOC 6006

Expands the foundational knowledge base of social research. It examines in detail selected research designs, the statistical techniques applied to those designs, and issues related to the application of the design. In this course, the group of students initiates an empirical research project about a problem in the area of human services.

#### TSOC 6132 Research Seminar and Thesis II

Three credits. One hour of lecture and two hours of laboratory per week.

Prerequisite: TSOC 6131

Application of knowledge and results of skills acquired in research. Emphasis on statistical data analysis in the writing of the research project.

#### TSOC 6896 Thesis Research Seminar III

Zero credits. Thesis. Prerequisite: TSOC 6132

This course allows students to conclude their master's thesis and maintain an active student status under the direction of their advisors. They must enroll in the course until their thesis is completed.

#### OTHER COURSE DESCRIPTIONS:

## TSOC 6013 Critical Perspectives on Health and its Implications for Social Work

Three credits. Two hours of lecture and one hour of discussion per week.

An examination of the concepts of health and disease in our historical and cultural context will be developed in the light of the following topics: presence of health in the social sciences, changes in public health perspectives, key concepts for the health enterprise (morality and risk), social differences created by ideas about disease and the role of health professionals, particularly social workers, in defining healthiness. These issues will be addressed by critically reflecting on the role of power and social control that these definitionsimply and by analyzing how they have historically changed to exert control over populations. These control mechanisms are manifested in diagnoses, advertising campaigns, laws and applied practices in the social sciences. Work strategies in response to these critical perspectives, such as community work and social policies, will be explored.

#### TSOC 6018 Social Work with the Elderly.

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Develop knowledge, attitudes, and skills in the field of gerontology that will enable the social worker toward effective intervention. Analysis of the impact of existing theories on public policy. Development of intervention and prevention skills in the context of Puerto Rican social reality. Special attention to social research, and tothe development of readiness for interdisciplinary group work.

### **TSOC 6038 Crisis Intervention**

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Acquisition of knowledge, attitudes, and skills in crisis intervention in the Puerto Rican sociocultural context. It has a preventive approach and develops students' readiness for interdisciplinary group work. Intervention models and theiradequacy to the sociocultural context are analyzed. Emphasis is placed on public policy analysis and research.

## TSOC 6056 Systematization of Social Work Practice

Three credits. Two hours of discussion and one hour of lecture per week. Prerequisite: One of any of the following: TSOC 6091, 6092 or 6093.

Systematization is a methodological proposal for the critical interpretation of practical experiences enabling the construction of knowledge based on reflection from these, both professional and of the various social groups. From this production of knowledge, the promotion of conditions of equity and social justice is sought, prioritizing transformative political intentionality. This course is aimed at the training and development of students' skills in the processes of systematization of social work practice at the various levels of professional intervention. Its content includes the conceptual bases and characterizations of the systematization, differentiation and complementarity of various social practices in the production of knowledge, the epistemological foundations sustaining systematization and the debates around it, various methodological proposals for systematization, as well as experiences of systematization in Puerto Rico and Latin America.

## TSOC 6058 Organizational Behavior and Social Work

Three credits. Three hours of lecture per week

Prerequisite: Director's authorization.

Provides the knowledge and opportunity to develop attitudes and skills related to the integration of individuals, groups, and structures and their effect on organizational behavior in human service agencies in Puerto Rico. Special attention to the impact and analysis of public policyand the analysis of research in this regard. The focus of the course will be on preparing for interdisciplinary group work in the organizational context.

#### TSOC 6059 Theories of Criminal Behavior

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Study and critical analysis of theories of criminal behavior. Special attention is paid to the applicability of these theories to prevention and professional intervention of social workers in the context of Puerto Rican social reality. Aspects of public policy and scientific research. Emphasis will be placed on working in interdisciplinary teams.

## TSOC 6066 Social Movements and Social Work

Three credits. Three hours of lecture a week.

Development of knowledge, attitudes, and skills enabling students to analyze and research different social movements in Puerto Rico, Latin America, and other parts of the world. It fosters the development of readiness towards work in interdisciplinary groups, the critical analysis of the impact of these social movements on the country's public policies and scientific approach to this social phenomenon.

## TSOC 6075 Identity and Diversity in Social Work Practice

Four credits. Two hours of lecture and one hour of discussion per week.

Study of the impact of economic, political, social, and cultural structures on the formation of the individual and collective identity of Puerto Ricans residing in Puerto Rico and the UnitedStates, according to their class, race, and gender status. The difference between oppression, discrimination and prejudice will be clarified specifically in relation to the dynamics of classism, racism, colonialism, eurocentrism and sexism. Analysis of the responses that have been generated from the field of social work to meet the needs of different social groups, which have been marginalized for reasons of their class, race, ethnicity or gender condition, as well as social policies and programs developed to promote the inclusion and acceptance of human diversity. Special interest in describing and analyzing the experiences of Puerto Ricans and other marginalized groups residing in the United States, as well as immigrant groups in Puerto Rico, and their struggles to promote social justice. In Puerto Rico and the United States, community-based organizations, organizations, and agencies working with class, race, and gender dynamics in Puerto Rico and the United States will be visited.

## TSOC 6095 Theory and Methodology of Social Work with Families I

Three credits. One hour of lecture, one hour of discussion and one hour of workshopper week. Prerequisite: TSOC 6091.

This course will be a prerequisite for students in the regular program, but not for those in the accelerated program, who are exempt from taking it.

This is the first of two courses in family intervention methodology required for family-centered social work concentrations. The main purpose of the course is to provide students with a body of knowledge, skills, and attitudes enabling them to intervene directly with families. Emphasis will be placed on the direct service of social work with the family from a systemic perspective. This course aims to offer students learning experiencesthat allow them to know, compare and apply different models of intervention with families. Inaddition, it will allow you to learn about the

historical development of the family, intervention with families and the contribution of the schools of thought studied and of social work to the study of the family.

## **TSOC 6097 Community Development and Processes**

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: TSOC 6092

This course is required for students of the community social work concentration and elective for any other discipline. It delves into the components of community development in the context of Puerto Rica's socio-economic reality, as well as the processes to meet the needsof communities and to address the obstacles and limitations impeding their full development and well-being, including the prevention and solution of social problems. The impact of the country's socio-economic development policies on planning and community development will be analyzed, as well as the responsibility and power dynamics that are configured between the state, other institutions and various popular sectors. The theoretical and methodological basis that enables community social workers to be inserted in community processes and to carry out their role of education, promotion, planning and facilitation of interdisciplinary work with ethical-political responsibility will be discussed. It emphasizes theprocesses of leadership, participation, organization, decision-making, planning, research, action, and community oversight necessary for the development of community potential, self-management, and interdependence toward the integral transformation of Puerto Rico.

## TSOC 6099 Management in the Organizational Context of Social Programs

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisites: TSOC 6093

Core Professional Practice in Social Work II Requirement in administration of social programs, whose purpose is to deepen the development of knowledge, attitudes, and skills allowing the effective performance of social program administration functions in the Puerto Rican context. It prepares students to take a proactive position in the implementation of social policies. It analyzes the impact of market forces and political forces as opposed to organizational transformation to respond to clientele. It analyzes the theoretical foundations that underpin administrative practice, structures, processes, and functions from an open system approach. Reflect on the Theory of Social Management Practice. It examines the relationship between social policy, management, social programs, and the services offered. It emphasizes the political dimension of leadership and participatory forms of organizational decision-making.

## TSOC 6106 Social Work and Mental Health in Puerto Rico

Three credits. Three hours of lecture a week.

Development of basic knowledge, attitudes and skills to intervene, within an interdisciplinary framework, in the preventive and curative field with mental health conditions in children, adolescents, adults and the elderly.

## TSOC 6107 Social Worker Intervention with Terminally Ill Persons

Three credits. One hour of lecture and two hours of lab or workshop per week.

Prerequisite:TSOC 6091 or Director's authorization.

Provides the advanced theoretical-methodological foundation for intervening with terminally ill individuals, their families, and the community. Public Policy Analysis and Terminal Illness Research. Special attention to terminal illnessesof high incidence in Puerto Rico, such as AIDS. Develop the readiness to work in interdisciplinary teams of health professionals.

## TSOC 6108 Policy Process and Community Social Action in Social WorkPractice

Three credits. One hour of lecture, one hour of discussion and one hour of workshop perweek. Prerequisites: TSOC 6092

The course analyzes community social action and the political process in the context of Puerto Rican social reality. It studies processes aimed at change in power relations, the distribution of resources, and social institutions. It examines the relationship between the political process, social action, and social policy. The process is examined as a tool to achieve greater community participation in decision-making and process management, to promote the prevention and solution of social problems, to fight against social injustice andto defend the rights of the diversity of oppressed groups in the community. It will facilitate the development of knowledge, attitudes and skills to enable community groups to participate in the formulation, development and changes of social policies that affect them. The intervention emphasizes the use of the scientific method, interdisciplinary work, and anethical-political approach.

## TSOC 6117 Social Work with Groups in the Administration of Social Programs

Three credits. One hour of lecture, one hour of discussion and one hour of workshop perweek. Prerequisites: TSOC 6105-Social Agency Administration. Students from different concentrations need the school's authorization.

A required course for students in the Social Program Administration concentration and electives for students in other concentrations. The purpose of the course is to incorporate the skills of working with groups into administrative processes. The course is focused on developing the group methodology as an instrument to promote a transformation of the components of the organizational structure that favors the improvement in the quality of services. Students will analyze the various theories, approaches, and models of group work employed in the organizational context. The course emphasizes the types of groups, stages, roles, techniques, and communication pertinent to group work. The course will use the group methodology as an instrument to strengthen the effectiveness of the practice, to empower the student and to collaborate with other professionals inside and outside the organization. The use of research for skills development will be encouraged.

## **TSOC 6126 Social Work with Community Groups**

Three credits. One hour of lecture and two hours of discussion per week. Prerequisite: TSOC 6092 – Core Professional Practice in Social Work II.

Required course for students in the community social work concentration and elective for students in any other concentration. Oriented to the intervention of the social worker with groups in the community context. The emphasis is on task forces to meet the organizational needs of communities in the context of Puerto Rican social reality. The content of the coursecovers fundamental areas such

as: social work with task groups or theoretical concepts, organization and work with different groups and stages in development and phases in group implementation and professional intervention. The findings of scientific research will be examined in their application to group work. The course will include the analysis of social policies that affect working with groups as a modality of professional intervention and how groups in turn impact the development of social policies at the community level.

## TSOC 6146 Theory and Methodology of Small Group Social Work

Three credits. One hour of lecture, one hour of discussion and one hour of workshop perweek. Prerequisite: TSOC 6091 Core Professional Practice in Social Work I.

This is one of the required courses to be taken by students in concentration of family-centered social work. The main purpose of the course is for students to deepen their knowledge, attitudes and skills that allow them to perform more safely and effectively when using this intervention modality. Emphasis will be placed on the importance of preventive work throughmutual aid, support, guidance, personal growth and education groups. Emphasis will be placed on working with those populations at highest risk in Puerto Rican society. Existing research studies will be analyzed to analyze the applicability of the models to at-risk groups in Puerto Rican society. Organizational policy analyses will be carried out. Existing ones that promote or limit the use of group social work as an intervention modality.

**TSOC 6152 Theory and Methodology of Social Work with Families II** Three credits. One hour of reading, one hour of discussion, and one hour ofworkshop per week.

Prerequisites: TSOC 6091- Core Professional Practice in Social Work I and Theory and Methodology of Social Work with Families I.

This is the second of two courses in family intervention methodology required for the family-centered social work area of concentration. The main purpose of this course is providing students with knowledge, skills, and attitudes that will enable them to intervene directly with families. Its content includes a socio-historical perspective of the family; the postulates, strategies, and intervention techniques of feminist, conflict, and other emergingmodels of family therapy; An analysis of social policies that impact the family and an effectiveness study in the area of intervention with families.

**TSOC 6165 Theory and Methodology of Social Work with Individuals** Three credits. One hour of reading, one hour of discussion, and one hour ofworkshop per week. Prerequisite: TSOC 6091 - Core Professional Practice in Social Work I.

This is a required course for students of the family-centered social work concentration. It provides the student with an advanced theoretical and methodological basis on the processof individual intervention at the three levels of prevention, within an interdisciplinary framework. The course emphasizes the analysis of the factors that characterize the PuertoRican social reality and their impact on family dynamics and on the development and maintenance of situation management skills in people of various age groups. The implications of public policies and research on the effectiveness of intervention models andtheir implications for professional social work practice are discussed.

## **TSOC 6229 Supervision in Social Work**

Three credits. Three hours of lecture a week.

Prerequisite: TSOC 6093 and Director's authorization.

Administrative, Educational, and Emotional Support Methodological Foundations of the Intermediate Level Supervision Process.

## TSOC 6230 Supervision of Direct Service Personnel in Social Work

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: TSOC 6229 Supervision in Social Work. Other students request specialpermission to enroll in the course.

This is the second supervisory course in social work in the social program administration concentration. This course is elective and prepares the student to learn about and apply innovative models of supervision in social work in the Puerto Rican context. Emphasis will be placed on the models of interactional supervision and intervention with families in the group context, in addition to other emerging models. Findings from recent studies in the area of supervision will be analyzed, particularly in the development of interpersonal skills necessary to be able to implement supervisory functions and in the administration of socialprograms. This course emphasizes the role of the supervisory social worker as a group leader who facilitates changes in the organizational environment and the supervision of direct service personnel.

## TSOC 6236 Middle Management in Human Services Agencies

Three credits. Three hours of lecture a week.

Prerequisite: TSOC 6093, 6229.

Develop knowledge, attitudes and skills that enable the acceptance and execution of the role of middle manager. Emphasis will be placed on the study of the relationship between social and administrative policy from a scientific perspective. Students will be provided withthe ability to analyze and apply skills in the conception, design, implementation, and analysis of social service programs.

## TSOC 6265 Social Work and Gender

Two credits. Two hours of lecture per week.

Prerequisite: Director's authorization.

Critical analysis and intervention with issues affecting women as members of the family and Puerto Rican society. Special emphasis on the analysis of the dominant ideology and its impact on women's policies. Attention to researchdata, prevention and the development of readiness for work in interdisciplinary teams.

#### TSOC 6279 Human Sexuality and Social Work

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Human Sexuality within the context of Puerto Rican social reality. Methodological aspects pertinent to preventive intervention in areas related to the expression of sexuality. Critical examination of public policies and scientific research. Emphasis on the development of readiness for work in interdisciplinary teams.

## TSOC 6288 Program Evaluation and Proposal Development

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Provides the student with the knowledge, attitudes, and skills that strengthen the ability to conduct evaluative research and develop proposals withinthe Puerto Rican institutional framework. The implications of program evaluation for social policy and evaluation are analyzed from the perspective of working in interdisciplinaryteams.

### TSOC 6289 Social Work and Domestic Violence

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: Director's authorization.

Analysis of the etiology of domestic violence in the context of the Puerto Rican reality. Development of knowledge, attitudes and skills in the management of domestic violence. Special attention to prevention and intervention strategies, the impact of public policies, research on this problem, and the readiness of social workers for interdisciplinary work.

#### TSOC 6296 Social Work and Alcoholism in Puerto Rico

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite:TSOC 6091 or Director's authorization.

Development of knowledge, attitudes, and skills to intervene with alcohol prevention and treatment. The impact of alcoholism on different population sectors and the sociocultural and legal aspects associated with its use and alcohol abuse. Critical analysis of the impact of public policies and scientific research. Emphasis on readiness for interdisciplinary teamwork.

## TSOC 6297 Expertise and Social Work

Three credits. Three hours of lecture a week.

Prerequisite: It is recommended that the course be taken at the second-year level ofmaster's degree studies in Social Work.

Knowledge, attitudes and expertise in social work. Spatial emphasis on the performance of roles of analyst, public policy maker, evaluator, advisor, researcher, speaker and proposal writer, among others. It emphasizes research skills and the impact of the preventive dimension of this role. Students will develop readiness towards interdisciplinary work.

#### TSOC 6301 Professional Occupational Social Work Practice I

Three credits. Three hours of lecture a week.

Prerequisite: TSOC 6037, 6237 and Director's authorization.

Rationale for professional intervention with workers, and labor organizations that represent them. Worker development potential for organizational change.

#### TSOC 6302 The Professional Practice of Social Work II

Three credits. Three hours of lecture a week.

Prerequisite: TSOC 6301

Study of the basic components in the provision of occupational social work services in Puerto Rico, such as: occupational counseling, information and referral services, application of worker protection laws, advocacy for rights, and design of service projects and programs. Review of intervention strategies and techniques in the field of prevention and rehabilitation.

## TSOC 6326 Social Work Within the Legal Context

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: TSOC 6091

Development of knowledge, attitudes, and skills of the social worker within the legal context. Study of legal institutions and legislation related to the profession, functions and roles of the social worker. Develop readiness for interdisciplinary work.

## TSOC 6327 Social Work in the Promotion of Local Economic Development

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: TSOC 6270 and Director's authorization.

Review of the economic function of the community, thebasic concepts of community economic development, and the factors that facilitate and hinder the phases of this process. Emphasis on critical analysis of socio-economic experiences in other countries and the factors affecting the promotion of local economic development of the future.

## **TSOC6345 Independent Study in Social Work**

One to three credits.

It offers students the opportunity to delve deeper into a topic of interest within the field of social work. The student will select the topic of their preference and, together with the assigned professor, will identify and discuss the theoretical formulations, intervention models and recent research pertinent to the selected topic.

Mailing address: 9 University Ave., Ste. 901, San Juan, Puerto Rico 00925-2529

Acting director: Dr. Elithet Silva Martínez

Doctoral Degree Program Coordinator: Dr. Larry E. Alicea Rodríguez

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E-mail address: <a href="mailto:egtsbl.rrp@upr.edu">egtsbl.rrp@upr.edu</a>
Website: <a href="mailto:http://sociales.uprrp.edu/egts/">http://sociales.uprrp.edu/egts/</a>

#### **DEGREE:**

## **Doctor of Philosophy in Social Work**

Accreditation: Council on Social Work Education

#### **FACULTY:**

**Esterla Barreto Cortés,** Ph.D., Brandeis University, 1999. Professor. Participatory social research; social policy analysis; race; oppression and diversity.

**Angélica Varela Llavona**, Ph.D., Ohio State University, 1981. Associate Professor. Management; proposal development.

**Elithet Silva Martínez,** MSW, Ph.D., University of Iowa, 2009. Associate Professor. Models of intervention with families, migration, women and gender, social research methods, art and social work.

**Hilda Rivera Rodríguez,** MSW, Ph.D., Columbia University, 2000. Professor. Social policy, program design and management, community organizing and art, women and child welfare, and human rights.

**Diana Padilla Medina,** LMSW, Ph.D., New York University, 2017. Assistant Professor. Intimate partner violence, social determinants of health, cardiovascular health, development and evaluation of programs and measurement instruments.

**Jannette Rodríguez Ramírez,** Ph.D., University of Puerto Rico, 2008. Assistant Professor. Social policy evaluation, statistics for social sciences, population studies.

**Jenice M. Vázquez Pagán,** MSW, JD, Ph.D., University of Puerto Rico, 2013. Assistant Professor. Social policy, social work administration, gender, gender violence, labor, poverty, and human rights.

**Lrry Alicea-Rodríguez,** MSW, JD, Ph.D., University of Puerto Rico, 2021. Assistant Professor. Clinical and forensic social work, children, youth, judicial social policy.



**Eduardo J. Zavala-Mendoza,** Ph.D., University of Puerto Rico, 2018. Assistant Professor. Development, social policy and the state, social program design and management, governance and planning, health and psychoactive substances, intersectionality and social justice.

## **ADMISSION REQUIREMENTS:**

## General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Requirements of the Doctoral Program**

Possess an academic degree according to one of two classifications: master's degreein social work from an accredited university institution, or bachelor's degree in social work and a master's degree from an accredited program in an area related to social work(Public Administration, Anthropology, Political Science, Rehabilitation Counseling, Economics, Latin American or Caribbean Studies, Juris Doctor, Criminal Justice, Planning, Psychology, Public Health-Demography, Gerontology, Sociology, Guidance and Counseling, others -by decision of the doctoral committee).\*

- 1. Minimum academic index at the graduate level of 3.00 points on a scale of 4.00 orits equivalent.
- 2. Complied with graduate level statistics course within the 5 years prior to applying for a PhD.
- 3. Basic computer skills, knowledge of a word processing program, and personale-mail address.
- 4. Ability to read and write Spanish and read English.
- 5. The doctoral committee will invite qualified applicants for interviews.

\* Applicants whose bachelor's and master's degrees are not in areas related to socialwork will be conditionally accepted if they meet the other requirements, pass the English test and move to the interview stage when evaluated by the doctoral committee. Their integration at the doctoral level at the Beatriz Lassalle Graduate School of Social Work will be conditioned to the approval of 15 credits with a minimum average of 'B' in core courses of the master's degree in social work and the seminar social work as a profession, prior to enrolling in doctoral courses. The duration of conditional admission will not exceed 2 years. If, at the end of the two years of conditional admission, the applicant does not enroll in the doctoral program, he/she will have toapply again.

## **Documents Required for the Application for Admission**

- 1. Application for Admission to Graduate Studies in electronic format https://solicitud.upr.edu/
- 2. Two official academic transcripts.
- 3. Writing an essay that elaborates on the research area of interest and reflectscritical analysis skills and writing skills (request newsletter at school).

Detailed curriculum vitae that includes education, professional experiences, professional

presentations, publications, research, participation in proposals, professional associations, community service, language(s) mastered, language(s) reading and comprehension skills, and computer skills, among other skills that the candidate deems relevant. (request anewsletter at school).

## **GRADUATION REQUIREMENTS:**

In addition to meeting the general admission requirements for graduate studies at the RíoPiedras Campus, students must meet the following:

- 1. Complete successfully a minimum of 39 credits in courses under the program.
- 2. Maintain an overall minimum index of 3.00 points. If students have a lower index in any semester, their permanence in the doctoral program will be subject to an evaluation and recommendation by the admissions committee.
- 3. Take a written degree exam upon passing the 39 credits in required courses at the doctoral level.
- 4. Present and defend a dissertation proposal, which must be approved by the dissertation committee.
- 5. Present in the form of a doctoral dissertation and defend an original research work that constitutes a significant contribution to the analysis and administration of socialpolicy.

## **PROGRAM OF STUDY:**

Program Requirements	Credits	
Core Courses*	12	
TSOC 8005 Philosophical Foundations of Social Work	3	
TSOC 8006 Theory for the Analysis of Social Policy and Organizational Behavior in the Context of Puerto Rico		
TSOC 8015 Oppression, Justice, and Social Policy	3	
TSOC 8016 Models for the Practice of Social ProgramAdministration	3	
Three Research Courses		
TSOC 8101 Advanced Social Research I: Methodological Design and Applicability to Social Policy Research	3	
TSOC 8102 Advanced Social Research II: Analysis of QuantitativeData Using SPSS	3	
TSOC 8103 Advanced Social Research III: Qualitative Analysis.	3	
Three specialization courses in the areas of PublicAdministration, Social Planning and Research		
Elective	6	
TSOC 8406 Project in Social Policy Analysis	2	

rogram Requirements	Credits
TSOC 8900 Doctoral Degree Examination	0
Dissertation	4

TSOC 8405 Dissertation Seminar	1
TSOC 8501 Doctoral Dissertation in Social Work I	3
TSOC 8502 Doctoral Dissertation in Social Work II	0
Total Credits	42

<sup>\*</sup>Students admitted to the doctoral program with a bachelor's and master's degree in another discipline must take 15 core credits at the master's level in social work.

#### **COURSE DESCRIPTION:**

The course descriptions below are the last ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## TSOC 8005 Philosophical Foundations of Social Work

Three credits. Three hours of lecture a week.

Analysis of at least two central axes of social work: its epistemological bases and its conceptual bases, delving from these two points of view into the contradictory process of modernity. Exploration through a systemic reading of the links between social work and this conceptual network, having a more rigorous logic of interpretation.

## TSOC 8006 Theory for the Analysis of Social Policy and Organizational Behavior in the Context of Puerto Rico

Three credits. Three hours of lecture a week.

Examination of studies and research conducted in Puerto Rico applying theories for the social analysis of organizations in charge of implementing social policies. It delves into the current state of knowledge that arises as a function of research management. It integrates the theoretical aspects of social analysis with contextual factors and organizational behaviorin the implementation of social policy. The political, social, and economic situation of PuertoRico is studied, as reflected in the professional literature.

## TSOC 8015 Oppression, Justice, and Social Policy

Three credits: One hour of lecture and two hours of discussion.

In-depth analysis of the dynamics of oppression including a historical perspective of this phenomenon and the effect it has on preventing the development of full individual and collective well-being. The evaluative premises of social equality and the concrete elements that promote and maintain marginalization, exploitation, cultural imperialism, power and violence are analyzed. It examines the social, economic, political, and cultural factors that contribute to the configuration of the social arrangements in force in Puerto Rico and the extent to which they promote oppression and social injustice. The experience of other countries (related or different) is included. A selection

of existing social welfare policies is made to critically examine the effect that globalization, privatization, and federal policies have had on them to deal with thesituation of disadvantage and marginalization from the discourse and actions of the state. Topics such as social class, ethnicity, gender, and race, among others, are included.

## TSOC 8016 Models for the Practice of Social Program Administration

Three credits: One hour of lecture and two hours of discussion.

Developmental examination of social work theory and practice. Emphasis is given to the critical analysis of the theoretical and ideological bases of the models and approaches that guide professional practice in administration and social policy. In this process, each student examines their professional intervention, shares their analysis with others in the class, and proposes models for social work practice. Intervention models produced by social workers are identified for analysis, as well as other foundations in the interest of specific groups in the community and other professional sectors.

## TSOC 8101 Advanced Social Research I: Methodological Design and Applicability to Social Policy Research

Three credits. Three hours of seminar per week.

This course is the first of a sequence of three (3) under the area of Research. It is an introduction to epistemological and methodological design considerations related to research, specific techniques, and data analysis mechanisms available to researchers. We will explore issues in controversies around the use of social research for the benefit of socially marginalized sectors of the population. We will approach social research through the crucible of possibilities for the promotion of changes related to social justice. We will address the implications of the topics addressed in the course to work in social policy, specifically the role of research in its formulation and evaluation. Students will have the opportunity to develop work that explores the applicability of different models to specific issues in the Puerto Rican, Caribbean and Latin American environment or the society from which the student comes from.

## TSOC 8102 Advanced Social Research II: Analysis of Quantitative Data UsingSPSS

Three credits. One hour of lecture, one hour of discussion and one hour ofworkshop. Prerequisite: TSOC 8101

This course is the second in a sequence of three (3) under the research area. It is an introduction to the process of quantitative data analysis from an applied perspective and using computer programs for data storage and analysis. Through the course, we will examine general aspects of the analysis and the role of the *Statistical Package for the Social Sciences* (SPSS) program in this process. Through the course, students will have the opportunity to be exposed to the central aspects of the approach to quantitative data analysis from a theoretical and applied perspective. Through practical exercises, they willbe able to establish relationships between the knowledge acquired and their research work, particularly those related to their dissertation work.

## TSOC 8103 Advanced Social Research III: Qualitative Analysis

Three credits. One hour of lecture, one hour of discussion and one hour of workshop.

This course is an extension and deepening of the Qualitative Research (CI) content initiated in the course Advanced Research I: Methodological Design. We will emphasize the promotion of qualitative research as an appropriate strategy to produce knowledge relevant to social work and the formulation and implementation of social policies. The group of students will be able to examine qualitative methods as a basis for the preparation and analysis of bills, and social policies or social programs that respond to the needs of diversepopulation groups in Puerto Rico. In addition, they will have the opportunity to deepen the application of qualitative methodologies and techniques in the study of a bill, policy or socialprogram on a topic agreed upon by the group.

## **TSOC 8406 Project in Social Policy Analysis**

Two credits. Three-hour seminars and four hours of internship per week.

Prerequisites: Complete successfully all core, research, elective and concentration courses and obtained written authorization from the institution where students will carry out practical application projects.

Integration through the practice of the knowledge and skills obtained in core and concentration courses. It will be carried out in the legislature or in a public or private social welfare organization and under the supervision of a professor assigned by the Doctoral Program. It allows the student to choose among several options of experiences of analysis, formulation or implementation of a specific social policy, emphasizing those aimed at meeting the needs of marginalized and excluded sectors. Among the options are analyzing an existing social policy aimed at solving a particular social problem, analyzing the results of implementing a social policy (evaluation of a program), and formulating a new social policy to address an unattended or poorly addressed social problem. Students will produce written work that includes a critical assessment of what exists and some concrete and viable alternatives to the situation.

#### **TSOC 8900 Doctoral Degree Examination**

0 credits.

Prerequisite: Students must request the exam through the appropriate form and obtain approval from the coordinator.

It consists of a written test in which the student prepares a theoretical methodological essaythat can be published in a professional journal. In the essay, the student will demonstrate their competencies and critical integration of controversies, theories and methodologies related to at least three of the core areas (Philosophical Foundations of Social Work; Theories for the Analysis of Social Policy and Organizational Behavior in the Context of Puerto Rico; Oppression, Justice and Social Policy; Models for Social Work Practice in the Field of Social Policy Formulation and Social Program Administration) and one of the areasof concentration (Public Administration or Planning).

#### **TSOC 8405 Dissertation Seminar**

A credit. Three hours of seminar per week.

Prerequisites: All core courses, three research courses, three concentration courses, and two electives.

Formulation and discussion of the ideas that will become the doctoral dissertation proposal, both in

terms of the conceptualization of the subject to be investigated, and the methodologyconsidered for these purposes. Presentation of these ideas to the scrutiny of peers and professors in order to achieve a greater definition of them.

#### TSOC 8501 Dissertation in Social Work I

Three credits. Three hours of meeting a week.

Prerequisite: Meet the program requirements to enroll in the Doctoral Dissertation.

The doctoral dissertation is original research that demonstrates the student's ability as anindependent researcher and confirms their coherent integration of the doctoral courses takenthroughout the program. It will involve the presentation and defense of their research proposal pertinent to the advancement of knowledge in the specialty of social work with emphasis on the analysis, formulation, implementation and evaluation of social policy, before its Dissertation Committee.

### TSOC 8502 Doctoral Dissertation in Social Work II

No credit.

Prerequisite: TSOC 8501

This course allows students of the doctoral program in Social Work to conclude the writing of their dissertation, making the pertinent changes after the reading and evaluation of their dissertation supervisor. At the end of the semester, the student will defend their dissertation, as part of the requirements for obtaining the Ph.D.degree.

#### OTHER COURSE DESCRIPTIONS:

#### TSOC 6006 Social Research from Social Work

Three credits. One hour of lecture and two hours of discussion per week. Prerequisite: Applicants must be admitted to the School.

It provides the student with the fundamental knowledge of quantitative and qualitative research in social work. Quantitative research discusses the positivist paradigm, problem formulation and hypothesis, sampling, design, and methods of data collection and analysis. Qualitative research includes the constructivist paradigm, problem formulation, designs, data collection methods, and qualitative analysis.

## TSOC 6013 Critical Perspectives on Health and its Implications for Social Work

Three credits. Two hours of lecture and one hour of discussion per week.

An examination of the concepts of health and disease in our historical and cultural contextwill be developed in the light of the following topics: presence of health in the social sciences, changes in public health perspectives, key concepts for the health enterprise (morality and risk), social differences created by ideas about disease and the role of healthprofessionals, particularly social workers, in the definition of healthy. These issues will be addressed by critically reflecting on the role of power and social control that these definitions imply and by analyzing how they have historically changed to exert control over populations. These control mechanisms are manifested in diagnoses, advertising campaigns, laws and applied practices in the social sciences. Work

strategies in response to these critical perspectives, such as community work and social policies, will be explored.

## TSOC 6018 Social Work with the Elderly

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Develop knowledge, attitudes, and skills in the field of gerontology that will enable the social worker toward effective intervention. Analysis of the impact of existing theories on public policy. Development of intervention and prevention skills in the context of Puerto Rican social reality. Special attention to social research, and tothe development of readiness for interdisciplinary group work.

#### TSOC 6021 Practical Instruction in Social Work I

Three credits.

Prerequisite: Core courses.

This experience provides a laboratory-like environment aimed at integrating classroom knowledge and allowing students to engage with the programs and services of various practice centers.

#### TSOC 6027 Advanced Practical Instruction in Social Work II

Three credits. Three hours of lecture a week.

Prerequisite: TSOC 6021 and Director's authorization.

Professional intervention in more complex situations of vulnerable and oppressed groups from a scientific perspective. Critical analysis of social policies that impact these groups and of action for change.

#### TSOC 6028 Advanced Practical Instruction in Social Work III

Three credits. Twenty hours of lab or workshop per week.

Prerequisite: TSOC 6021 and 6027.

Development of a scientific, critical and objective orientation of social reality and social policies as a basis for the intervention of the social worker. This orientation should lead to concrete proposals that will contribute to reducing or eliminating the dependency on large sectors served by social workers.

#### **TSOC 6055 Social Reality Analysis**

Three credits. Three hours of lecture a week.

Critical and reflexive study of the macrostructure in the economic, political and social order. Analysis of the economic development model, economic, political and psychological dependence, as well as its impact on social policy and the quality of life of oppressed and vulnerable groups in society. Elaboration of a diagnosis of the Puerto Rican social reality and alternatives for change.

## TSOC 6057 Comparative Analysis of Theories of Human Behavior

Three credits. Three hours of lecture per week

Critical and comparative analysis of theories of human behavior from different perspectives in their applicability to the professional context and their relevance to the development and analysis of social policy, emphasizing the preventive and interdisciplinary aspect. Research and literature pertinent to the Puerto Rican social reality will be analyzed.

## TSOC 6065 Analysis of Social Welfare Policy and Services

Three credits. Three hours of lecture a week.

Study of the conceptual, theoretical and methodological basis for the analysis of social welfare policy and services. Critical examination of explanatory theses on the origin of social policies, approaches to the social welfare system and the growing intervention of the Statein this area. Study of the types of analysis of social policy with emphasis on scientific research.

## TSOC 6091 Professional Practice in Social Work I (Ind. & Fam.)

Three credits. Three hours of lecture a week.

This is one of seven core courses in the Master of Social Work program and the first in a three-course sequence on Advanced Professional Practice. It is focused on the discussion and analysis of theoretical and conceptual frameworks that guide and support intervention with various human systems: individuals, families and groups. The course deepens knowledge and refining skills to define issues, needs, gather and weigh information, plan and hire, identify intervention alternatives, select and implement appropriate courses of action, and use research to evaluate processes and their outcomes. The aim is to give particular attention to preventive intervention, with particular emphasis on interdisciplinary work. The student will have the opportunity to examine and critically analyzemodels of direct intervention that can be used with human systems (individuals, families, and groups).

#### TSOC 6092 Core Professional Practice in Social Work II (Community)

Three credits. Three hours of lecture a week.

Second year of the Advanced Professional Practice in Social Work sequence. It examines avariety of aspects of community organizing in the historical context of community work in Puerto Rico, highlighting the role of social work in this process. A diversity of theoretical foundations is applied to intervention models that promote the capacity of the community to improve their living conditions through participation and concerted efforts in those matters that impact them. Intervention models, such as community development, planning and social action, applied to geographical and functional communities are presented. The relevance of these in working with oppressed and vulnerable sectors is critically analyzed. Emphasis is placed on people's participation in decision-making, self-management, empowerment and leadership processes. The roles of the practitioner and collaboration withother professions are clarified.

# TSOC 6093 Core Professional Practice in Social Work III (Administration of Social Programs)



Three credits. Three hours of lecture a week.

This course is the third in the introductory sequence on the concept of Advanced Professional Practice in Social Work at the graduate level. In Puerto Rico, professional practice is undergoing significant change, shifting from a predominance of positions in government settings to an increasing presence in non-governmental organizations and autonomous practices where social workers are their own employers. This course provides students with the opportunity to critically examine and analyze social administration through various philosophical, theoretical, and conceptual paradigms, addressing controversies such as diversity in its broadest sense. The goal is for students to understand the importance of exercising transformative professional leadership that contributes to a competent organization and recognizes that administration in social work is integral to the practice of human services professionals committed to individual, group, community, and social transformation.

## TSOC 8007 Evaluation of Social Programs and Services

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisite: Social research course or research design.

This course focuses on the conceptual, theoretical, ethical, and methodological aspects of evaluating social programs and services. It explores the significance of evaluation in the formulation and implementation of social policies and related decision-making processes. Students will analyze various evaluation approaches and models, as well as the procedures for conducting these evaluations. The course provides a theoretical and conceptual foundation for implementing and developing evaluations of programs and services.

#### TSOC 8008 Theories of Communication, Public Policy, and Communities

Three credits. One hour of lecture and two hours of discussion per week.

This course aims to integrate knowledge from various disciplines and practices to help students understand the complexities of creating public policy in a globalized world. It emphasizes the crucial role of communication in raising awareness, building alliances, disseminating information, and securing approval and implementation of public policies that address the needs of communities.

#### TSOC 8009 Seminar on the State and Social Policies

Three credits. One hour of lecture and two hours of seminar per week. Prerequisites: TSOC 8005, 8006, 8015, 8016, 8101, 8102, 8103.

This seminar delves into the specificity of the State and social policies in the contemporary world. While social policies across different geographical and historical contexts address particular social issues—such as unemployment, citizens' rights, crime, housing, health, migration, exclusion based on condition, ethnicity or identity, and poverty—the articulation of these policies is closely linked to the nature of the State. The seminar examines various state models, including functionalist, instrumentalist, and minimalist, through different theoretical lenses such as Marxist, neo-Marxist, social democratic, Weberian, liberal, neo-liberal, post-modern, and feminist perspectives. It also explores more eclectic frameworks, including "the reconstitution of the welfare state," the concept

of the "cooperative state," and the debate on "failed states."

## TSOC 8055 Mixed Methods in Social Research and its Implications for Social Policy

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisites: TSOC 8101, 8102, 8103.

This course examines the ongoing debates in social research, particularly those related to epistemological, ontological, and methodological issues. A key focus is the integration of qualitative and quantitative techniques in research designs. While this area is still developing, many questions about the integration of these approaches remain unanswered. The complexity increases when considering the implications for social work and the social sciences in general. In the context of social policy research and evaluation, there is an urgent need to explore the integration of perspectives that focus on the local, specific, and narrative, alongside those that emphasize the generalizable, broad, and quantifiable. This course will explore the theoretical and methodological implications of mixed methods and their applicability to social policy-related research.

## TSOC 8995 Special Topics Seminar in Social Policy Analysis and Administration

One to three credits. Monthly Seminar.

Requirements: Authorization from the Academic Advisor and availability of qualified teaching resources.

This course focuses on the analysis of special issues in social policy and its administration, with an emphasis on contemporary debates. The goal is to provide students with an opportunity to build on the knowledge and skills gained in core social policy courses by exploring topics that are either briefly touched upon or not covered in the required curriculum. The course topics will be determined collaboratively by students and instructors, based on student interests and the availability of teaching resources. This course may be repeated, provided the topics differ. Potential topics include social intervention and citizenship, the nature of poverty in Puerto Rico, lobbying for community interests, development and transformation of the third sector, Ad Hoc groups and their interests, intolerance and its consequences, innovative models of social intervention, and other relevant issues in social policy from a rigorous theoretical and methodological perspective.



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901, San Juan, PR 00925-2529

Physical Address: Plaza Universitaria, North Twer, 1st. floor

**Phone extensions**: (787) 764-0000, extensions 87392, 87376, 87379 y 87399

#### **DEGREE:**

## Master in Management and Development of Cooperatives and Community Based Organizations

#### **FACULTY**

**Elba A. Echevarría Díaz,** Ed.D., Associate Professor. University of Puerto Rico, 2011. Cooperative legislation, cooperative education, management, cooperative organization, gender. elba.echevarria@upr.edu

**Grisell Reyes Núñez,** Ph.D., Associate Professor. University of Puerto Rico, 2005. Selfmanagement, social bond, social and solidarity economy, cooperative subjectivity. grisell.reyes@upr.edu

**Efraín Rosado Rodríguez,** Ph.D., Associate Professor. Cooperative Enterprise Management at the University of Mondragon, Basque Country, 2016. Cooperative management models, enterprises transformed into cooperatives by workers, cooperative identity and management models for solidarity organizations. <a href="mailto:efrain.rosado@upr.edu">efrain.rosado@upr.edu</a>

#### **ADMISSION REQUIREMENTS:**

## General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific master's Program Requirements**

- 1. A bachelor's degree or its equivalent from a recognized university.
- 2. A minimum academic index of 3.00 on a 4.00 scale.
- 3. Proficiency in oral and written communication in two languages, one of which must be Spanish or English.
- 4. Two letters of recommendation.
- 5. Completion of the entire application and admission process via this link: https://solicitud.upr.edu/.
- 6. Interview with the Admissions Committee.
- 7. Submission of a written essay.

#### **GRADUATION REQUIREMENTS:**

- 1. Complete a 30-credit program in area of specialization, maintaining a minimum academic GPA of 3.00. All courses must be passed with a grade of A or B.
- 2. Successfully complete the COOP 6201 Project course, which includes the submission of two volumes of the final project.
- 3. Finish all degree requirements within a maximum of four years. In exceptional cases, students who do not meet this deadline may request an extension from the Dean's Office of Graduate Studies and Research at the Río Piedras Campus.

#### **PROGRAM OF STUDY:**

Core Courses - 21 credits			
Codificación	Course Title	Credits	<b>Contact Hours</b>
COOP 6031	Fundamentals of Cooperativism	3	45
COOP 6033	Contemporary Socio-Economic Debates	3	45
COOP 6035	Psychosocial and Educational Aspects in Cooperatives and Solidarity Organizations	3	45
COOP 6131	Economic Viability for Cooperatives and Solidarity Organizations	3	45
COOP 6133	Management Models for Cooperatives and Solidarity Organizations	3	45
COOP 6135	Project Proposal Seminar	3	45
COOP 6201	Project	3	45
Total: 7 courses		21	315
			Percent: 70%

Open Selection Courses - 9 credits (You can choose up to 3 of the following courses)			
Codificación	Course Title	Credits	<b>Contact Hours</b>
COOP 6210	Companies Transformed into Cooperatives by Workers	3	45
COOP 6207	Cooperativism and Solidarity Economy in the Caribbean Antillean	3	45
COOP 6206	Comparative Cooperative Law	3	45
COOP 6215	Interdisciplinary Seminar	3	45
COOP 6205	Practical experience in Solidarity Organizations	3	45
COOP 6208	Public Policies for Cooperativism and Solidarity Organizations	3	45
COOP 6209	Solidarity Finance	3	45
COOP 5009	Cooperative Study Tour	3	45
Total: 3 courses		9	135
			Percent: 30%

**NOTE:** The curricular design of the Master's Degree in Management and Development of Cooperatives and Solidarity Organizations allows students to take up to nine (9) credits in free

selection courses, which can be from our Program, which is highly recommended, although they can also take them in courses in other faculties that we have identified as an interdisciplinary mechanism

## **COURSE DESCRIPTION:**

The following course descriptions are the most recent entries in the Student Information System of the Office of the Registrar at the Río Piedras Campus, as of November 30, 2023. These will be included in the 2023-2024 Graduate Catalog.

## **COOP 6031 Fundamentals of Cooperativism**

Three credits. Three hours of lecture a week.

This course offers a philosophical exploration of the foundational conceptions of Cooperativism as a socio-economic system in the Western context. Central to the discussion are the concepts of economy and social order, labor and the human condition, as well as collaboration and cooperation. The course aims to provide a nuanced understanding of the conceptual framework of Cooperativism, critically examining its development while highlighting both its potential and limitations. Group discussions and teamwork will serve as the primary pedagogical approaches.

## **COOP 6033 Contemporary Socioeconomic Debates**

Three credits. Three hours of lecture a week.

Corequisite: COOP 6031

This course engages with current socio-economic debates, focusing on concepts such as Development, from the rise of capitalism to the new approaches of the late twentieth century, and the concept of the Solidarity Economy as a new theoretical framework. It explores points of convergence and divergence within these debates, particularly in relation to Puerto Rico's Economic Development Model. The course is structured into five thematic modules and will be conducted through reflections, group discussions, reports, presentations, and debates.

## **COOP 6035 Psychosocial and Educational Aspects in the Solidarity Economy**

Three credits. Three hours of lecture a week. Corequisites: COOP 6031, COOP 6033...

This course explores various theories related to the associative and educational aspects of Cooperativism and Solidarity Organizations, examining their foundational assumptions and practical applications. Three thematic axes—Subjectivity, Community and Education, and Cooperative Identity—unify the course content. The course aims to provide master's students with a complex perspective on psychosocial dimensions, highlighting education as a transformative process for individuals and the societies in which they live, particularly through active citizen participation in social action initiatives. Instruction will include critical reflections based on readings, fieldwork, monographic papers, and the development of work or action plans.

#### **COOP 6131 Economic Viability**

Three credits. Three hours of lecture a week.

Prerequisites: COOP 6031, COOP 6033.

Corequisites: COOP 6035

This course examines the process of gestation and development of solidarity economic initiatives, from their conception to the evaluation of their economic and social viability. It focuses on the economic processes of production and distribution while considering ethical consumption and accumulation within the context of a solidarity economy. Emphasis will be placed on the ethical values associated with this type of economy and its impact on local development, aiming to foster an integrated cooperative and solidarity system through the creation of networks and alliances among these initiatives. Students will participate in oral and written presentations to enrich the discussion of key course topics. Additionally, each student will develop a business plan for a cooperative or solidarity organization, acquiring the knowledge and skills necessary to conceive, organize, plan, and assess the economic and social viability of new cooperatives or solidarity organizations as a strategy for local development.

## **COOP 6133 Management Models for Cooperatives and Solidarity Organizations**

Three credits. Three hours of lecture a week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131.

This course presents and analyzes fundamental concepts of the most widely used management models in the business world. It examines various forms of worker participation in the management of productive units and explores management models proposed by cooperatives, highlighting their characteristics and components. The application of cooperative principles in management and ethical considerations will also be discussed, emphasizing the traits that define cooperative management models through key management components. Additionally, the course will showcase examples of best practices established within these cooperative management frameworks. To enhance understanding, case studies and both oral and written presentations will be incorporated into the discussion. The course will be offered in face-to-face, hybrid, and online formats.

#### **COOP 6135 Project Proposal Seminar**

Three credits. Three hours of seminar per week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131.

This course focuses on the significance of research in the field of Cooperativism and Solidarity Organizations, as well as the processes involved in its development. Various research approaches and methods will be introduced and evaluated, with a particular emphasis on participatory research and action. The course will cover the structure and requirements of a research project in accordance with the regulations of the graduate program, including ethical considerations. By the end of the seminar, students are expected to present their project or research proposal.

## **COOP 6201 Project**

Three credits. Three hours of thesis per week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6135.

This course provides individualized assistance and support to students as they complete and present their projects in accordance with the regulations of the graduate program. Students will have the option to choose from five project modalities: creative project, research work, publishable article, case study, or a feasibility study (social and economic) of a Cooperative or Solidarity Organization. The course requirement will be fulfilled by submitting the final written project and delivering a presentation. Students may repeat the course up to a maximum of two times.

## **COOP 6210 Enterprises Transformed into Cooperatives by Workers**

Three credits. Three hours of lecture a week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course analyzes the experiences of companies transformed into cooperatives by their workers, viewing them as a form of economic organization and a social phenomenon within the Social and Solidarity Economy. It examines the political and socio-economic contexts that facilitate or hinder the emergence and development of these organizations at both national and international levels. The course will explore the process of social organization, focusing on motivations, the development of a new cooperative identity, organizational changes, and worker satisfaction. Instruction will include group discussions based on case studies. Documentaries will be utilized to showcase real experiences and examples. Students will be required to submit a written paper or monograph that systematizes selected experiences or case studies.

## COOP 6207 Cooperativism and Solidarity Economy in the Caribbean Antillean

Three credits. Three hours of lecture a week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course examines the various experiences of the Social and Solidarity Economy in the Caribbean, with a particular focus on the Greater Antilles, including Cuba, Jamaica, Haiti, the Dominican Republic, and Puerto Rico. It presents the types and modalities of these experiences, the legal frameworks and public policies governing them, their integration with other social movements, and the support mechanisms and management models in place. The socio-economic impact and trends of these sectors in each country will be analyzed. Additionally, concepts and experiences of Cooperativism and Solidarity Economy will be explored from an international cooperative perspective. The course aims to promote research, facilitate exchanges, and foster networking among these countries.

## **COOP 6206 Cooperative Law**

Three credits. Three hours of lecture a week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course investigates the origins and evolution of the concepts and legal norms that constitute Cooperative Law. It will analyze the sources of cooperative law and how current regulations reflect and establish the principles guiding the cooperative movement. Particular attention will be given to the existing legal framework in Puerto Rico, which will be compared with regulatory frameworks in Europe, North America, and South America. The course will also explore contemporary debates surrounding the notion of social rights in relation to the dichotomy between public and private law, as well as the extent of state intervention in the development of cooperativism. Students will be expected to present critical analyses and recommendations based on the comparative cases studied in class.

## **COOP 6215 Interdisciplinary Seminar on Cooperativism and Solidarity Organizations**

Three credits. Three hours of seminar per week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course explores topics related to Cooperativism, Solidarity Organizations, and the Solidarity Economy from an interdisciplinary perspective, enriching the study of contemporary emerging issues. Its purpose is to enhance curriculum flexibility and cater to the interests of students. The course covers projects, texts, or research topics proposed by either the professor or students, allowing for a deeper exploration of these subjects. This seminar addresses contemporary debates that may not be included in the standard curriculum or provides an opportunity to further develop projects, cases, theoretical issues, concepts, or topics previously discussed in other courses of the Master's Degree in Management and Development of Cooperatives and Solidarity Organizations. Proposed topics must be approved by the graduate committee. Instruction will be conducted through discussions, case presentations, and the analysis of readings by key theorists in Cooperativism and Solidarity Organizations.

## **COOP 6205 Practical Experience in Solidarity Economy**

Three credits. Minimum of 20 hours of practice per week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course offers a practical experience in which students apply the knowledge gained from their master's coursework in an organization related to the solidarity economy. The internship will be conducted under the supervision of a faculty member from the department. Students may choose from several internship modalities. An internship with a Cooperative or Solidarity Organization, or a Practice Center from another discipline that includes an economic development component. An internship at a government agency or legislative commission related to Cooperativism. An internship at a research center involved in related studies. To successfully complete the course, students must accumulate between 20 hours per week and a maximum of 300 hours of practical experience per semester.

#### **COOP 6208 Public Policies**

Three credits. Three hours of lecture.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course provides an introduction to the legal framework governing Cooperativism and the Solidarity Economy in Puerto Rico. It begins with a definition of law and an exploration of its classifications that impact associative organizations. The course includes a critical analysis of the State's role in relation to the hegemonic economic model, as well as alternative models such as Cooperatives and Solidarity Organizations. Students will discuss and analyze the relevant laws concerning cooperatives and other organizations. The historical evolution of Cooperativism in Puerto Rico will be examined through the establishment of government institutions, public corporations, and federal organizations. By the end of the course, students will be able to evaluate public policy and current legislation. Instruction will include lectures, debates, reflections, and the development of public policy proposals.

## **COOP 6209 Solidarity Finance**

Three credits. Three hours of lecture a week.

Prerequisites: COOP 6031, COOP 6033, COOP 6035, COOP 6131, COOP 6133.

This course explores the concepts of currency and other means of exchange, as well as the markets, instruments, and financial institutions that facilitate the flow of funds for production, distribution, marketing, and consumption within the framework of a solidarity economy. It will analyze the risk/return ratio associated with activities conducted by markets and financial institutions operating in the solidarity economy compared to those in the traditional financial system. Performance indicators for both systems will be studied and compared. Students will examine various examples of markets and institutions that operate under the principles of solidarity finance and will be expected to present critical analyses and recommendations based on the philosophical and economic foundations learned throughout the course. Instruction will include lectures and active discussions of assigned readings and case studies.

## **COOP 5009 Cooperative Study Tour**

Three credits. Three hours of lecture a week.

Prerequisite: COOP 5005

This optional course is offered during the summer session and provides students with an international perspective on cooperativism, enriching their academic training. It includes a thoughtful and comparative analysis of the cooperative movement in Puerto Rico and other countries. The course will begin with pre-trip sessions designed to study the most representative expressions of the cooperative movement in the country being visited. During the trip, students will receive guidance from the professor at the cooperative institute and leaders of the cooperative movement in the host country.

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## **College of Information and Communications**



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Website: https://faci.uprrp.edu/maestria-comunicacion/

#### **DEGREE:**

#### **Master of Arts in Communication in Journalism**

#### **FACULTY:**

**Ramaris Albert Trinidad,** Ph.D., Complutense University of Madrid, 2015. Assistant Professor. Technologies Content and information structure; Database journalism; Digital visualizations.

**Rubén Ramírez Sánchez,** Ph.D., University of New Mexico, 2007. Professor. Media convergence; Technology and culture; Emerging media.

**Alfredo Rivas Vélez,** Ph.D., University of Puerto Rico, 2012. Assistant Professor. Communication and digital ideology, film studies, digital cultures, and digital communication and media.

**Israel Rodriguez Sánchez,** Ph.D., Complutense University of Madrid, 2016. Assistant Professor. Investigative journalism, digital narratives, public sphere, journalism, and diversity.

#### **ADMISSION REQUIREMENTS:**

## General Requirements of Río Piedras Campus:

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Admission Requirements:**

- 1. Bachelor's degree or its equivalent from a recognized university.
- 2. Proficiency in Spanish and sufficient English language skills to read and interpret texts.
- 3. Minimum GPA of 3.00 on a 4.00 scale.

#### **Required Documents for Admission:**

- 1. Admission Application for Graduate Studies in electronic format.
- 2. Two official academic transcripts.
- 3. Two letters of recommendation for Graduate Studies in electronic format.
- 4. An essay outlining your purpose for pursuing graduate studies in communication.
- 5. An essay detailing the area or topic of research you are interested in developing as part of your academic training (maximum of three pages).
- 6. A portfolio of journalistic writings or documentation of research and/or professional

associations (optional).

### **Graduation Requirements:**

- 1. Successfully complete the 30 credits of required courses and seminars.
- 2. Maintain a minimum GPA of 3.00.
- 3. Pass the Research Experience in Various Modalities thesis project.
- 4. Fulfill all graduation requirements within a period of four years or less.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Core Courses	9
COPU 6500 Communication Theories	3
COPU 6667 Perspectives and Methodologies of Communication Research	3
COPU 6517 Media Cultures and Structures	3
Specialization Courses: Journalism	9
COPU 6578 Journalism Theories and Ethics	3
COPU 6725 Journalism Seminar I	3
COPU 6726 Journalism Seminar II	3
Elective Courses	9
Graduate Project	3
COPU 6697 Research Experience in Various Modalities	3
Total Credits	30

#### **COURSE DESCRIPTIONS:**

The following course descriptions are the most recent entries in the Student Information System of the Office of the Registrar at the Río Piedras Campus, as of November 30, 2023. These will be included in the 2023-2024 Graduate Catalog.

#### **COPU 6500 Communication Theories**

Three credits. Three hours of lecture per week.

This course is designed for students entering the graduate program and focuses on the primary frameworks and perspectives that shape communication theories. Emphasis will be placed on pragmatic, sociotechnical, critical, and political-cultural approaches, which serve as the foundation for various communication theories. Topics will include Information Physical-Mathematical Theory, Social Theory based on language, Cognitive and Cultural Anthropology, Psychosociological Theory based on perception and interaction, the social and psychological

effects of communication, Mass Culture Theories, and the Critical Perspective as a reflection of bourgeois liberal culture. This course is offered in-person, in a hybrid format, and online.

## **COPU 6667 Perspectives and Methodologies of Communication Research**

Three credits. One and a half hours of lecture and one and a half hours of discussion per week.

Examination of the various dominant perspectives and methodologies in the study of communication and their relationship with the theoretical assumptions that underpin them. Identification of research areas and methodological approaches. Knowledge of the skills required to conduct research/projects at the graduate level in the field of communication. This course is offered in-person, hybrid, and online.

#### **COPU 6517 Media Cultures and Structures**

Three credits. Three hours of lecture per week.

Study of cultural processes and their relationship to concepts such as discourse, ideology, and mediation. Analysis of the primacy of communication structures, especially in the new multimedia context as the core of contemporary cultural processes. Evaluation of cultural products arising from emerging modes and structures of communication, such as digital mediation, convergence, and the political economy of information. This course is offered in-person, hybrid, and online.

## **COPU 6578 Journalism Theories and Ethics**

Three credits. Three hours of lecture per week.

Prerequisite: COPU 6500, COPU 6667.

Analysis of the journalistic field based on the study of fundamental historical references, the processes of news content production, and the evolution of the press in the digital society communication ecosystem (media convergence, post-industrial journalism, and transmedia narrative). Reflection on the social responsibility of the press, journalistic ethics, relevant regulations, and legislation affecting the profession.

#### **COPU 6725 Journalism Seminar I**

Three credits. Three hours of seminar per week.

Prerequisites: COPU 6500, COPU 6650.

This course explores cultural themes and production issues within journalism. It can be repeated for credit when the theme differs.

#### **COPU 6726 Journalism Seminar II**

Three credits. Three hours of seminar per week.

Prerequisites: COPU 6501, COPU 6650.

This course examines social, political, and economic issues and challenges in journalism. Students will develop study proposals related to the main theme, from which specific topics for in-depth discussion will be identified. The course can be repeated for credit when the theme differs. It is offered in-person, in hybrid format, and online.

# **COPU 6697 Research Experience in Various Modalities**

Three credits. Three hours of thesis work per week.

Prerequisite: COPU 6667 and authorization from the Graduate Program.

The research experience is designed to demonstrate mastery of analysis skills, critical thinking, and the relevant theories and methodologies within the field of communication. This exercise can take one of two forms: a) a publishable article in a peer-reviewed journal; b) a creative/professional project. For a creative/professional project, the student will produce a narrative detailing the development of the required components of the experience, along with a prototype of the central creative/professional product. This research experience constitutes a full workload for the student.

#### OTHER COURSE DESCRIPTIONS:

#### COPU 6508 Mass Communication in Latin America.

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Reading and group discussion on the role of mass communication in the so-called underdeveloped countries in Latin America. It demands, from its inception, a rigorous definition of the terms that will be used during the weekly dialogues among students, professors, and guest speakers. The first area of study will be the current social historical reality of Latin America today, followed by the problems and perspectives of the mass community. The second half of the course will be a collective study of the socio-political and economic role of mass media in Latin America. Effective as of January 2021.

# **COPU 6557 News: Concept and Writing**

Three credits. Three hours of lecture per week.

Intensive course, consisting of lectures and workshops, on news concepts and journalistic writing; analysis of different styles of news; writing informative news for all media.

## **COPU 6559 Advanced Techniques in Publication Design**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Advanced theory and practice of editing, proofreading, and layout of information, headlines, and photographs for publication. Analysis of selection criteria, preparation, and presentation of the various elements that compose any page of a publication.

## **COPU 6574 Latin American Cinema**

Three credits. Three hours of lecture per week.

This course explores the most significant Latin American cinemas—specifically those of Argentina, Mexico, Brazil, and Cuba—from their origins to the 1970s. Emphasis will be placed on key figures, representative works, and the unique challenges faced by these cinematographies. Effective as of January 2021.

#### **COPU 6607 Television Seminar**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Design and development of research on some aspects of television communication. Students may conduct this work individually or in teams.

#### **COPU 6655 Audience Studies**

Three credits. Three hours of lecture per week.

Prerequisite: COPU 6650 or professor's authorization.

This course examines the behavior of mass communication receivers in relation to the media. It analyzes audience characteristics through an applied theory perspective, with a particular emphasis on surveys as a method of audience research. Students will study all aspects of audience surveys, including questionnaire construction and result analysis.

# **COPU 6656 Critical Analysis of Media Messages**

Three credits. Three hours of lecture per week.

Study of the various perspectives for analyzing messages produced by mass media. Includes textual signification strategies and the dynamics of effects generated by the analyzed messages.

# **COPU 6660 Independent Studies**

Three credits. Each study will have a value in credit hours of three credits.

Prerequisite: Prior authorization from the director.

Each student has the right to select a library research project within the field of communications, with the guidance of a faculty tutor.

#### **COPU 6661 Independent Studies**

Three credits. Independent research.

Prerequisite: Completion of a research study in COPU 6660.

Independent research study in communications.

#### **COPU 6665 Advanced Research in Communication**

Three credits. Three hours of lecture per week.

Prerequisites: COPU 6667 and/or professor's authorization.

In-depth analysis of scientific research methods and public communication phenomena with an emphasis on the practical aspect of the research process. Students will develop individual research projects under the supervision of the professor.

# **COPU 6675 Symbolic Production, Reception, Consumption**

Three credits. One and a half hours of lecture and one and a half hours of discussion per week.

Study of symbolic production processes from a semiotic, linguistic, and anthropological perspective. Discussion of reception and cultural consumption practices based on their aesthetic and cultural aspects.

## **COPU 6695 Thesis Proposal Seminar**

Three credits. Three hours of seminar per week.

Prerequisite: Successful Completion of the Qualifying Exam.

Intensive development of the thesis or project proposal, utilizing all the constitutive elements of a proposal.

#### **COPU 6696 Thesis**

Three credits.

Prerequisite: COPU 6695

Development and presentation of a research project in the format of a master's thesis or a creative project equivalent. The student will be exposed to a series of guidelines aimed at providing useful elements for the development of their research and the presentation of their final work.

#### **COPU 6698 Continuation of Research Experience in Various Modalities**

Zero credits. Three hours of thesis work per week.

Prerequisite: COPU 6697

Continuation of the Research Experience in Various Modalities. This course is designed for students who require additional time to develop their projects. Students will present their completed projects upon finishing the course. This experience constitutes a full academic workload for the student.

#### **COPU 6705 Seminar in Communication I**

Three credits. Three hours of seminar per week.

Prerequisite: COPU 6501, COPU 6650.

Study of broad themes and problems of theoretical and methodological aspects of communication. The course may be repeated when the theme is different.

#### **COPU 6706 Seminar in Communication II**

Three credits. Three hours of seminar per week.

Prerequisite: COPU 6501, COPU 6650.

Study of broad themes and problems of symbolic and cultural production aspects of communication. The course may be repeated when the theme is different.

# **COPU 6707 Seminar in Communication III**

Three credits. Three hours of seminar per week.

Prerequisites: COPU 6501, COPU 6650.

Study of broad themes and problems of sociological, political, and economic aspects of communication. The course may be repeated when the theme is different. This course is offered in-person, hybrid, and online course.



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Website: https://faci.uprrp.edu/maestria-comunicacion/

#### **DEGREE:**

## Master of Arts in Communication in Theory and Research

#### **FACULTY:**

**Ramaris Albert Trinidad,** Ph.D., Complutense University of Madrid, 2015. Assistant Professor. Technologies; Content and structure of information; Database journalism; Digital visualizations.

**Rubén Ramírez Sánchez,** Ph.D., University of New Mexico, 2007. Professor. Media convergence; Technology and culture; Emerging media.

**Alfredo Rivas Vélez,** Ph.D., University of Puerto Rico, 2012. Assistant Professor. Communication and digital ludology, film studies, digital cultures, and digital communication and media.

**Israel Rodriguez Sánchez,** Ph.D., Complutense University of Madrid, 2016. Assistant Professor. Investigative journalism, digital narratives, public sphere, journalism, and diversity.

## **ADMISSION REQUIREMENTS:**

### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Admission Requirements:**

- 1. Bachelor's degree or its equivalent from a recognized university.
- 2. Proficiency in the Spanish language and sufficient knowledge of English to read an interpret it.
- 3. Minimum GPA of 3.00 on a 4.00 scale.

### **Required Documents for Admission:**

- 1. Electronic Application for Graduate Studies.
- 2. Two official academic transcripts.
- 3. Two recommendation letters for Graduate Studies in electronic format.

- 4. Submission of an essay about the purpose of your graduate studies in communication and the area or topic of research you are interested in developing as part of your academic training (maximum of three pages.)
- 5. Portfolio of journalistic writings or research and/or professional associations (optional.)

# **Graduation Requirements:**

- 1. Successfully complete the 30 credits of courses and seminars required by the Program.
- 2. Maintain a minimum academic index of 3.00 points.
- 3. Pass the Research Experience in Various Modalities thesis project.
- 4. Fulfill all graduation requirements within a period of 4 years or less.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Core Courses	9
COPU 6500 Communication Theories	3
COPU 6667 Perspectives and Methodologies of Communication Research	3
COPU 6517 Media Cultures and Structures	3
Specialization Courses: Theory and Research	9
COPU 6705 Seminar in Communication I	3
COPU 6706 Seminar in Communication II	3
COPU 6707 Seminar in Communication III	3
Elective Courses	9
Graduate Project	3
COPU 6697 Research Experience in Various Modalities	3
Total Credits	30

#### **COURSE DESCRIPTIONS:**

These course descriptions are the most recent entries recorded in the Student Information System of the Registrar's Office at the Río Piedras Campus, as of November 30, 2023. They will be included in the Graduate Catalog for the 2023-2024 academic year.

#### **COPU 6500 Communication Theories**

Three credits. Three hours of lecture per week.

This introductory course for graduate students explores the key frameworks and perspectives that shape communication theories. Students will examine various approaches, including pragmatic, sociotechnical, critical, and political-cultural, which inform the development of communication theories. Key topics include Information Physical-Mathematical Theory, Social Theory based on language, Cognitive and Cultural Anthropology, Psychosociological Theory focusing on perception and interaction, as well as the social and psychological effects of communication. Additionally, Mass Culture Theories and the Critical Perspective, reflecting bourgeois liberal culture, will be discussed. This course is offered in-person, in hybrid format, and online.

## **COPU 6667 Perspectives and Methodologies of Communication Research**

Three credits. One and a half hours of lecture and one and a half hours of discussion per week.

Examination of the various dominant perspectives and methodologies in the study of communication and their relationship with the theoretical assumptions that underpin them. Identification of research areas and methodological approaches. Knowledge of the skills required to conduct research/projects at the graduate level in the field of communication. This course is offered in-person, hybrid, and online.

#### **COPU 6517 Media Cultures and Structures**

Three credits. Three hours of lecture per week.

This course examines the interplay between cultural processes and key concepts such as discourse, ideology, and mediation. Students will analyze the central role of communication structures, particularly within the contemporary multimedia landscape, as a driving force behind cultural processes. The course will also evaluate cultural products that emerge from new modes and structures of communication, including digital mediation, convergence, and the political economy of information. This course is available in-person, in hybrid format, and online.

#### **COPU 6705 Seminar in Communication I**

Three credits. Three hours of seminar per week.

Prerequisite: COPU 6501, COPU 6650.

Study of broad topics and issues related to theoretical and methodological aspects of communication. The course may be repeated when the topic is different.

#### **COPU 6706 Seminar in Communication II**

Three credits. Three hours of seminar per week.

Prerequisite: COPU 6501, COPU 6650.

Study of broad topics and issues related to symbolic and cultural production aspects of communication. The course may be repeated when the topic is different.

## **COPU 6707 Seminar in Communication III**

Three credits. Three hours of seminar per week.

Prerequisites: COPU 6501, COPU 6650.

This course explores a wide range of sociological, political, and economic aspects of communication. Students will engage with diverse topics, and the course may be repeated when new themes are introduced. It is offered in-person, in hybrid format, and online.

# **COPU 6697 Research Experience in Various Modalities**

Three credits. Three hours of thesis work per week.

Prerequisite: COPU 6667 and authorization from the Graduate Program.

The research experience is an exercise demonstrating mastery of analysis skills, critical thinking, theories, and methodologies relevant to the field of communication. This exercise can take one of two modalities: a) publishable article in an arbitrated journal in the field; b) creative/professional project. In the case of a creative/professional project, the student will produce a project narrative (depending on the adopted modality) that accounts for the development of the required components of the experience, accompanied by a prototype of the central creative/professional product of the project. It constitutes a full workload for the student.

#### OTHER COURSE DESCRIPTIONS:

#### **COPU 6578 Journalistic Theories and Ethics**

Three credits. Three hours of lecture per week.

Prerequisite: COPU 6500, COPU 6667.

Analysis of the journalistic field based on the study of fundamental historical references, the processes of news content production, and the evolution of the press in the digital society communication ecosystem (media convergence, post-industrial journalism, and transmedia narrative). Reflection on the social responsibility of the press, journalistic ethics, relevant regulations, and legislation affecting the profession.

#### COPU 6555 Radio and Television Journalism

Three credits. One and a half hours of lecture and one and a half hours of laboratory per week.

The editing of radio and television news within their own techniques, various formats, laws, and regulations governing these electronic news media.

#### **COPU 6556 Journalism and Public Affairs**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Techniques in preparing reports on public affairs. Treatment and content of journalistic information on court trials, public hearings, legislation, press conferences, government scandals, and public policy.

## **COPU 6557 News: Concept and Writing**

Three credits. Three hours of lecture per week.

Intensive course, consisting of lectures and workshops, on news concepts and journalistic writing; analysis of different styles of news; writing informative news for all media.

# **COPU 6559 Advanced Techniques in Publication Design**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

This course delves into the advanced theories and practices of editing, proofreading, and layout design for publication. Students will analyze selection criteria and learn how to prepare and present various elements, including text, headlines, and photographs, that compose a publication page.

#### **COPU 6607 Seminar in Television**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Design and development of research on some aspects of television communication. Students may conduct this work individually or in teams.

#### **COPU 6655 Audience Studies**

Three credits. Three hours of lecture per week.

Prerequisite: COPU 6650 or professor's authorization.

The course studies the behavior of mass communication receivers in their relationship with the media. Audience characteristics are analyzed from an applied theory perspective, with emphasis on surveys as a research method for the audience. All aspects of a survey on the audience, from questionnaire construction to results analysis, will be studied.

## **COPU 6656 Critical Analysis of Media Messages**

Three credits. Three hours of lecture per week.

Study of the various perspectives for analyzing messages produced by mass media. Includes textual signification strategies and the dynamics of effects generated by the analyzed messages.

## **COPU 6660 Independent Studies**

Three credits. Each study will have a value in credit hours of three credits.

Prerequisite: Prior authorization from the director

Every student has the right to select, within the field of communications and with the assistance of a faculty tutor, a library research project.

#### **COPU 6661 Independent Studies**

Three credits. Independent research.

Prerequisite: Completion of a research study in COPU 6660.

Independent research study in communications.

#### **COPU 6665 Advanced Research in Communication**

Three credits. Three hours of lecture per week.

Prerequisites: COPU 6667 and/or professor's authorization.

In-depth analysis of scientific research methods and public communication phenomena with an emphasis on the practical aspect of the research process. Students will develop individual research projects under the supervision of the professor.

## **COPU 6675 Symbolic Production, Reception, Consumption**

Three credits. One and a half hours of lecture and one and a half hours of discussion per week.

Study of symbolic production processes from a semiotic, linguistic, and anthropological perspective. Discussion of reception and cultural consumption practices based on their aesthetic and cultural aspects.

### **COPU 6695 Thesis Proposal Seminar**

Three credits. Three hours of seminar per week.

Prerequisite: Successful Completion of the Qualifying Exam

Intensive development of the thesis or project proposal, utilizing all the constitutive elements of a proposal.

#### **COPU 6696 Thesis**

Three credits.

Prerequisite: COPU 6695

This course focuses on the development and presentation of a research project, which may take the form of a master's thesis or an equivalent creative project. Students will receive comprehensive guidelines designed to assist them in the research process and ensure the effective presentation of their final work.

## **COPU 6698 Continuation of Research Experience in Various Modalities**

Zero credits. Three hours of thesis work per week.

Prerequisite: COPU 6697

Continuation of the Research Experience in Various Modalities for students requiring additional time in the development of their project, which they present upon completion of this course. It constitutes a full academic workload for the student.

#### **COPU 6725 Journalism Seminar I**

Three credits. Three hours of seminar per week.

Prerequisites: COPU 6500, COPU 6650.

This course examines the cultural themes and production challenges within the field of journalism. Students will engage with various topics, and the course may be repeated when new themes are introduced.

#### **COPU 6726 Journalism Seminar II**

Three credits. Three hours of seminar per week.

Prerequisites: COPU 6501, COPU 6650.

This course explores the social, political, and economic issues and challenges facing journalism today. Students will develop study proposals related to the main theme, from which specific topics will be identified for in-depth discussion. The course may be repeated when new themes are introduced and is offered in-person, in hybrid format, and online.



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#### **DEGREE:**

#### **Master of Information Sciences**

The Graduate Program in Information Sciences and Technologies prepares professionals to meet emerging trends in the information field and the evolving demands of society. This master's program offers two areas of emphasis: Library and Information Sciences and Knowledge Management. Both specializations include shared core courses, interdisciplinary approaches—such as Evidence-Based Practice and Problem-Based Learning—a Research Seminar (Knowledge Application/Capstone), and the creation of an electronic professional portfolio.

**ACCREDITATIONS:** American Library Association (Committee on Accreditation)

#### **FACULTY**:

Claudia D. De Souza, Ph.D., University Carlos III of Madrid, 2018. Assistant Professor. Open science in the Caribbean.

**Noraida Domínguez Flores,** Ph.D., Nova Southeastern University, 2010. Associate Professor. Integration of technology in teaching; Teaching information literacy and technological skills; Knowledge Management; Qualitative research; Communities of Practice.

**Eliut Flores Caraballo,** Ph.D., University of Texas, 1991. Professor. Integration of information technologies into teaching; Distributed learning; Knowledge management; Information services consulting.

**José A. Sánchez Lugo,** Ed.D., Pennsylvania State University, 1998. Professor. Effective integration of technology into education and information services; Creation of online learning communities; Qualitative research; Evaluation of processes and products; Creation of informational products.

Carlos Suárez Balseiro, Ph.D., University Carlos III of Madrid, 2004. Professor. Information management as a strategic resource; Basic principles of knowledge management; Evaluative bibliometrics; Quantitative methods applied to the management of information units.

**Betsaida Vélez Natal,** D.L.S., Columbia University, 1999. Associate Professor. Information needs of bank managers; Legal information; Archival science and document management; Production and use of information; Qualitative research.

# **ADMISSION REQUIREMENTS:**

# **General Requirements of the Río Piedras Campus:**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Requirements of the Master's Program:**

## Candidates for admission must meet the following requirements:

- 1. Completion of a bachelor's degree in any discipline, or its equivalent, with a minimum academic index of 3.00 points.
- 2. Submission of two letters of recommendation.
- 3. An essay in which the candidate demonstrates proficiency in language, critical thinking skills, and the ability to organize and articulate ideas clearly.
- 4. Demonstrate proficiency in both Spanish and English languages, as classes are generally taught in Spanish, but most of the professional literature of Library and information Sciences and Technologies is published in English, and visiting professors give lectures in this language.
- 5. Demonstrate proficiency in writing skills and style using the computer as a basic tool for work.

# **GRADUATION REQUIREMENTS:**

- 1. Complete 36 credits with a minimum academic index of 3.00 points.
- 2. Present an electronic portfolio, cumulative, demonstrating accomplishments and experiences throughout their studies.

#### STUDY PROGRAM:

#### AREA OF EMPHASIS: LIBRARY AND INFORMATION SCIENCE

Program Requirements	Credits
Core Courses	12
CINF 6705 Information, Knowledge, and Society	3
CINF 6706 Research Methods in Information Sciences	3
CINF 6707 Information and Knowledge Technologies	3
CINF 6708 Fundamentals of Information and Knowledge Organization	3
Required Courses	6
CINF 6806 Organization and Retrieval of Information and Knowledge	3
CINF 6807 Reference Products and Services	3
Coding Electives CINF	9
CINF 6XXX	3
CINF 6XXX	3

CINF 6XXX	3
Free Electives (Of 6000 codification or higher at the Campus)	6
Free Elective	3
Free Elective	3
Capstone Course (Does not count as a complete task)	3
CINF 6998 Research Seminar: Application of Knowledge (Capstone)	3
Total Credits	36

## AREA OF EMPHASIS: KNOWLEDGE MANAGEMENT

Program Requirements	Credits
Core Courses	12
CINF 6705 Information, Knowledge, and Society	3
CINF 6706 Research Methods in Information Sciences	3
CINF 6707 Information and Knowledge Technologies	3
CINF 6708 Fundamentals of Information and Knowledge Organization	3
Required Courses	6
CINF 6905 Fundamentals and Applications of Knowledge Management	3
CINF 6906 Strategies, Innovations, and Techniques for Knowledge Management	3
Coding Electives CINF	6
CINF 6XXX	3
CINF 6XXX	3
Free Electives (Of 6000 codification or higher at the Campus)	9
Free Elective	3
Free Elective	3
Free Elective	3
Capstone Course (Does not count as a complete task)	3
CINF 6998 Research Seminar: Application of Knowledge (Capstone)	3
Total Credits	36

## **COURSE DESCRIPTION:**

These course descriptions are the latest recorded in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the Graduate Catalog 2023-2024.

# **CINF 6705 Information, Knowledge, and Society**

Three credits. Three hours of discussion per week.

This course examines the evolution of processes related to the creation, recording, processing, and transmission of information and knowledge from the emergence of early civilizations to the present day. It is aimed at students of Library Science and Information Science, providing them with a

general understanding of the characteristics and importance of information and knowledge flows, with a special emphasis on contemporary society. Epistemological and disciplinary development issues, the functions of libraries and other information units, as well as the professional role of information in society, are discussed. This course is offered in-person, hybrid, and online.

#### **CINF 6706 Research Methods in Information Sciences**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6808.

This course provides students with an opportunity to explore the theoretical foundations of scientific research and its application in library science, information science, and knowledge management. Students will cultivate the knowledge and skills necessary to appreciate and engage in research, contributing to the advancement of the field from an interdisciplinary perspective. The course will cover various quantitative and qualitative research techniques, equipping students with the theoretical and methodological foundations needed to apply their learning throughout their studies. Additionally, the importance and value of research in library and information sciences will be analyzed, with a focus on its role in addressing specific societal challenges. New research trends, including evidence-based practice, will also be examined. This course is offered in-person, in a hybrid format, and online.

# **CINF 6707 Information and Knowledge Technologies**

Three credits. Three hours of lecture per week.

Corequisite: CINF 6705

This course, designed for Information Science students, introduces information and communication technologies for information and knowledge management. It addresses technological convergence processes and the nature of the digital technology industry. Topics include computational technologies, networks, databases, the Internet, Web 2.0+, and other emerging technologies. Students will familiarize themselves with various applications and technological platforms and tools used in information and knowledge units to enter the workforce with broad knowledge of field trends. The course may be offered in a hybrid modality to enhance student experience with virtual education technologies. This course is offered in-person, hybrid, and online.

## CINF 6708 Fundamentals of Information and Knowledge Organization

Three credits. Three hours of lecture per week.

Corequisite: CINF 6705

This course is designed to prepare students in the Information Science program with a comprehensive understanding of the principles, standards, and tools essential for organizing information across various media and organizational settings. Students will explore a range of manifestations, including catalogs, indexes, bibliographic networks, document inventories, archives, and other organizational entities. Key topics will include the analysis of cataloging and indexing structures, thematic representations using controlled vocabularies, bibliographic description, metadata, authority control, taxonomies, and classification systems. The course will also examine relevant standards and discuss emerging trends in the field, ensuring that students

are well-prepared to navigate the evolving landscape of information organization. This course is offered in-person, in a hybrid format, and online.

## CINF 6806 Organization and Retrieval of Information and Knowledge (Basic)

Three credits. Three hours of lecture per week. Prerequisites: CINF 6705, 6706, 6707, 6708.

This course discusses and analyzes the principles of information organization in theory and practice as an important factor for its effective access and use. Through lectures, discussions, and practical exercises, aspiring Information Science master's degree students will examine in-depth industry standards for descriptive and documentary cataloging, selection of access points, including descriptors and subject headings, and classification systems. The course covers the storage of integrated information in computerized databases, emphasizing the importance of understanding the community to be served to organize information effectively, facilitate its rapid access and use, and meet its information needs. Reflection on the importance of the information specialist in information organization and the need to develop basic knowledge and corresponding skills for employment in the workplace is emphasized. This course is offered online.

#### **CINF 6807 Reference Products and Services**

Three credits. Three hours of discussion per week.

Pre-requisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

This course offers an introduction to the utilization of reference sources and the organization and provision of reference services in libraries and other information units. It aims to prepare Information Science students for roles as reference librarians or to make informed decisions regarding the organization of reference services in various contexts. Key topics include reference policies, collection development for reference materials, types and uses of reference sources, and evaluation criteria for these sources. Additionally, the course addresses the integration of technology in virtual reference services and explores the ethical considerations relevant to professional practice. This course is available in-person, in a hybrid format, and online.

# CINF 6905 Fundamentals and Applications of Knowledge Management

Three credits. Three hours of lecture per week.

Pre-requisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

Introduction to the discipline and professional field of knowledge management. This course explores key theoretical concepts and models, addressing common strategies for managing knowledge in organizations and businesses to develop a deeper understanding of this emerging discipline. It provides master's students in Information Science with an emphasis on knowledge management with a holistic approach to the principles and practices impacting this field.

# CINF 6906 Strategies, Innovations, and Techniques for Knowledge Management

Three credits. Three hours of lecture per week.

This course, aimed at Information Science students, examines practical strategies and techniques to enhance intellectual capital in organizations and businesses. It covers procedures and



technologies required to implement these techniques and studies examples in various contexts. Students will engage in exercises designing and implementing the most commonly used techniques and strategies in the discipline to provide them with the basic competencies needed to work in the field. This course is offered in-person, hybrid, and online.

# **CINF 6998 Research Seminar: Application of Knowledge (Capstone)**

Three credits. Three hours of seminar per week.

Pre-requisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

The Capstone is designed for students in the master's program. It is an exercise in applying knowledge where students integrate into research lines established by professors. The process can be conducted in one or multiple stages: academic research projects may include literature reviews, instrument design, fieldwork, analysis, or evaluation of results. Projects creating solutions to information and knowledge problems may include result analysis or innovation, documentation of best practices, and case studies. The course is aimed at producing a presentation or publication reporting the results of the research or creation project. This course is offered online.

## OTHER COURSE DESCRIPTIONS:

# CINF 6907 Knowledge Generation, Communication, and Organizational Learning

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

This course addresses the processes of knowledge generation in organizations, from its discovery and capture to its communication and exchange in both tacit and explicit forms. Emphasis is placed on communication and leadership strategies that promote organizational learning and the development of a culture of collaboration with the support of technology. This course is offered in-person and hybrid.

# CINF 6908 Innovation Management: Idea to Implementation/Commercialization Cycle

Three credits. Three hours of lecture per week.

This course, aimed at Information Science students, analyzes dimensions and processes of knowledge creation and protection and intellectual property in organizational innovation initiatives. Strategies and techniques to stimulate innovation and best practices are identified to increase the competitiveness of the organization or company.

# CINF 6015 The Public Library: Its Clients and Services

Three credits. Three hours of conference per week.

Prerequisite: CINF 6000

This course examines the history, objectives, and functions of public libraries as vital components of the information landscape and integral parts of the communities they serve. Students will explore the various elements that make up public libraries and strategies for their effective management. Key topics include the diverse clientele in a multicultural society, the range of services provided, cooperative agreements, library systems, and the role of the public librarian.

Additionally, the course will address current trends and innovations in the field. Practical experiences will also be incorporated to enhance learning and application of concepts.

## CINF 6017 School Library Programs Integrated into the Curriculum

Three credits. Three hours of conference per week.

Prerequisites: CINF 6413 and 6000.

This course focuses on the objectives and service programs offered by school libraries, emphasizing their critical role in supporting educational goals. Students will explore various planning and organizational strategies, including how to effectively integrate these services into the school curriculum. The course includes practical experiences in the implementation, development, and evaluation of library programs and activities, allowing students to apply theoretical concepts in real-world settings. This course is offered online.

#### CINF 6019 The Role of the Librarian in Higher Education

Three credits. Three hours of discussion per week.

This course emphasizes the role of the librarian in institutions of higher education. It will briefly describe the origins of universities and their development in various parts of the world. It will emphasize the evolution and development of public and private higher education in Puerto Rico. Special attention will be paid to the administrative responsibilities of the academic librarian in post-secondary education institutions, both public and private. This course is offered in-person or hybrid.

#### CINF 6105 Production and Use of Information in the Humanities

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6005, 6100, and 6010.

This course examines the structure of information across various fields within the humanities, including religion, philosophy, mythology, languages, literature, music, and the performing and visual arts. Students will explore effective methods for accessing this information and become familiar with essential tools used in the humanities. The course will also cover specialized information services in the humanities, focusing on the diverse uses and user demographics of information in these disciplines.

#### **CINF 6107 Production and Use of Information in the Social Sciences**

Three credits. Three hours of discussion per week.

This course explores the evolution and emerging trends within the social sciences. It includes a critical analysis of the research methodologies and professional practices prevalent in these disciplines. Students will examine the challenges associated with the creation and utilization of information resources in the social sciences, focusing on the fundamental aspects of developing, managing, organizing, and disseminating these resources. Additionally, the course addresses the specific challenges faced by libraries, information centers, and information services in supporting the social sciences.

# CINF 6109 Production and Use of Information on Economics and Commerce

Three credits. Three hours of discussion per week.

This course focuses on the exploration of information sources pertinent to the business sector. Students will analyze general sources for economic and demographic statistics, as well as specialized sources tailored to specific industries, including construction, financial services, and tourism. Each source will be discussed within the context of its respective sector, emphasizing its significance to the economy, professional organizations, research centers, and major publishers. The course will cover both printed and electronic sources, providing a comprehensive understanding of the tools available for business research and analysis.

# **CINF 6110 Production and Use of Legal Information**

Three credits. Three hours of discussion per week.

Study of the main sources of information on legal sciences in the United States, Puerto Rico, and Spain. The origin and context in which they are developed are studied through the analysis of legislative, executive, and judicial processes. The research process, the main publishers, and providers of legal information, printed and electronic sources in the field, the various types of libraries, and the role of the legal information specialist are also studied.

#### CINF 6115 Production and Use of Information on Latin America and the Caribbean

Three credits. Three hours of discussion per week.

The course deals with the development and trends in the field of information in Latin America and the Caribbean. Evaluation and weighting of research methodologies and research in the field. Challenges posed by the creation and use of information resources on Latin America and the Caribbean. Evaluation, analysis, and weighting of said resources. Fundamental aspects of the development, management, organization, and dissemination of said resources. Challenges for libraries, information centers, archives, and information services for studies on Latin America and the Caribbean.

## **CINF 6117 Production and Use of Legal Information (Advanced)**

Three credits. Three hours of discussion per week.

Prerequisite: CINF 6110

This course examines the primary sources of information within specific areas of law, including labor law, tax law, environmental law, securities law, and the regulation of financial institutions. Emphasis will be placed on sources produced in Puerto Rico and the United States. Students will explore the origins of key legislative and regulatory sources, analyzing their characteristics, differences, and similarities. Through this study, students will gain a comprehensive understanding of the legal frameworks that govern various sectors and how these sources inform legal practice.

## CINF 6118 Production and Use of Information in Science and Technology

Three credits. Three hours of discussion per week.

Study of the development, current trends, and methodology of science and technology; the research process and problems; information resources in their various formats and media; information habits and needs of experimental scientists and technologists; and the education of information professionals specialized in science and technology.

## **CINF 6119 Production and Use of Government Information**

Three credits. Three hours of discussion per week.

This course introduces the unique nature and scope of multi-type government information resources, serving as essential information and reference materials for diverse clientele. It aims to ensure equitable access to these resources in the digital age. Students will explore government infrastructures and their corresponding units at the federal, state, local, regional, and international levels to understand the documentation generated by these entities. The course also emphasizes evaluating, selecting, acquiring, organizing, and developing government collections while creating value-added products that effectively meet client needs.

# CINF 6127 Production and Use of Information from International Organizations

Three credits. Three hours of discussion per week.

Study of the sources of legal information generated by non-governmental organizations and their affiliated agencies. Their origin and context are studied through the analysis of the structure and functions of the organizations. The process of selection and acquisition of resources is also studied. Includes organizations such as the United Nations, the Caribbean Community (CARICOM), and the Association of Caribbean States.

# **CINF 6208 Computerized Systems for Integrated Document Management**

Three credits. Three hours of discussion per week.

In this course, students will explore the fundamental technologies available for integrated document management using computerized systems. Given the complexity of operational models in contemporary organizations, there is a critical need for technologies that simplify and automate transaction processing and enhance information flow. Information specialists will gain familiarity with essential tools for organizing and retrieving digital information, managing workflows within document management systems, and administering electronic documents throughout an organization. This course is offered in-person, hybrid, and online.

## CINF 6209 Organization and Management of Documents and Information Access

Three credits. Three hours of discussion per week.

Prerequisites: Completion of information skills modules offered by EGCTI.

Corequisite: CINF 6705

This course examines concepts and practices related to the organization and management of documents in archives, libraries, documentation centers, and other organizations. It includes the study of access systems and methods of description and dissemination of information. Topics include collection organization and description, preparation of descriptive guides and inventories, and fund and collection management systems. The use of different industry standards for effective

document description and organization will be highlighted. Students will have the opportunity to apply the methodologies presented through in-class practical work, assignments, and a final project. The challenges posed by various information technologies for document preservation management will also be discussed. This course is offered in a hybrid format.

## **CINF 6215 Introduction to Computerized Database Design**

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of conceptualizing computerized databases. Each student will apply this knowledge by designing and programming a database and its corresponding documentation. Students will learn this skill in the context of their work as information specialists and with the aim of preparing them to design or evaluate databases for libraries and other information centers.

#### **CINF 6216 Technical Services in Law Libraries**

Three credits. Three hours of discussion per week.

Study of the various phases of technical services - collection development and management, organization of information resources in the context of law libraries. The course discusses the particularities of printed and electronic legal collections, major publishers, and the influence of information technology on the development and management of collections.

# **CINF 6217 Advanced Computerized Database Design**

Three credits. Three hours of discussion per week.

In this course, students will have the opportunity to delve into the conceptualization and programming of computerized databases. Each student will develop an advanced project, designing and programming a related database and its corresponding documentation. Students will learn these skills in the context of their work as information specialists and with the aim of preparing them to design or evaluate databases for libraries and other information centers.

# **CINF 6300 Information Technologies I**

Two credits. Two hours of discussion per week.

Introduction to information technologies, the value of information in different eras, the basic elements of this science, its development, and its projections.

## **CINF 6410 Development of a Consultancy Practice in Information Services**

Three credits. Three hours of discussion per week.

This course introduces students to the fundamental principles of consultancy practice in information systems and services. Students will have the opportunity to apply these principles through the development of a project tailored for a specific client. By engaging in hands-on experiences, students will enhance their skills in assessing client needs, designing effective

solutions, and delivering impactful recommendations within the context of information management.

# **CINF 6415 Strategic Planning (Workshop)**

One credit. One hour of discussion per week.

Prerequisite: CINF 6000

This workshop will familiarize students with the procedures and techniques of strategic planning.

## **CINF 6416 The School Library**

Three credits. Three hours of discussion per week.

In this course, the objectives, and functions of the school library as an essential element in the information world and an integral part of education will be discussed. The various components of the school library and how to manage them effectively will be presented. It will include practical experiences. This course is offered online.

# **CINF 6417 Document Manager**

Three credits. Three hours of discussion per week.

This course provides a comprehensive overview of effective administrative management practices for records administrators, emphasizing both theoretical foundations and practical applications relevant to Puerto Rico, the United States, and Latin America. It examines the organizational structure of records management units, highlighting the significance of planning, managing, and systematically evaluating records management practice. Key topics include the phases of the document and information life cycle—creation, evaluation, retention, and disposal—along with strategies for the description, organization, storage, disaster prevention, dissemination, and preservation of documents. Students will explore the parameters guiding these decisions and engage in the planning, development, and evaluation of public projects. The course includes hands-on laboratory sessions and requires students to complete either an individual or collaborative laboratory project. This course is offered in a hybrid format.

# CINF 6419 Files: Organization, Development, and Legislation

Two credits. Two hours of discussion per week.

This course explores the evaluation, selection, and organization processes of both public and private archives, with a focus on developing policies for the management and administration of various formats of archival materials. Students will engage with the historical context that has shaped the development and administration of archives, providing a deeper understanding of contemporary practices. Through a combination of theoretical frameworks and practical applications, the course will examine best practices for archive management in diverse settings. This course is offered in-person, hybrid, and online.

## **CINF 6426 Library Administration**

Three credits. Three hours of discussion per week.

This course provides an overview of the various administrative environments found in academic libraries, public libraries, and information centers. Students will acquire the knowledge and skills necessary to select and implement effective strategies for planning, organizing, developing, and continuously evaluating different types of libraries in response to the challenges of the 21st century. The course emphasizes the importance of cultivating proactive attitudes for managing change and offers frameworks for problem-solving and responsible decision-making. Additionally, it highlights the significance of collaboration and teamwork among personnel within information entities. This course is offered in-person, hybrid, and online.

# **CINF 6427 Information Management as a Strategic Resource**

Three credits. Three hours of discussion per week.

This course emphasizes the strategic value of information for organizations. It describes the processes aimed at identifying, categorizing, and evaluating information resources within an organization. It examines the use of these resources by various components of the organization and the results generated from that utilization. The use of information resources will be evaluated with a view to developing effective strategies to improve the management of these resources.

# **CINF 6429 Special Libraries**

Three credits. Three hours of discussion per week.

Study of special libraries and information centers and their various manifestations. Discussion of historical and contemporary development, including the most important elements of special libraries, such as management, budget, types of clienteles, development of collections - both print and electronic, customer services, professional ethics, and the role of information specialists.

## **CINF 6507 Conservation, Preservation, and Restoration of Documents**

Three credits. Three hours of discussion per week.

This introductory course explores the management of conservation and preservation services in information centers, with a particular focus on libraries and archives. Students will gain a comprehensive understanding of the fundamentals of preventive conservation, including the evaluation criteria necessary for informed decision-making regarding the intervention of documentary materials by affiliated professionals. The course addresses the complexities of preservation planning, considering the intrinsic needs of the most common media and formats, as well as the deterioration agents that significantly impact documentary collections, particularly in tropical environments. This course is offered in-person, hybrid, and online.

## **CINF 6800 Clinical Experiences in Information Services**

One credit. One hour of workshop per week.

Students will be assigned to a library, documentation center, or archive for three hours once a week. They will work under the supervision of a professional librarian or information specialist in one or two service areas, as agreed upon with the supervising professor.

## **CINF 6805 Clinical Experiences in School Libraries**

One credit. One hour of workshop per week.

This course aims to provide students with practical experiences in offering integrated school library services within the curriculum. Students will develop activities from the Reading Orientation Program and the Program for the Development of Information and Critical Thinking Skills within the mentioned context. Other library services will also be offered by students. This course is offered online.

#### **CINF 6808 User Studies and Information Needs**

Three credits. Three hours of discussion per week.

Corequisites: CINF 6705, CINF 6706.

Introduction to concepts, methods, and techniques related to user studies and information needs diagnosis. The study of informational behavior and information use is considered important. The evolution of user studies and some of the models used for the study of informational behavior are analyzed. The needs and usage habits of information from different user communities in the context of different information units are exposed. Emphasis is placed on the importance of these studies for a user-centered library practice and the research activity that generates the necessary evidence for such practice. This course is offered online.

# CINF 6809 Selection and Acquisition of Information Knowledge Resources

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6706, 6707, 6708, CINF 6806, 6807.

This course provides students in the Information Science program with a comprehensive overview of the collection development process. Key topics include the formulation of collection development policies, selection criteria, censorship and intellectual freedom, evaluation and disposal of collections, and the sharing of information resources. Students will also learn about negotiating usage licenses, as well as the maintenance, preservation, and conservation of collections. The course delves into the book market and the information industry, exploring relevant organizations, associations, awards, and information sources within this field. It exposes students to various acquisition processes, including purchasing, exchanging, donating, and legal deposit, while also examining the roles of vendors and information resource suppliers. Furthermore, the course introduces automation in acquisitions as a practical working model. This course is offered in-person and online.

## CINF 6810 Organization and Retrieval of Information and Knowledge (Advanced)

Three credits. Three hours of lecture per week.

Prerequisite: CINF 6806, CINF 6705, CINF 6706, CINF 6707, CINF 6808.

In-depth discussion and analysis of the description and access to electronic resources and other multi-type resources. Includes bibliographic control of electronic serial publications, e-books, video recordings, among others, and their description using professional standards such as AACR2 and RDA. Extensive discussion on authority control in subjects and classification by the Library of Congress (LCC). Additionally, metadata schemes such as Dublin Core and Metadata Object Description (MODS) are explored. Practice will be provided in the use of different tools so that

students can effectively perform in new work environments. This course is offered in-person, hybrid, and online.

# **CINF 6815 Informational and Technological Competencies**

Three credits. Three hours of lecture per week.

Prerequisites: CINF6705, CINF6706, CINF6707, CINF6708.

This course explores the processes and strategies for developing informational and technological competencies, specifically tailored for students in Library Science and Information Sciences. The objective is to equip students with the skills necessary to design effective programs focused on information literacy and critical thinking. Additionally, the course will cover methods for assessing the attainment of these competencies and will provide practical experiences across various instructional models. This course is offered in-person or online.

## **CINF 6816 Information Services Management**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

Lecture and discussion on the basic concepts of library and information center management, aimed at students of information-related professions, so that they can make informed decisions in their future areas of work. Terminology, planning process, organization, development, innovation, and continuous evaluation are included. Concepts of direction, leadership, human resources, physical facilities, technological applications, finances, and services are discussed.

# **CINF 6995 Special Topics in Information Sciences and Technologies**

One to three credits.

Prerequisite: Basic courses.

This advanced seminar explores a range of contemporary topics of interest within the field of information. The course duration varies based on the number of credits. Students may enroll multiple times for credit, provided the seminar covers different topics with each iteration.

#### **CINF 6996 Independent Study**

One to three credits.

Prerequisite: Basic courses.

Intensive individual study of a topic or problem in the field of information under the supervision of a faculty member. As an outcome, a written paper meeting the requirements of a research paper will be presented.

## CINF 6997 Workshop in Information Sciences and Technologies

One to three credits.

Prerequisite: Basic courses.

Intensive study on an aspect of library science and information science under the guidance of an expert in that field. The duration varies according to the number of credits. May be repeated for credit.



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#### **DEGREE:**

## Post Bachelor Certificate in Records Management and Archives

The Post-Baccalaureate Certificate in Document and Archives Management offers students the flexibility and convenience of distance learning to specialize in this field. The curriculum primarily consists of online courses, occasionally supplemented with face-to-face sessions or video conferencing. Through the use of chats, discussion forums, and email communication, students enjoy continuous interaction with their professors and peers, enhancing their engagement in the learning process.

**ACCREDITATIONS:** American Library Association (Committee on Accreditation)

#### **FACULTY:**

Claudia D. De Souza, Ph.D., University Carlos III of Madrid, 2018. Assistant Professor. Open science in the Caribbean.

**Noraida Domínguez Flores,** Ph.D., Nova Southeastern University, 2010. Associate Professor. Integration of technology in teaching; Teaching information literacy and technological skills; Knowledge Management; Qualitative research; Communities of Practice.

Eliut Flores Caraballo, Ph.D., University of Texas, 1991. Professor. Integration of information technologies into teaching; Distributed learning; Knowledge management; Information services consulting.

**José A. Sánchez Lugo,** Ed.D., Pennsylvania State University, 1998. Professor. Effective integration of technology into education and information services; Creation of online learning communities; Qualitative research; Evaluation of processes and products; Creation of informational products.

Carlos Suárez Balseiro, Ph.D., University Carlos III of Madrid, 2004. Professor. Information management as a strategic resource; Basic principles of knowledge management; Evaluative bibliometrics; Quantitative methods applied to the management of information units.

**Betsaida Vélez Natal,** D.L.S., Columbia University, 1999. Associate Professor. Information needs of bank managers; Legal information; Archival science and document management; Production and use of information; Qualitative research.

**ADMISSION REQUIREMENTS:** 

# General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Program Requirements**

- 1. Maintain a cumulative GPA of 3.00 or higher.
- 2. Hold a bachelor's degree in education or possess a valid basic teaching license. Alternatively, applicants may qualify with a bachelor's degree in any discipline, provided they have relevant library work experience.

# **GRADUATION REQUIREMENTS:**

Complete 18 credits with a GPA of 3.00 points.

## **STUDY PROGRAM**:

Program Requirements	Credits
CINF 6208 Computerized Systems for Integrated Document Management	3
CINF 6209 Organization and Management of Documents and Information Access	3
CINF 6417 Document Manager	3
CINF 6419 Files: Organization, Development, and Legislation	2
CINF 6507 Conservation, Preservation, and Restoration of Documents	3
CINF 6707 Information and Knowledge Technologies	3
CINF 6800 Clinical Experiences in Information Services	1
Total Credits	18

## **Course Descriptions:**

These course descriptions are the latest recorded in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the Graduate Catalog 2023-2024.

## **CINF 6208 Computerized Systems for Integrated Document Management**

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of available technologies for managing documents in an integrated manner using computerized technologies. The complexity of operational models in many organizations requires the implementation of technologies that

simplify and automate transaction processing and information flow. Information specialists must be familiar with the technologies necessary to organize and retrieve digital information, manage information flow in document management systems, and administer an organization's electronic documents. This course is offered in-person, hybrid, and online.

## CINF 6209 Organization and Management of Documents and Information Access

Three credits. Three hours of discussion per week.

Prerequisites: Completion of information skills modules offered by EGCTI.

Corequisite: CINF 6705

This course examines concepts and practices related to the organization and management of documents in archives, libraries, documentation centers, and other organizations. It includes the study of access systems and methods of description and dissemination of information. Topics include collection organization and description, preparation of descriptive guides and inventories, and fund and collection management systems. The use of different industry standards for effective document description and organization will be highlighted. Students will have the opportunity to apply the methodologies presented through in-class practical work, assignments, and a final project. The challenges posed by various information technologies for document preservation management will also be discussed. This course is offered in a hybrid format.

# **CINF 6417 Document Manager**

Three credits. Three hours of discussion per week.

This course introduces effective administrative management of records administrators, in theory and practice with special emphasis on the reality of Puerto Rico, the United States, and Latin America. The organizational structure of the organizational unit, the importance of planning, managing, and systematically evaluating. Includes the study of the phases of the document and information life cycle, creation, evaluation, and retention. Additionally, it considers the description, organization, storage, prevention and disaster management, dissemination and use, disposal, or preservation of documents and the parameters governing these decisions. It presents and studies planning, development, and evaluation of public projects and strategies. Requires a laboratory and an individual or collective laboratory project. This course will be offered in a hybrid format.

## **CINF 6419 Files: Organization, Development, and Legislation**

Two credits. Two hours of discussion per week.

The course will analyze the process of evaluation, selection, and organization of public and private archives, the preparation of policies for the development and administration of different types of formats of public and private archives. The development and administration of public and private archives will be done from a historical perspective. This course is offered in-person, hybrid, and online.

## **CINF 6507 Conservation, Preservation, and Restoration of Documents**

Three credits. Three hours of discussion per week.

This is an introductory course to the management of conservation and preservation services in information centers. It provides an overview of the fundamentals of preventive conservation mainly in libraries and archives and establishes evaluation parameters for decision-making regarding the intervention of documentary materials by affiliated professionals. The course addresses the complexities in preservation planning by considering the intrinsic needs of the most common media and supports, in line with the deterioration agents that most affect documentary collections in the tropics. This course is offered in-person, hybrid, and online.

## **CINF 6707 Information and Knowledge Technologies**

Three credits. Three hours of lecture per week.

Corequisite: CINF 6705

This course, designed for Information Science students, introduces information and communication technologies for information and knowledge management. It addresses technological convergence processes and the nature of the digital technology industry. Topics include computational technologies, networks, databases, the Internet, Web 2.0+, and other emerging technologies. Students will familiarize themselves with various applications and technological platforms and tools used in information and knowledge units to enter the workforce with broad knowledge of field trends. The course may be offered in a hybrid modality to enhance student experience with virtual education technologies. This course is offered in-person, hybrid, and online.

# **CINF 6800 Clinical Experiences in Information Services**

One credit. One hour of workshop per week.

Students will be assigned to a library, documentation center, or archive for three hours once a week. They will work under the supervision of a professional librarian or information specialist in one or two service areas, as agreed upon with the supervising professor.

#### OTHER COURSE DESCRIPTIONS:

#### CINF 6015 The Public Library: Its Clients and Services

Three credits. Three hours of conference per week.

Prerequisite: CINF 6000

This course offers a thorough exploration of the history, objectives, and functions of public libraries, highlighting their essential role in the information landscape and their integral position within the communities they serve. It will present the various components that make up a public library and discuss effective management strategies for each. Key topics include the diverse types of clients in a multicultural society, the range of services provided, cooperative agreements, library systems, and the evolving role of the public librarian. Additionally, the course will examine current trends and innovations in the field, complemented by practical experiences that enable students to apply theoretical concepts in real-world contexts.

## CINF 6017 School Library Programs Integrated into the Curriculum

Three credits. Three hours of conference per week.

Prerequisites: CINF 6413 and 6000.

This course will detail the objectives of the services programs offered by the school library. It will discuss various planning and organization strategies, including their integration into the school curriculum. It includes practical experiences in the implementation, development, and evaluation of programs and their activities. This course is offered online.

## CINF 6019 The Role of the Librarian in Higher Education

Three credits. Three hours of discussion per week.

This course emphasizes the role of the librarian in institutions of higher education. It will briefly describe the origins of universities and their development in various parts of the world. It will emphasize the evolution and development of public and private higher education in Puerto Rico. Special attention will be paid to the administrative responsibilities of the academic librarian in post-secondary education institutions, both public and private. This course is offered in-person or hybrid.

#### CINF 6105 Production and Use of Information in the Humanities

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6005, 6100 and 6010.

This course focuses on the structure of information across various fields within the humanities, including religion, philosophy, mythology, languages, literature, music, and other performing and visual arts. It explores how to access this information, and the essential tools required for effective retrieval. Additionally, the course examines specialized information services in the humanities, analyzing the diverse uses of information within these disciplines and identifying the various users engaged with this information. Through this comprehensive approach, students will gain a deeper understanding of the complexities and significance of information in the humanities.

#### CINF 6107 Production and Use of Information in the Social Sciences

Three credits. Three hours of discussion per week.

The course covers the development and trends in the social sciences. An analysis of the research and professional methodologies used in these disciplines. Challenges posed by the creation and use of information resources in the social sciences. Fundamental aspects of the development, management, organization, and dissemination of said resources. Challenges for libraries, information centers, and information services for the social sciences.

# CINF 6109 Production and Use of Information on Economics and Commerce

Three credits. Three hours of discussion per week.

Study of information sources related to the world of business. General sources for economic and demographic statistics are analyzed. In addition, specific sources for various industries, such as construction, financial institutions, and tourism, are studied. The sources are discussed within the context of each sector, and their relative importance for the economy, professional organizations,

research centers, major publishers, among other aspects, is analyzed. Printed and electronic sources are included.

## **CINF 6110 Production and Use of Legal Information**

Three credits. Three hours of discussion per week.

Study of the main sources of information on legal sciences in the United States, Puerto Rico, and Spain. The origin and context in which they are developed are studied through the analysis of legislative, executive, and judicial processes. The research process, the main publishers, and providers of legal information, printed and electronic sources in the field, the various types of libraries, and the role of the legal information specialist are also studied.

# CINF 6115 Production and Use of Information on Latin America and the Caribbean

Three credits. Three hours of discussion per week.

This course explores the development and trends in the field of information within Latin America and the Caribbean. It emphasizes the evaluation and assessment of research methodologies relevant to this area, addressing the challenges associated with the creation and utilization of information resources pertaining to the region. Students will engage in the evaluation, analysis, and critical weighting of these resources, focusing on fundamental aspects of their development, management, organization, and dissemination. Additionally, the course examines the specific challenges faced by libraries, information centers, archives, and information services in supporting research and studies related to Latin America and the Caribbean.

# **CINF 6117 Production and Use of Legal Information (Advanced)**

Three credits. Three hours of discussion per week.

Prerequisite: CINF 6110

This course examines the primary sources of information in specific areas of law, including labor law, tax law, environmental law, securities, and financial institutions, with a particular emphasis on resources produced in Puerto Rico and the United States. Students will explore the origins of key legislative and regulatory sources, analyzing their characteristics, differences, and similarities. This comprehensive study will equip students with a deep understanding of the legal frameworks and resources relevant to these critical areas of law.

## CINF 6118 Production and Use of Information in Science and Technology

Three credits. Three hours of discussion per week.

This course explores the development, current trends, and methodologies in the fields of science and technology. It covers the research process and the associated challenges, as well as the various formats and media of information resources. Additionally, students will examine the information habits and needs of experimental scientists and technologists. The course also emphasizes the education and training of information professionals who specialize in science and technology, preparing them to effectively support the evolving needs of these disciplines.

#### CINF 6119 Production and Use of Government Information

Three credits. Three hours of discussion per week.

This course introduces the unique characteristics and scope of multi-type government information resources, serving as essential reference materials for diverse clienteles. It aims to ensure equitable access to such information in the digital age. Students will examine government infrastructures and their corresponding units at the federal, state, local, regional, and international levels to gain an understanding of the documentation produced. The course also focuses on the evaluation, selection, acquisition, organization, and development of these collections, emphasizing the creation of value-added products to meet the specific needs of clients.

# CINF 6127 Production and Use of Information from International Organizations

Three credits. Three hours of discussion per week.

Study of the sources of legal information generated by non-governmental organizations and their affiliated agencies. Their origin and context are studied through the analysis of the structure and functions of the organizations. The process of selection and acquisition of resources is also studied. Includes organizations such as the United Nations, the Caribbean Community (CARICOM), and the Association of Caribbean States.

# CINF 6215 Introduction to Computerized Database Design

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of conceptualizing computerized databases. Each student will apply this knowledge by designing and programming a database and its corresponding documentation. Students will learn this skill in the context of their work as information specialists and with the aim of preparing them to design or evaluate databases for libraries and other information centers.

#### **CINF 6216 Technical Services in Law Libraries**

Three credits. Three hours of discussion per week.

Study of the various phases of technical services - collection development and management, organization of information resources in the context of law libraries. The course discusses the particularities of printed and electronic legal collections, major publishers, and the influence of information technology on the development and management of collections.

## **CINF 6217 Advanced Computerized Database Design**

Three credits. Three hours of discussion per week.

In this course, students will explore the conceptualization and programming of computerized databases. Each participant will undertake an advanced project, which involves designing and programming a database along with its corresponding documentation. Through this process, students will acquire essential skills relevant to their roles as information specialists, preparing them to design and evaluate databases for libraries and other information centers.

#### **CINF 6300 Information Technologies I**

Two credits. Two hours of discussion per week.

Introduction to information technologies, the value of information in different eras, the basic elements of this science, its development, and its projections.

# CINF 6410 Development of a Consultancy Practice in Information Services

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of consultancy practice in information systems and services and will have the opportunity to apply these principles in developing a project for a particular client.

# **CINF 6415 Strategic Planning (Workshop)**

One credit. One hour of discussion per week.

Prerequisite: CINF 6000

This workshop will familiarize students with the procedures and techniques of strategic planning.

# **CINF 6416 The School Library**

Three credits. Three hours of discussion per week.

This course examines the objectives and functions of the school library as a vital component of the information landscape and a fundamental part of the educational process. Students will explore the various components of the school library and learn effective management strategies. The course will also include practical experiences to enhance learning. This course is offered online.

#### **CINF 6426 Library Administration**

Three credits. Three hours of discussion per week.

Introduces students to various administrative environments of academic libraries, public libraries, and information centers. It offers the opportunity to acquire knowledge and skills to select appropriate and effective strategies for planning, organizing, developing, and continuously evaluating different types of libraries in the face of 21st-century challenges. Aims to develop proactive attitudes for managing changes, with reference frameworks and guidance for problem-solving and responsible decision-making. Highlights the importance of integration and group work for personnel working in the information entity. This course is offered in-person, hybrid, or online.

### CINF 6427 Information Management as a Strategic Resource

Three credits. Three hours of discussion per week.

This course emphasizes the strategic value of information for organizations. It describes the processes aimed at identifying, categorizing, and evaluating information resources within an organization. It examines the use of these resources by various components of the organization and the results generated from that utilization. The use of information resources will be evaluated with a view to developing effective strategies to improve the management of these resources.

### **CINF 6429 Special Libraries**

Three credits. Three hours of discussion per week.

This course focuses on the study of special libraries and information centers, exploring their diverse manifestations and functions. It covers both historical and contemporary developments, highlighting key aspects such as management practices, budgeting, various clientele types, collection development (including both print and electronic resources), customer service strategies, professional ethics, and the pivotal role of information specialists within these environments.

## CINF 6705 Information, Knowledge, and Society

Three credits. Three hours of discussion per week.

This course explores the evolution of processes involved in the creation, recording, processing, and transmission of information and knowledge, tracing their development from early civilizations to the present. Designed for students in Library Science and Information Science, the course offers a comprehensive understanding of the characteristics and significance of information and knowledge flows, with particular emphasis on their role in contemporary society. Key topics include epistemological and disciplinary development, the functions of libraries and other information units, and the professional responsibilities of information specialists within society. This course is available in-person, hybrid, and online formats.

#### **CINF 6706 Research Methods in Information Sciences**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6808.

This course provides an in-depth exploration of the theoretical foundations of scientific research and its applications in library science, information science, and knowledge management. Students will develop essential knowledge, skills, and appreciation for research, preparing them to initiate projects that contribute to the advancement of these fields from an interdisciplinary perspective. The course will cover a range of quantitative and qualitative research techniques, allowing students to establish a solid theoretical and methodological foundation that they can apply throughout their academic journey. Emphasis will be placed on the need and value of research in Library Science and Information Science, as well as its role in addressing specific societal challenges. Additionally, students will examine emerging research trends, including evidence-based practice. This course is offered in-person, hybrid, and online formats.

### CINF 6708 Fundamentals of Information and Knowledge Organization

Three credits. Three hours of lecture per week.

Corequisite: CINF 6705

This course is designed to equip students in the Information Science program with a comprehensive understanding of the principles, standards, and tools essential for organizing information across various media and organizational settings. Through the examination of

catalogs, indexes, bibliographic networks, document inventories, archives, and other organizational entities, students will explore various manifestations of information organization. Key topics include the analysis of cataloging and indexing structures, thematic representations using controlled vocabularies, bibliographic description, metadata, authority control, taxonomies, and classification systems. The course will also cover applicable standards and current trends in the field, ensuring students are well-informed about the evolving landscape of information organization. This course is offered in-person, hybrid, and online.

## **CINF 6805 Clinical Experiences in School Libraries**

One credit. One hour of workshop per week.

This course aims to provide students with practical experiences in offering integrated school library services within the curriculum. Students will develop activities from the Reading Orientation Program and the Program for the Development of Information and Critical Thinking Skills within the mentioned context. Other library services will also be offered by students. This course is offered online.

## CINF 6806 Organization and Retrieval of Information and Knowledge (Basic)

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, 6706, 6707, 6708.

This course discusses and analyzes the principles of information organization in theory and practice as an important factor for its effective access and use. Through lectures, discussions, and practical exercises, aspiring Information Science master's degree students will examine in-depth industry standards for descriptive and documentary cataloging, selection of access points, including descriptors and subject headings, and classification systems. The course covers the storage of integrated information in computerized databases, emphasizing the importance of understanding the community to be served to organize information effectively, facilitate its rapid access and use, and meet its information needs. Reflection on the importance of the information specialist in information organization and the need to develop basic knowledge and corresponding skills for employment in the workplace is emphasized. This course is offered online.

## **CINF 6807 Reference Products and Services**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

This course provides an introduction to the use of reference sources and the organization and provision of reference services in libraries and other information units. It aims to equip Information Science students to work as reference librarians or make decisions for organizing reference services in different contexts. Topics include reference policies, collection development for reference materials, types, uses, and evaluation criteria of sources. The use of technologies in virtual reference services and ethical aspects for professional performance are also addressed. This course is offered in-person, hybrid, and online.

## CINF 6905 Fundamentals and Applications of Knowledge Management

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

Introduction to the discipline and professional field of knowledge management. This course explores key theoretical concepts and models, addressing common strategies for managing knowledge in organizations and businesses to develop a deeper understanding of this emerging discipline. It provides master's students in Information Science with an emphasis on knowledge management with a holistic approach to the principles and practices impacting this field.

# CINF 6906 Strategies, Innovations, and Techniques for Knowledge Management

Three credits. Three hours of lecture per week.

This course, aimed at Information Science students, examines practical strategies and techniques to enhance intellectual capital in organizations and businesses. It covers procedures and technologies required to implement these techniques and studies examples in various contexts. Students will engage in exercises designing and implementing the most used techniques and strategies. in the discipline to provide them with the basic competencies needed to work in the field. This course is offered in-person, hybrid, or online.

## CINF 6907 Knowledge Generation, Communication, and Organizational Learning

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

This course addresses the processes of knowledge generation in organizations, from its discovery and capture to its communication and exchange in both tacit and explicit forms. Emphasis is placed on communication and leadership strategies that promote organizational learning and the development of a culture of collaboration with the support of technology. This course is offered in-person or hybrid.

# **CINF 6908 Innovation Management: Idea to Implementation/Commercialization Cycle** Three credits. Three hours of lecture per week.

This course, aimed at Information Science students, analyzes dimensions and processes of knowledge creation and protection and intellectual property in organizational innovation initiatives. Strategies and techniques to stimulate innovation and best practices are identified to increase the competitiveness of the organization or company.

#### **CINF 6808 User Studies and Information Needs**

Three credits. Three hours of discussion per week.

Corequisites: CINF 6705, CINF 6706.

Introduction to concepts, methods, and techniques related to user studies and information needs diagnosis. The study of informational behavior and information use is considered important. The evolution of user studies and some of the models used for the study of informational behavior are analyzed. The needs and usage habits of information from different user communities in the context of different information units are exposed. Emphasis is placed on the importance of these

studies for a user-centered library practice and the research activity that generates the necessary evidence for such practice. This course is offered online.

## CINF 6809 Selection and Acquisition of Information Knowledge Resources

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6706, 6707, 6708, CINF 6806, 6807.

This course introduces students in the Information Science program to topics on the collection development process, including the preparation of collection development policy, selection, censorship and intellectual freedom, evaluation, and disposal of collections, sharing information resources, negotiation of usage licenses, maintenance, preservation, and conservation of collections. The course examines the book market and the information industry; related organizations and associations; awards and information sources in this area. It exposes students to the processes of purchase, exchange, donations, and legal deposit; and examines the role of vendors and information resource suppliers. It presents the automation of acquisitions as a working model. This course is offered in-person and online.

## CINF 6810 Organization and Retrieval of Information and Knowledge (Advanced)

Three credits. Three hours of lecture per week.

Prerequisite: CINF 6806, CINF 6705, CINF 6706, CINF 6707, CINF 6808.

In-depth discussion and analysis of the description and access to electronic resources and other multi-type resources. Includes bibliographic control of electronic serial publications, e-books, video recordings, among others, and their description using professional standards such as AACR2 and RDA. Extensive discussion on authority control in subjects and classification by the Library of Congress (LCC). Additionally, metadata schemes such as Dublin Core and Metadata Object Description (MODS) are explored. Practice will be provided in the use of different tools so that students can effectively perform in new work environments. This course is offered in-person, hybrid, and online.

## **CINF 6815 Informational and Technological Competencies**

Three credits. Three hours of lecture per week.

Prerequisites: CINF6705, CINF6706, CINF6707, CINF6708.

This course focuses on developing informational and technological competencies essential for students in Library Science and Information Sciences. It aims to equip students with the knowledge and skills necessary to design effective programs that enhance information literacy and critical thinking. In addition, the course will cover assessment methods to evaluate the achievement of these competencies, along with practical experiences across various models. This course is offered in-person and online.

## **CINF 6816 Information Services Management**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

Lecture and discussion on the basic concepts of library and information center management, aimed at students of information-related professions, so that they can make informed decisions in their future areas of work. Terminology, planning process, organization, development, innovation, and continuous evaluation are included. Concepts of direction, leadership, human resources, physical facilities, technological applications, finances, and services are discussed.

## CINF 6995 Special Topics in Information Sciences and Technologies

One to three credits.

Prerequisite: Basic courses.

An advanced seminar dealing with various current topics of interest in the field of information. Its duration varies according to the number of credits. May be repeated with credits.

## **CINF 6996 Independent Study**

One to three credits.

Prerequisite: Basic courses.

This course involves an intensive individual study of a specific topic or problem within the field of information, conducted under the supervision of a faculty member. Students will engage in indepth research and critical analysis, culminating in a written paper that meets the standards of a formal research project.

## CINF 6997 Workshop in Information Sciences and Technologies

One to three credits.

Prerequisite: Basic courses.

Intensive study on an aspect of library science and information science under the guidance of an expert in that field. The duration varies according to the number of credits. May be repeated with credits.

## **CINF 6998 Research Seminar: Knowledge Application (Capstone)**

Three credits. Three hours of seminar per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708

The Capstone is designed for students in the master's program. It is an exercise in applying knowledge where students integrate into research lines established by professors. The process can be conducted in one or multiple stages: academic research projects may include literature reviews, instrument design, fieldwork, analysis, or evaluation of results. Projects creating solutions to information and knowledge problems may include result analysis or innovation, documentation of best practices, and case studies. The course is aimed at producing a presentation or publication reporting the results of the research or creation project. This course is offered online.



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#### **DEGREE:**

## Post Master Certificate in Public and Special Academic Library Administration

The Post-Master's Certificate in Administration of Public and Special Academic Libraries allows students to take courses with the flexibility and convenience of distance learning to certify in this specialty. Courses are occasionally complemented with some in-person sessions or through video conferencing. The use of chats or discussion forums and emails provides students with constant interaction with their professors and peers to participate in their learning process.

**ACCREDITATIONS:** American Library Association (Committee on Accreditation)

#### **FACULTY:**

Claudia D. De Souza, Ph.D., University Carlos III of Madrid, 2018. Assistant Professor. Open science in the Caribbean.

**Noraida Domínguez Flores,** Ph.D., Nova Southeastern University, 2010. Associate Professor. Integration of technology in teaching; Teaching information literacy and technological skills; Knowledge Management; Qualitative research; Communities of Practice.

**Eliut Flores Caraballo,** Ph.D., University of Texas, 1991. Professor. Integration of information technologies into teaching; Distributed learning; Knowledge management; Information services consulting.



**José A. Sánchez Lugo,** Ed.D., Pennsylvania State University, 1998. Professor. Effective integration of technology into education and information services; Creation of online learning communities; Qualitative research; Evaluation of processes and products; Creation of informational products.

Carlos Suárez Balseiro, Ph.D., University Carlos III of Madrid, 2004. Professor. Information management as a strategic resource; Basic principles of knowledge management; Evaluative bibliometrics; Quantitative methods applied to the management of information units.

**Betsaida Vélez Natal,** D.L.S., Columbia University, 1999. Associate Professor. Information needs of bank managers; Legal information; Archival science and document management; Production and use of information; Qualitative research.

#### **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Program-Specific Requirements**

- 1. Master of Library Science (MLS) or a Master of Science and Information technologies (MIS.)
- 2. Academic index of 3.00 points.

## **GRADUATION REQUIREMENTS:**

Complete 16 credits with an average of 3.00 points.

#### **STUDY PROGRAM:**

Program Requirements	Credits
CINF 6019 The Role of the Librarian in Higher Education	3
CINF 6415 Strategic Planning (Workshop)	1
CINF 6426 Library Administration	3
Course on Higher Education to be taken in the College of Education	3
Electives	6
Total Credits	16

#### **COURSE DESCRIPTION:**



These course descriptions are the latest recorded in the Student Information System of the Registrar's Office of the Río Piedras Campus as of November 30, 2023, to be included in the Graduate Catalog 2023-2024.

## CINF 6019 The Role of the Librarian in Higher Education

Three credits. Three hours of discussion per week.

This course emphasizes the role of the librarian in institutions of higher education. It will briefly describe the origins of universities and their development in various parts of the world. It will emphasize the evolution and development of public and private higher education in Puerto Rico. Special attention will be paid to the administrative responsibilities of the academic librarian in post-secondary education institutions, both public and private. This course is offered in-person and hybrid.

## **CINF 6415 Strategic Planning (Workshop)**

One credit. One hour of discussion per week.

Prerequisite: CINF 6000

This workshop will familiarize students with the procedures and techniques of strategic planning.

## **CINF 6426 Library Administration**

Three credits. Three hours of discussion per week.

Introduces students to various administrative environments of academic libraries, public libraries, and information centers. It offers the opportunity to acquire knowledge and skills to select appropriate and effective strategies for planning, organizing, developing, and continuously evaluating different types of libraries in the face of 21st-century challenges. Aims to develop proactive attitudes for managing changes, with reference frameworks and guidance for problem-solving and responsible decision-making. Highlights the importance of integration and group work for personnel working in the information entity. This course is offered in-person, hybrid, and online.

#### **OTHER COURSE DESCRIPTIONS:**

#### CINF 6015 The Public Library: Its Clients and Services

Three credits. Three hours of conference per week.

Prerequisite: CINF 6000

This course will discuss the history, objectives, and functions of the public library as an essential element in the world of information and as an integral part of the community it serves. It will present the various elements that compose it and how to manage them most effectively. These include types of clients in a multicultural society, the services they offer, cooperative agreements, library systems, the public librarian, and trends and innovations in this field. It also includes practical experiences.

## **CINF 6017 School Library Programs Integrated into the Curriculum**

Three credits. Three hours of conference per week.

Prerequisites: CINF 6413 and 6000.

This course will detail the objectives of the services programs offered by the school library. It will discuss various planning and organization strategies, including their integration into the school curriculum. It includes practical experiences in the implementation, development, and evaluation of programs and their activities. This course is offered online.

#### CINF 6105 Production and Use of Information in the Humanities

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6005, 6100 and 6010.

This course explores the structure of information across various fields of the humanities, including religion, philosophy, mythology, languages, literature, music, and other performing and visual arts. It examines how to access this information and the important tools available for doing so. Additionally, the course will address information services specialized in the humanities and analyze the diverse uses and users of information within these disciplines.

## CINF 6107 Production and Use of Information in the Social Sciences

Three credits. Three hours of discussion per week.

This course examines the development and current trends in the social sciences, focusing on the research methodologies and professional practices employed within these disciplines. It analyzes the challenges associated with creating and utilizing information resources in the social sciences, along with fundamental aspects of their development, management, organization, and dissemination. Additionally, the course addresses the specific challenges faced by libraries, information centers, and information services in supporting social science research and education.

## CINF 6109 Production and Use of Information on Economics and Commerce

Three credits. Three hours of discussion per week.

This course focuses on the study of information sources related to the business sector. It provides an analysis of general sources for economic and demographic statistics while also exploring specific sources pertinent to various industries, including construction, financial institutions, and tourism. Each source is discussed within the context of its respective sector, highlighting its significance for the economy, professional organizations, research centers, and major publishers. Both printed and electronic sources are included, providing a comprehensive overview of the resources available in the field of business information.

#### **CINF 6110 Production and Use of Legal Information**

Three credits. Three hours of discussion per week.

This course examines the primary sources of information in the field of legal sciences, with a focus on the United States, Puerto Rico, and Spain. Students will explore the origins and contexts in which these sources are developed by analyzing the legislative, executive, and judicial processes.

The course also covers the research process, identifies key publishers and providers of legal information, and discusses both printed and electronic sources within the discipline. Additionally, students will investigate the various types of libraries that serve legal information needs and the critical role of the legal information specialist.

## CINF 6115 Production and Use of Information on Latin America and the Caribbean

Three credits. Three hours of discussion per week.

This course explores the development and emerging trends in the field of information in Latin America and the Caribbean. Students will evaluate and assess various research methodologies applicable to this area, as well as the challenges associated with creating and utilizing information resources specific to Latin America and the Caribbean. The course emphasizes the evaluation, analysis, and importance of these resources, covering fundamental aspects of their development, management, organization, and dissemination. Additionally, it addresses the challenges faced by libraries, information centers, archives, and information services in supporting studies related to Latin America and the Caribbean.

## **CINF 6117 Production and Use of Legal Information (Advanced)**

Three credits. Three hours of discussion per week.

Prerequisite: CINF 6110

This course focuses on the primary sources of information within specific areas of law, including labor law, tax law, environmental law, securities, and financial institutions. It emphasizes sources produced in Puerto Rico and the United States. Students will explore the origins of key legislative and regulatory sources, examining their characteristics, differences, and similarities. Through this study, participants will gain a comprehensive understanding of the legal frameworks and information resources that shape these areas of law.

## CINF 6118 Production and Use of Information in Science and Technology

Three credits. Three hours of discussion per week.

This course examines the development and current trends in science and technology, focusing on the methodologies utilized within these fields. It explores the research process, including common challenges, and evaluates information resources in various formats and media. Additionally, students will analyze the information habits and needs of experimental scientists and technologists, as well as the education and training of information professionals specializing in science and technology.

#### **CINF 6119 Production and Use of Government Information**

Three credits. Three hours of discussion per week.

Introduces the special nature and scope of multi-type government information resources as basic information and reference material for different clients. Aims to ensure access to such information in the electronic age. Presents government infrastructures and corresponding units at the federal, state, local, regional, and international levels, to understand the documentation generated.

Considers how to evaluate, select, acquire, organize, and develop such collections, and develop value-added products to meet client needs.

## CINF 6127 Production and Use of Information from International Organizations

Three credits. Three hours of discussion per week.

Study of the sources of legal information generated by non-governmental organizations and their affiliated agencies. Their origin and context are studied through the analysis of the structure and functions of the organizations. The process of selection and acquisition of resources is also studied. Includes organizations such as the United Nations, the Caribbean Community (CARICOM), and the Association of Caribbean States.

## **CINF 6208 Computerized Systems for Integrated Document Management**

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of available technologies for managing documents in an integrated manner using computerized technologies. The complexity of operational models in many organizations requires the implementation of technologies that simplify and automate transaction processing and information flow. Information specialists must be familiar with the technologies necessary to organize and retrieve digital information, manage information flow in document management systems, and administer an organization's electronic documents. The course is offered in-person, hybrid, and online.

## CINF 6209 Organization and Management of Documents and Information Access

Three credits. Three hours of discussion per week.

Prerequisites: Completion of information skills modules offered by EGCTI.

Corequisite: CINF 6705

This course examines concepts and practices related to the organization and management of documents in archives, libraries, documentation centers, and other organizations. It includes the study of access systems and methods of description and dissemination of information. Topics include collection organization and description, preparation of descriptive guides and inventories, and fund and collection management systems. The use of different industry standards for effective document description and organization will be highlighted. Students will have the opportunity to apply the methodologies presented through in-class practical work, assignments, and a final project. The challenges posed by various information technologies for document preservation management will also be discussed. This course is offered in a hybrid format.

## **CINF 6215 Introduction to Computerized Database Design**

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of conceptualizing computerized databases. Each student will apply this knowledge by designing and programming a database and its corresponding documentation. Students will learn this skill in the context of their work as information specialists and with the aim of preparing them to design or evaluate databases for libraries and other information centers.

#### **CINF 6216 Technical Services in Law Libraries**

Three credits. Three hours of discussion per week.

Study of the various phases of technical services - collection development and management, organization of information resources in the context of law libraries. The course discusses the particularities of printed and electronic legal collections, major publishers, and the influence of information technology on the development and management of collections.

## **CINF 6217 Advanced Computerized Database Design**

Three credits. Three hours of discussion per week.

In this course, students will have the opportunity to delve into the conceptualization and programming of computerized databases. Each student will develop an advanced project, designing and programming a related database and its corresponding documentation. Students will learn these skills in the context of their work as information specialists and with the aim of preparing them to design or evaluate databases for libraries and other information centers.

## **CINF 6300 Information Technologies I**

Two credits. Two hours of discussion per week.

Introduction to information technologies, the value of information in different eras, the basic elements of this science, its development, and its projections.

## CINF 6410 Development of a Consultancy Practice in Information Services

Three credits. Three hours of discussion per week.

In this course, students will learn the fundamentals of consultancy practice in information systems and services and will have the opportunity to apply these principles in developing a project for a particular client.

#### **CINF 6416 The School Library**

Three credits. Three hours of discussion per week.

In this course, the objectives, and functions of the school library as an essential element in the information world and an integral part of education will be discussed. The various components of the school library and how to manage them effectively will be presented. It will include practical experiences. This course is offered online.

### **CINF 6417 Document Manager**

Three credits. Three hours of discussion per week.

This course introduces students to the effective administrative management of records, emphasizing both theoretical principles and practical applications relevant to Puerto Rico, the United States, and Latin America. It covers the organizational structure of records management units, highlighting the importance of planning, management, and systematic evaluation. Students

will study the phases of the document and information life cycle, including creation, evaluation, retention, and the description and organization of records. Additionally, the course addresses document storage, prevention and disaster management, dissemination, use, disposal, and preservation, along with the parameters that guide these decisions. It also involves the planning, development, and evaluation of public projects and strategies. The course requires laboratory work, culminating in an individual or collective laboratory project, and is offered in a hybrid format.

## CINF 6419 Files: Organization, Development, and Legislation

Two credits. Two hours of discussion per week.

The course will analyze the process of evaluation, selection, and organization of public and private archives, the preparation of policies for the development and administration of different types of formats of public and private archives. The development and administration of public and private archives will be done from a historical perspective. This course is offered in-person, hybrid, and online.

## CINF 6427 Information Management as a Strategic Resource

Three credits. Three hours of discussion per week.

This course emphasizes the strategic value of information for organizations. It describes the processes aimed at identifying, categorizing, and evaluating information resources within an organization. It examines the use of these resources by various components of the organization and the results generated from that utilization. The use of information resources will be evaluated with a view to developing effective strategies to improve the management of these resources.

## **CINF 6429 Special Libraries**

Three credits. Three hours of discussion per week.

This course examines special libraries and information centers, exploring their various manifestations and functions. It discusses both the historical and contemporary developments in the field, focusing on key elements such as management practices, budgeting, and the diverse types of clienteles served. Students will study the development of collections, encompassing both print and electronic formats, as well as customer service strategies and professional ethics. The course also emphasizes the critical role of information specialists within special libraries and information centers.

### **CINF 6507 Conservation, Preservation, and Restoration of Documents**

Three credits. Three hours of discussion per week.

This is an introductory course to the management of conservation and preservation services in information centers. It provides an overview of the fundamentals of preventive conservation mainly in libraries and archives and establishes evaluation parameters for decision-making regarding the intervention of documentary materials by affiliated professionals. The course addresses the complexities in preservation planning by considering the intrinsic needs of the most

common media and supports, in line with the deterioration agents that most affect documentary collections in the tropics. This course is offered in-person, hybrid, and online.

## CINF 6705 Information, Knowledge, and Society

Three credits. Three hours of discussion per week.

This course examines the evolution of processes related to the creation, recording, processing, and transmission of information and knowledge from the emergence of early civilizations to the present day. It is aimed at students of Library Science and Information Science, providing them with a general understanding of the characteristics and importance of information and knowledge flows, with a special emphasis on contemporary society. Epistemological and disciplinary development issues, the functions of libraries and other information units, as well as the professional role of information in society, are discussed. This course is offered in-person, hybrid, and online.

### **CINF 6706 Research Methods in Information Sciences**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6808.

This course offers an opportunity to learn about the theoretical foundations of scientific research and its application in library science, information science, and knowledge management. Students are expected to develop knowledge, skills, and appreciation for research to initiate this activity and contribute to the development of the field from an interdisciplinary perspective. Various quantitative and qualitative research techniques will be explored. Students will develop the theoretical and methodological foundations to apply what they have learned as they progress through their studies. The need and value of research in Library Science and Information Science, as well as its benefits in seeking solutions to specific problems in society, will be analyzed. Includes the study of new research trends, such as evidence-based practice. This course is offered in-person, hybrid, and online.

## **CINF 6707 Information and Knowledge Technologies**

Three credits. Three hours of lecture per week.

Corequisite: CINF 6705

This course, designed for Information Science students, introduces information and communication technologies for information and knowledge management. It addresses technological convergence processes and the nature of the digital technology industry. Topics include computational technologies, networks, databases, the Internet, Web 2.0+, and other emerging technologies. Students will familiarize themselves with various applications and technological platforms and tools used in information and knowledge units to enter the workforce with broad knowledge of field trends. The course may be offered in a hybrid modality to enhance student experience with virtual education technologies. This course is offered in-person, hybrid, and online.

## CINF 6708 Fundamentals of Information and Knowledge Organization

Three credits. Three hours of lecture per week.

Corequisite: CINF 6705

This course aims to prepare students in the Information Science program to understand the principles, standards, and tools used for information organization across various media and in different organizational environments. Manifestations are illustrated through the study of catalogs, indexes, bibliographic networks, document inventories, archives, and other organizational entities. Topics include analysis of cataloging and indexing structures, thematic representations with controlled vocabularies, bibliographic description, metadata, authority control, taxonomies, and classification systems. Applicable standards are examined and discussed to alert students to trends in the field. This course is offered in-person, hybrid, and online.

## **CINF 6800 Clinical Experiences in Information Services**

One credit. One hour of workshop per week.

Students will be assigned to a library, documentation center, or archive for three hours once a week. They will work under the supervision of a professional librarian or information specialist in one or two service areas, as agreed upon with the supervising professor.

## CINF 6805 Clinical Experiences in School Libraries

One credit. One hour of workshop per week.

This course aims to provide students with practical experiences in offering integrated school library services within the curriculum. Students will develop activities from the Reading Orientation Program and the Program for the Development of Information and Critical Thinking Skills within the mentioned context. Other library services will also be offered by students. This course is offered online.

## CINF 6806 Organization and Retrieval of Information and Knowledge (Basic)

Three credits. Three hours of lecture per week. Prerequisites: CINF 6705, 6706, 6707, 6708.

This course discusses and analyzes the principles of information organization in theory and practice as an important factor for its effective access and use. Through lectures, discussions, and practical exercises, aspiring Information Science master's degree students will examine in-depth industry standards for descriptive and documentary cataloging, selection of access points, including descriptors and subject headings, and classification systems. The course covers the storage of integrated information in computerized databases, emphasizing the importance of understanding the community to be served to organize information effectively, facilitate its rapid access and use, and meet its information needs. Reflection on the importance of the information specialist in information organization and the need to develop basic knowledge and corresponding skills for employment in the workplace is emphasized. This course is offered online.

#### **CINF 6807 Reference Products and Services**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

This course provides an introduction to the use of reference sources and the organization and provision of reference services in libraries and other information units. It aims to equip Information Science students to work as reference librarians or make decisions for organizing reference services in different contexts. Topics include reference policies, collection development for reference materials, types, uses, and evaluation criteria of sources. The use of technologies in virtual reference services and ethical aspects for professional performance are also addressed. This course is offered in-person, hybrid, and online.

#### **CINF 6808 User Studies and Information Needs**

Three credits. Three hours of discussion per week.

Corequisites: CINF 6705, CINF 6706.

Introduction to concepts, methods, and techniques related to user studies and diagnosing information needs. This course emphasizes the significance of studying informational behavior and information usage. It covers the evolution of user studies and analyzes various models used to study this behavior. The course also examines the information needs and usage patterns of different user communities within various information settings. Special focus is placed on the importance of these studies in fostering user-centered library practices and supporting research that generates the necessary evidence for such practices. This course is offered online.

## CINF 6809 Selection and Acquisition of Information Knowledge Resources

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6706, 6707, 6708, CINF 6806, 6807.

This course introduces students in the Information Science program to topics on the collection development process, including the preparation of collection development policy, selection, censorship and intellectual freedom, evaluation, and disposal of collections, sharing information resources, negotiation of usage licenses, maintenance, preservation, and conservation of collections. The course examines the book market and the information industry; related organizations and associations; awards and information sources in this area. It exposes students to the processes of purchase, exchange, donations, and legal deposit; and examines the role of vendors and information resource suppliers. It presents the automation of acquisitions as a working model. This course is offered in-person and online.

## CINF 6810 Organization and Retrieval of Information and Knowledge (Advanced)

Three credits. Three hours of lecture per week.

Prerequisite: CINF 6806, CINF 6705, CINF 6706, CINF 6707, CINF 6808.

In-depth discussion and analysis of the description and access to electronic resources and other multi-type resources. Includes bibliographic control of electronic serial publications, e-books, video recordings, among others, and their description using professional standards such as AACR2 and RDA. Extensive discussion on authority control in subjects and classification by the Library of Congress (LCC). Additionally, metadata schemes such as Dublin Core and Metadata Object Description (MODS) are explored. Practice will be provided in the use of different tools so that students can effectively perform in new work environments. This course is offered in-person, hybrid, and online.

## **CINF 6815 Informational and Technological Competencies**

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

This course discusses the process and strategies for the development of informational and technological competencies. Aimed at students of Library Science and Information Sciences, with the purpose of enabling them to design a program of information and critical thinking skills. It also includes how to assess whether the skills mentioned were achieved and practical experiences in different models. This course is offered in-person and online.

## **CINF 6816 Information Services Management**

Three credits. Three hours of discussion per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

Lecture and discussion on the fundamental concepts of managing libraries and information centers. This course is designed for students in information-related fields to help them make informed decisions in their future professional roles. It covers terminology, the planning process, organization, development, innovation, and continuous evaluation. Key topics include management, leadership, human resources, physical facilities, technology applications, finances, and services.

## CINF 6905 Fundamentals and Applications of Knowledge Management

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708...

Introduction to the discipline and professional field of knowledge management. This course explores key theoretical concepts and models, addressing common strategies for managing knowledge in organizations and businesses to develop a deeper understanding of this emerging discipline. It provides master's students in Information Science with an emphasis on knowledge management with a holistic approach to the principles and practices impacting this field.

## CINF 6906 Strategies, Innovations, and Techniques for Knowledge Management

Three credits. Three hours of lecture per week.

This course, aimed at Information Science students, examines practical strategies and techniques to enhance intellectual capital in organizations and businesses. It covers procedures and technologies required to implement these techniques and studies examples in various contexts. Students will engage in exercises designing and implementing the most commonly used techniques and strategies in the discipline to provide them with the basic competencies needed to work in the field. This course is offered in-person, hybrid, and online.

## CINF 6907 Knowledge Generation, Communication, and Organizational Learning

Three credits. Three hours of lecture per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708

This course addresses the processes of knowledge generation in organizations, from its discovery and capture to its communication and exchange in both tacit and explicit forms. Emphasis is placed on communication and leadership strategies that promote organizational learning and the development of a culture of collaboration with the support of technology. This course is offered in-person and hybrid.

# **CINF 6908 Innovation Management: Idea to Implementation/Commercialization Cycle** Three credits. Three hours of lecture per week.

This course, designed for Information Science students, examines the dimensions and processes of knowledge creation, protection, and intellectual property in organizational innovation initiatives. It identifies strategies and techniques to foster innovation and highlights best practices to enhance the competitiveness of organizations or companies.

## CINF 6995 Special Topics in Information Sciences and Technologies

One to three credits.

Prerequisite: Basic courses.

An advanced seminar covering a range of current topics of interest in the field of information. The duration varies based on the number of credits. May be repeated for credit.

## **CINF 6996 Independent Study**

One to three credits.

Prerequisite: Basic courses.

Intensive individual study of a topic or problem in the field of information under the supervision of a faculty member. As an outcome, a written paper meeting the requirements of a research paper will be presented.

## CINF 6997 Workshop in Information Sciences and Technologies

One to three credits.

Prerequisite: Basic courses.

Intensive study on an aspect of library science and information science under the guidance of an expert in that field. The duration varies according to the number of credits. May be repeated with credits.

### **CINF 6998 Research Seminar: Knowledge Application (Capstone)**

Three credits. Three hours of seminar per week.

Prerequisites: CINF 6705, CINF 6706, CINF 6707, CINF 6708.

The Capstone seminar is designed for master's program students as an opportunity to apply their knowledge by integrating into research lines established by faculty. The process may occur in one or more stages, including academic research projects that involve literature reviews, instrument design, fieldwork, analysis, or evaluation of results. Projects focused on solving information and knowledge problems may include result analysis, innovation, documentation of best practices, or



case studies. The course aims to produce a presentation or publication reporting the results of the research or creative project. This course is offered online.

# **College of Education**

Dean: Dra. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Exercise Science Program Coordinator**: Dra. Lucía del R. Martínez

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89203, 89253

Website: <a href="http://ege.uprrp.edu/">http://ege.uprrp.edu/</a>

**DEGREE:** 

## Master of Exercise Science in Exercise Physiology

## **FACULTY:**

Marta Amaral Figueroa, Ph.D., Louisiana State University, 1998, Catedrática. Effect physical activity/exercise on different special populations; effect of psychological activity.

physiological stress on the cardiovascular system, diabetes, chronic kidney disease, and breast cancer

Lucía R. Martínez Colón, Ph.D., Florida State University, 1991, Catedrática.

Cardiorespiratory and metabolic characteristics and responses to exercise in children at different stages of maturation; Health characteristics and physiological assessment of physical fitness in diverse populations.

**Farah A. Ramírez Marrero**, Ph.D., Ohio State University, 1997, Catedrática. Post-doctorate at the University of Puerto Rico, Medical Sciences Campus, 2006 Post-doc at Mayo Clinic, Rochester, Minnesota, 2010. Physical activity and health characteristics in HIV, diabetes, cancer, and obesity; Physical activity and health characteristics in children and adolescents.

**José C. Vicente Cernuda**, Ph.D., Florida State University, 1971, Catedrático. Post-doctorate in Cardiology Services, University of Wisconsin, La Crosse, 1982. Body composition: prediction of body density based on anthropometric measurements. Cardiovascular evaluation.

## **ADMISSION REQUIREMENTS:**

General Requirements of the Rio Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Admission Requirements**

- 1. Baccalaureate or its equivalent from an accredited university
- 2. Minimum academic index of 3.00 points on a 4.00 scale
- 3. Twelve (12) credits in specialization courses in Exercise Sciences including Anatomy and Kinesiology and Exercise Physiology

## **Documents and Other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format
- 2. Two (2) official academic transcripts of Baccalaureate credits.
- 3. Three (3) letters of recommendation for Graduate Studies in electronic or paper format.
- 4. Essay on experiences, academic background, and their relationship to professional goals (500-1500 words).
- 5. Interview with Faculty of the Area.

## **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Pass the specialty courses with a grade of no less than "B" and obtain a grade of no less than "C" in the other courses.
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

#### STUDY PROGRAM:

Program Requirements	Credits
Core courses	6
EDUC 6390 Applied Statistics in Education	3
CIEJ 6007 Research Methods in Exercise Sciences	3
Specialty courses	16
CIJE 6015 Exercise Physiology at Intermediate Level	3
CIEJ 6016 Laboratory Techniques in Exercise Physiology	2
CIEJ 6035 Physiological Assessment of Physical Fitness	3
CIEJ 6045 Exercise Prescription and Programming	3
EDUC 6627 Stress Testing: Methods and Procedures	3
CIEJ 6205 Seminar on Administrative Aspects in Exercise Sciences	1
CIEJ 6206 Seminar on Psychological Aspects of Physical Activity and Exercise	1
Other required courses:	6
CIEJ 6069 Practicum in Exercise Sciences	3
CIEJ 6207 Research and Creation Seminar in Sciences	3
CIEJ 6208 Continuation of Research and Creation Seminar in Exercise Sciences	0
EDUC 6511 Thesis or Master's Project	6
EDUC 6512 Continuation of Thesis or Master's Project	0
Elective courses	6
Total Credits	34

## **COURSE DESCRIPTION:**

The following course descriptions are the most recent entries registered in the Student Information System of the Registrar's Office at the Río Piedras Campus, as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **EDUC 6390 Applied Statistics in Education I**

Three credits. Three hours of lecture per week.

This course covers the application of various statistical analyses in education, emphasizing their assumptions, justification, data processing using computer software, and interpretation of results.



Topics include frequency distributions, measures of central tendency and variability, probability distributions, correlation (both parametric and nonparametric), regression, and hypothesis testing (z-tests, t-tests, chi-square tests, and one-way ANOVA). Proficiency in computer usage is required.

#### **CIEJ 6007 Research Methods in Exercise Sciences**

Three credits.

This course will introduce the research methods used in discovering resources, knowledge, and data relevant to conducting investigations in exercise sciences. It will cover the use of statistical software to streamline the application of basic statistical methods, information retrieval, utilization of bibliographic resources, evaluation procedures, and experimental research methods.

## **CIEJ 6015 Intermediate Level Exercise Physiology**

Three credits. Three hours of lecture per week.

This course will describe, explain, and review the effects of chronic and acute physical activity and exercise on the functioning of the human body at an advanced level. Students will apply their knowledge to evaluate the latest scientific research regarding adaptations and responses in bioenergetics, neuromuscular, pulmonary, circulatory, and endocrine functions because of physical activity, exercise, and sports training in humans. Additionally, the course will address considerations for children, women, and the elderly, as well as the impact of the environment on sports performance.

## IEJ 6016 Laboratory Techniques in Exercise Physiology

Two credits. One hour of lecture and two hours of laboratory per week.

Co-requisite: CIEJ 6015

Study and practice in the administration and supervision of laboratory techniques to evaluate the acute and chronic effects of exercise in the functioning of the human body. Development of the skills of observation, data collection, analysis of results, discussion and the development of conclusions about topics of interest in exercise physiology. Includes equipment calibration and the writing of laboratory reports.

## CIEJ 6035 Physiological Assessment of the Physical Fitness

Three credits.

Prerequisites: CIEJ-6015, 6016.

Study of field and laboratory methods to assess the components of physical fitness related to health and related to motor skills. Includes the evaluation, selection, administration and interpretation of results of tests to assess cardiorespiratory endurance, muscular strength, endurance and power, flexibility, agility, balance and body composition.

## **CIEJ 6045 Exercise Prescription and Programming**

Three credits. Three hours of lecture per week.

Prerrequisitos: CIEJ 6015, CIEJ 6016 and CIEJ 6035.



This course focuses on applying physiological principles to the prescription of physical exercise and the administration of physical activity programs for individuals of varying ages, genders, health statuses, and fitness levels. Emphasis will be placed on designing safe and effective physical activity programs using scientific principles and innovative programming strategies.

## **EDUC 6627 Graded Exercise Testing: Methods and Procedures**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization of the director.

The human physiological, anatomical, pathophysiological, and psychological basis needed for effective graded exercise testing will be discussed. The following topics will be included: electrocardiography, equipment calibration, patient screening, protocol selection, data collection and summary, basic cardiopulmonary resuscitation, emergency procedures, and exercise prescription.

## **CIEJ 6205 Seminar Administrative Aspects in the Exercise Sciences**

One credit. Three hours of seminar per week.

Seminar with emphasis on the application of theories and administrative approaches in the industry of the exercise sciences. Integrates essential issues for the management of exercise programs such as human resources, administration of facilities and equipment, legal aspects and risk management, program evaluation, and aspects of budget preparation.

## CIEJ 6206 Seminar-Psychological Aspects of Physical Activity and Exercise

One credit. Three hours of seminar per week.

The course integrates the concepts, theories and methodologies related to counseling in the process of adopting and maintaining regular physical activity and exercise habits. Discussion of the psychological aspects related to the promotion and counseling of physical activity and exercise programs for individuals, communities and populations with special needs, in the context of the exercise sciences.

#### **CIEJ 6069 Practicum in Exercise Science**

Three credits. One hour of seminar and nine hours of supervised practice.

Prerequisites: CIEJ 6015-6016, CIEJ 6035, CIEJ 6045.

Course designed to offer work-education experience in an organization, corporation or agency that gives services in the field of exercise science to their clientele. The student will obtain practical professional, administrative, supervisory and leadership experience under the supervision of qualified personnel of the center and of the university.

#### CIEJ 6207 Seminar in Research and Creation in the Exercise Sciences

Three credits. Three hours of seminar per week.

Prerequisites: Successfully complete all core courses and major courses. Authorization from the professor.

This course involves the application of research methods in exercise sciences and the development of a research or creative project. Depending on the nature of the project, the course may be offered in a face-to-face, hybrid, distance, or online format. It constitutes a full academic load for the student.

#### CIEJ 6208 Continuation Seminar Research and Creation in the Exercise Science

Credits: 0Three hours of investigation per week.

Prerequisite: CIEJ 6207

This course continues the application of research methods in exercise sciences and focuses on the development of a research or creative project, including writing a research article or documenting a creative project. Depending on the nature of the project, the course may be offered in-person, hybrid, or online formats. It constitutes a full academic load for the student. This course has been effective since January 2021.

#### **EDUC 6511 Master's Thesis or Project**

From three to six credits. Contact hours are to be determined by agreement. Prerequisites: Completion of the Master's Degree Examination (if applicable).

Student must present a certificate of completion for the information competencies workshop granted by the Gerardo Selles Solá Library, as well as evidence of completion of the online module on Responsible Conduct in Research from the CITI Program, in accordance with the requirements of Certification 029 (202-2013) from the Administrative Board of Puerto Rico. The course will emphasize the preparation of the master's thesis or project, focusing on the proposal and the study of procedures for writing the thesis or project.

#### **EDUC 6512 Continuation of master's Thesis or Project**

Credits: 0Three hours of lecture per week.

Prerequisite: EDUC 6511

Continue the preparation of the master's thesis or project, giving emphasis to the implantation of the research or project and its defense.

#### OTHER COURSE DESCRIPTIONS:

## CIEJ 6005 Seminary of Contemporary Topics in Science Exercise

Three credits.

This course involves the presentation, analysis, and discussion of contemporary topics in the exercise sciences. It includes discussions of recent publications, proposals, and research projects from faculty and guest speakers. Flexibility in identifying topics is essential to the course design.

## CIEJ 6010 Seminar Physical Activity and Public Health

One credit. One hour of seminar per week.

This course discusses the importance of physical activity and the prevention of sedentary behavior in controlling and preventing diseases in individuals and populations, as well as its impact on public health. It includes an analysis of various methods and instruments for evaluating physical activity and sedentary behavior, along with practical experiences in collecting and interpreting information about physical activity and health in individuals and populations.

## CIEJ 6011 Seminar of Interpretation and Writing in the Exercise Sciences

One credit. One hour of seminar per week.

This course discusses the importance of oral and written communication in the exercise sciences, highlighting the variations based on the audience receiving the information. It includes an analysis of published studies and potential variations in the interpretation and application of results. Practical experiences in both written and verbal communication, as well as the interpretation of the information being conveyed, are also included.

## **CIEJ 6019 Independent Study in Exercise Science**

Three credits. Three hours of independent study per week.

Prerequisites: CIEJ 6007- research methods in sciences applied to physical education, sport and recreation, EDUC 6390- applied statistics in education, CIEJ 6015- intermediate level exercise physiology, CIEJ 6016- laboratory techniques in exercise physiology.

Application of research methodology in the exercise sciences. Includes review of the literature, identification of the research problem, formulation of a hypothesis, development of the methodology and writing a research proposal.

## **CIEJ 6020 Nutritional Aspects of Physical Activity**

Three credits. Three hours of lecture per week.

The course will study the function of macro and micronutrients to health, physical activity, exercise and sports performance. It includes the study of nutritional ergogenic aids, the athlete's diet, pre-event meal, eating disorders and considerations related to body composition and optimal weight.

## **CIEJ 6026 Introduction to the Biochemistry of Exercise**

Three credits. Three hours of lecture per week.

Prerequisite: quim 3001 or equivalent.

Introduction to the study of the biochemistry of carbohydrates, lipids and proteins and their relationship with physical activity, exercise and sports training. It includes the analysis of human metabolism, muscle contraction, enzymatic activity and hormonal and nucleotide regulation during the exercise, how they affect the capacity to perform muscular work and how they adapt to exercise and sport training.

## **CIEJ 6067 Human Motion Analysis**

Three credits. Two hours of lecture and one laboratory per week.

Study of the biomechanical principles and their interaction with mechanical and physics factors of human motion. Analysis of fundamental activities in exercise sciences and its variations including balance, dumping, walking, running, throwing, manipulation of objects, aerial maneuvers, among others. Analysis of factors predisposing to musculoskeletal injuries and those factors for sports enhancement. Integration of fundamental principles of the human body and the manipulation of biomechanical variables for the prescription of training programs in healthy and injured individuals.

## CIEJ 6105 Psychosocial Foundations of Exercise.

Three credits. Three hours of lecture per week.

Study of the psychological foundations of exercise. Integration of theory and research with the application and intervention, helping the student to understand and develop the competencies to modify behavior in and towards exercise (adoption and adherence). Revision of the psychosocial aspects related to physical activity, exercise, and physical training.

# CIEJ 6106 Application and Management of Information Technology for Research in Exercise Sciences

Three credits. Three hours of lecture per week.

This course will explore the theoretical and practical applications and management of information technology for research in exercise sciences. We will study the most common uses of computers, information technology, and remote computer access within the research process and the provision of assessment services in exercise science. We will analyze some common computer software programs for the development of research and protocols in order to access, process, and construct knowledge, evaluation, and intervention instruments that facilitate the writing of reports and scientific articles with an emphasis on the management of international networks, the access to scientific databases, the use of electronic references and the ethical concerns of its use.

## **EDUC 8995 Directed Specialized Study**

One to three credits. One to three contact hours.

Prerequisite: Authorization from the Department.

Exploration of special topics or problems of particular interest to groups of graduate students under the direction of a faculty member or visiting professor. This course may be taken up to a maximum of nine credits.



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Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Exercise Science Program Coordinator**: Dra. Lucía del R. Martínez

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#### **DEGREE:**

## Master of Education in Curriculum and Teaching Plan A (30 credits)

The Department of Graduate Studies of the College of Education offers Master of Education (Plan A) programs with a specialty in Curriculum and Teaching. The subspecialties are:

Curriculum and Teaching in Science Education

Curriculum and Teaching in Mathematics Education

Curriculum and Teaching in Spanish

Curriculum and Teaching in History and Social Studies

Curriculum and Teaching in Learning Technology

Curriculum and Teaching in Curriculum Theory, Design and Evaluation

#### **FACULTY:**

**Gladys R. Capella Noya**, Ed.D. Harvard University, 1995. Professor. Power relations within learning environments; curriculum and culture; democracy and educational practice.

**Kevin S. Carroll,** Ph.D. University of Arizona, 2009. Associate Professor. Language planning and policy, translanguaging, bilingual education, and teachers of English to speakers of other languages.

**Ileana M. Quintero Rivera** Ed. D. Harvard University, 1996. Full Professor. Curricular design and Methodology of Teaching and Learning in Social Study and History. Interest in the integration of theory, reflection and practice. Collaboration in Community Projects. Qualitative and Ethnographic Research.

**Omar A. Hernández Rodríguez**, Ed.D. University of Puerto Rico, 2002. Associate Professor. Study of conceptual development in mathematics, cognitive and metacognitive processes in solving mathematical problems; incorporation of new technologies in the teaching of mathematics and the professional development of teachers.

**Edwin Martínez Hernández**, Ed.D. University of Puerto Rico, 2000. Associate Professor. Integration of technologies in instructional events and its effect on learning.

**Rose Marie Santiago Villafañe**, Ph.D. University of Murcia, 2005. Associate Professor. sociolinguistic analysis of texts; the development of linguistic awareness; writing and reading as cognitive processes; curricular design in the area of Spanish; students as language researchers; the linguistic attitudes of teachers towards the language they teach; curricular development by competencies.

**José Soto Soner**a, Ed.D. University of Puerto Rico, 2006. Associate Professor. Curriculum design and evaluation; science teaching and learning; cognitive processes and conceptual development from historical-cultural and anthropological perspectives.

## **ADMISSION REQUIREMENTS:**

General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Admission Requirements**

## Master of Education with a specialty in Curriculum and Teaching Plan A:

Minimum requirements of the Master's Program in Education with a specialty in Curriculum and Teaching (Plan A) with a subspecialty in Scientific Education, Mathematics Education, Spanish, History and Social Studies, Learning Technology, and Curriculum Theory, Design and Evaluation:

- 1. Baccalaureate from an accredited university or its equivalent
- 2. Minimum academic index of 3.00 on a scale of 4.00 in Baccalaureate

Specific requirements for subspecialties in Science Education, Physical Education, Mathematics Education, Spanish, History and Social Studies:

1. Eighteen (18) credits at the baccalaureate level in the subspecialty

## Specific requirements for the Learning Technology subspecialty:

- 1. Competence in the management of Information and Communication Technologies (ICT). Confirmation will occur during the interview process.
- 2. Three (3) credits at the undergraduate level in learning technology.

### **Documents and Other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies platform.
- 2. Two official academic transcripts from the bachelor's degree program.
- 3. Two (2) letters of recommendation for Graduate Studies in electronic or paper format.
- 4. Interview.
- 5. Proficient in both Spanish and English.



## **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully completion of the courses with a grade of no less than "C".
- 3. Academic index of no less than 3.00 in the courses considered in the Study Plan for graduation.
- 4. Comply with all the requirements within a period of four (4) years from the date on which you begin your graduate studies. For these purposes, it is very important that the student prepare a study plan with their academic advisor.

## **STUDY PROGRAM:**

The study program of the Master of Education with a specialty in Curriculum and Teaching (Plan A) includes courses in four (4) Components: General Professional Area, Specialized Professional Area, Subspecialty Area, and Elective Courses Area. Students take courses in the subspecialty area of their interest. Subspecialty courses consist of required courses and elective-directed courses. The table below describes the general study program of the master's degree (Plan A):

#### PLAN A

Distribution of credits by Components / Study Areas	Credits
Component: General Professional Area	
Basics	3
EDUC 6509 - Research Methods in Education	3
Component: Specialized Professional Area	
Core Curriculum	3
EDUC 6517: Curriculum Principles	
EDUC 6900: Subject Exam	0
EDUC 6551: Research and Creation Seminar	3
Component: Subspecialty	
Required courses	6
Elective-directed courses	6
Component: Elective Courses Area	
Free electives	6
Total credits	30

• EDUC 6517 Curriculum Principles

## COURSES REQUIRED BY SUB-SPECIALTY

Required Course: Curriculum and Teaching subspecialty in Science Education

- EDUC 6370 Science teaching seminar in high school
- EDUC 6599 Programmatic trends in science teaching in secondary and postgraduate levels

Required courses: Subspecialty in Curriculum and Teaching in Mathematics Education

Choose two (2) courses from the following:

- EDUC 6058 Calculators and computers in teaching Mathematics at the Intermediate and higher level
- EDUC 6128 Teaching and Learning Mathematics in Elementary School: theory and practice
- EDUC 6528 Curricular innovations in the teaching of Mathematics
- EDUC 6530 Workshop for the preparation of new teaching materials of mathematics

Required courses: Curriculum and Teaching in Spanish Subspecialty

- EDUC 6280 Study and design of curricular content in Spanish.
- EDUC 6520 Reading in high school

Required courses: Curriculum and Teaching Subspecialty in History and Social Studies

- EDUC 6290 Innovative approaches in teaching Social Studies.
- EDUC 6300 Programmatic trends in the curricular teaching of social studies.

Required courses: Curriculum and Teaching Subspecialty in Learning Technology

- EDUC 6645 Principles of instructional design.
- EDUC 6720 Learning technologies.

Curricular Required courses: Curriculum and Teaching Subspecialty in Curriculum Theory, Design and Evaluation

• EDUC 6730 Curricular design of educational programs

Choose one (1) course from the following:

- EDUC 6735 Seminar on practices, trends, and controversial issues in curriculum design
- EDUC 8048 Theories about curriculum development
- EDUC 8160 Theory and conceptualization of the integrated curriculum

## ELECTIVE COURSES DIRECTED BY SUB-SPECIALTY

Elective-directed courses: Curriculum and Teaching Subspecialty in Science Education.

• Graduate courses in scientific disciplines

Elective-directed courses: Curriculum and Teaching Subspecialty in Mathematics Education.

- Courses with MATE 5000, MATE 6000, MATE 8000 coding
- Graduate courses that offer a broad overview of content rather than focusing on specific topics or authors. This should include, among others, courses in literature and linguistics.

Elective-directed courses: Curriculum and Teaching Subspecialty in History and Social Studies.

• Graduate courses in history, and social sciences offered in the Department of History, in the College of Social Sciences

Elective-directed courses: Curriculum and Teaching Subspecialty in Learning Technology.

• Graduate courses in learning technology or related areas related to the student's academic interests and professional projections, with the prior approval of the academic advisor.

Elective-directed courses: Curriculum and Teaching Subspecialty in Curriculum Theory, Design and Evaluation.

• Graduate courses are defined in accordance with the student's academic interests and professional projections, with the prior approval of the academic advisor.

#### **COURSE DESCRIPTION:**

The following course descriptions are the most recent entries registered in the Student Information System of the Registrar's Office at the Río Piedras Campus, as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **EDUC 6509 Research Methods in Education**

Three credits.

Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. Emphasis on planning, conducting and evaluating types of research. Face-to-face online and hybrid course.

## **EDUC 6517 Principles of Curriculum**

Three credits. Three hours of lecture per week.

Discussion of problems and issues related to curriculum development and improvement study of curriculum decision and the theoretical framework to make and prove those decisions. Particular consideration will be given to the need for curriculum changes and research.

#### **EDUC 6900 Master Exam**

Credits: 0

## EDUC 6551 Research and Creation Seminar in Curriculum and Teaching

Three credits. Three hours of seminar.

Prerequisite: Successfully pass the comprehensive exam.

Integrative experience in which the student demonstrates research and creative skills in curriculum and teaching. This experience stems from the professional and academic interests of the student.

#### OTHER COURSE DESCRIPTION:

## **EDUC 6008 Written Language in Spanish**

Three credits. Three hours of lecture per week.

This course involves a critical study of the acquisition and development of written language from a cognitive-interactive social perspective. It examines the relationship between the learner and the writing process, analyzing the implications of various theories, curricular practices, and existing methodological approaches. Based on field research, students will design curricular units that articulate the essential elements of the writing development process necessary for fostering writing competency.

## **EDUC 6009 Writing Academic Articles**

Three credits. One hour of lecture, one hour of discussion and one hour of workshop.

This course examines and includes the academic writing processes as well as resources as the student writes an article where they research a topic of their discipline. Writing and research strategies are applied and contextualized according to the basic components of academic discourse intended for publication: function, purpose, types, content depth and the reader profile.

### **EDUC 6036 Methods for Teaching Adults**

Three credits. Three hours of lecture per week.

This course offers a revision of learning theories and teaching methods in the field of adult education, with an emphasis on adopting a systems approach to learning and enhancing the competencies of adult educators. Available research will be utilized throughout the course.

#### **EDUC 6037 Trends in Adult Education**

Three credits. Three hours of lecture per week.

This course provides a comprehensive review of learning theories and teaching methods in adult education, emphasizing the adoption of a systems approach to learning and the enhancement of adult educators' competencies. Relevant research will be utilized throughout the course.

# EDUC 6038 Teaching, Learning and Creativity Through the Natural Sciences Curriculum Three credits. Three hours of lecture, discussion and seminar per week.

This course involves a critical analysis of perspectives and theories related to human learning and creativity in the natural sciences. It investigates the theoretical and empirical foundations that support these perspectives, as well as their implications for teaching natural sciences at various educational levels. The course also analyzes the factors that influence and foster learning and creativity—such as genetics, social and cultural environments, ideologies, and misconceptions—and explores how to address these factors throughout the educational process. Additionally, the evaluation of educational programs and teaching models will be conducted in relation to these theories.

#### EDUC 6045 Curriculum of adult education

Three credits. Three hours of lecture per week.

This course involves a critical evaluation of the adult education curriculum. Students will study and analyze current research and literature in this field, focusing on principles and concepts of curriculum planning that address the needs and characteristics of adult learners. Students will evaluate existing adult curricula and propose revisions as needed.

#### **EDUC 6046 The Role of the Adult Educator**

Three credits. Three hours of lecture per week.

Analysis of the role of the adult educator. The competencies that adult educators must possess and the application of these competencies in accordance with the role performed. Available research concerning these issues will be used.

# EDUC 6047 In-Service Education in Educational Settings: Theory, Research and Action Three credits. Three hours of lecture and fifteen of supervised fieldwork per week.

Critical analysis of the in-service education process to facilitate the professional development of educational setting's personnel. Focused on the conceptual, technical, and social competences to



facilitate the design, implementation, evaluation, and review of in-service education programs in diverse educational settings.

## EDUC 6048 Instructional Reflection: Theory, Research and Action

Three credits. An hour and a half of conference and an hour and a half of discussion per week.

Conceptualization, demonstration, and practice of options and processes directed to support and facility educator's reflection of their practice based on the analysis of research, issues, challenges and possibilities.

## **EDUC 6055 Microcomputers in Education**

Three credits. Three hours of lecture per week.

Introduction to the use of microcomputers in education. Computer literacy will be developed in the students so that they will be able to use microcomputers in their professional endeavors as teacher, administrator or supervisor, counselor, or educational researcher.

# EDUC 6058 Calculators and Computers in the Teaching of Mathematics at the Intermediate and High School Level

Three credits. Three hours of lecture per week.

The use of pocket calculators and microcomputers in the teaching of mathematics. The application of the scientific calculator or microcomputer to several classical mathematical algorithms. Topics include problems in statistics and probability as well as the Monte Carlo method.

## **EDUC 6059 Design of Computer-Based Instruction**

Three credits. Three hours of discussion per week.

Discussion of the models and techniques for the design, development and evaluation of computer-based instruction. Analysis of the various computer systems available for production. Discussion of the research literature on the design of computer-based instruction. The students will prepare a design for an educational computer program.

## **EDUC 6061 Development of Computer-Based Instruction**

Three credits. Two hours of discussion and two hours of laboratory per week

Prerequisite: EDUC 6055

Practical course in the development of computer-based instruction. discussion of the various types of authoring systems and resources such as software for designing graphics, animations and movies, and hardware such as digitizers. CD-ROMs and video cameras. Development of the skills necessary for the production of educational software.

## **EDUC 6063 Design and Production of Multimedia Presentation**

Three credits. Two hours of discussion and two of laboratory work per week Prerequisites: EDUC 6055, 6059.



Discussion of the planning and production process of multimedia presentations. Emphasis on the relationship between learning objectives, materials and audience, as well as the relevant educational theories. Discussion of the literature on design and production of graphic materials. Analysis of the software and hardware available for the development of multimedia presentations. The students will produce a multimedia presentation that incorporates peripheral equipment such as videodisk players, CD-ROMs or compact disk.

## **EDUC 6068 Discipline Models and Strategies in the Process of Teaching**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

A study and analysis of discipline models and strategies in the process of teaching and learning.

# **EDUC 6069** Alternative Conceptions in Chemistry: Educational Implications and Didactic Approaches

Three credits. Three hours of lecture, discussion and seminar per week.

Prerequisites: CHEM 3001-3002.

This course involves the study of students' alternative conceptions in chemistry, focusing on their mental formulations. It examines contributions from various philosophical, psychological, and neurobiological perspectives to understand the mental processes that guide the construction of scientific knowledge. The analysis includes seminal studies exploring students' alternative conceptions of scientific concepts, as well as the methodologies used for these investigations. Key topics include heat, temperature, the nature of matter, covalent bonds, kinetic chemistry, chemical equilibrium, and electrochemistry. Additionally, the course evaluates the conceptions students bring to the classroom and the methodologies that facilitate conceptual change, grounded in an analysis of relevant research literature.

## **EDUC 6085 Computer Programming in Basic Language for Teaching**

Three credits. Three hours of lecture per week

Prerequisite: EDUC 6056

An extension of programming in basic from the educator's perspective with the purpose of enabling participants to create software that takes advantage of the microcomputer's capabilities to enhance and facilitate the teaching-learning process.

## EDUC 6105 Study, Analysis and Design of School Theater Curricular Content

Three credits. Three hours of lecture per week.

This course involves the study and analysis of various processes, methods, and techniques related to drama as an academic discipline, with a focus on theatrical animation. Students will also design a curriculum for a school theater program.

# **EDUC 6106 Supervision of The Teaching in School Theater**

Three credits. Three hours of lecture per week.

Processes, methods and techniques for the teaching of theater from educational and supervisory perspective.

## EDUC 6127 Teaching-Learning Science in Elementary School: Theory and Practice.

Three credits. Three hours of seminar per week.

Seminar for the analysis and evaluation of research on the construction of knowledge and learning in the natural sciences. Application of relevant theorical frames on the instructional design and effective teaching of children in the elementary school based on the instructional objectives of science at the national and local levels. Clinical, laboratory and field work required.

# **EDUC 6128 The Teaching and Learning of Mathematics in Elementary School: Theory and Practice**

Three credits. Three hours per week of seminar.

Analysis and evaluation of research on the construction of knowledge and learning of elementary school mathematics. Research and application of theoretical frameworks relevant to instructional design and effective teaching of children in elementary school, based on instructional objectives and standards of the discipline.

# **EDUC 6135** The Development of Scientific and Logic-Mathematical Thinking in the Early Years

Three credits. Three hours of lecture per week.

Analysis of the sequence of cognitive development that results in the construction of scientific and logic-mathematical knowledge. Review of related research and its pertinence to the educational interaction in the preschool classroom. Clinical experiences aimed at observing, analyzing and undertake educational activities that foster the development of scientific and logic-mathematical thinking within the context of the home and school.

# **EDUC 6140** Role of the Puerto Rican Cultural and Historical Experience in the Bilingual Bicultural Education

Three credits. Three hours of lecture per week.

Designed to provide background, awareness and sensitivity to the cultural and historical heritage of Puerto Rican children and its role in the bilingual bicultural learning process, and curriculum development; relationship of this heritage to schools in transition; field excursions maybe included; role of ethnic studies. This course will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6155 Recent Trends on Social Studies in Elementary School**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6095

Analysis of recent research literature on social studies in the elementary school.



# EDUC 6280 Study, Analysis and Designing of Curricular Content for the Teaching of Spanish

Three credits. Three hours of lecture per week.

Prerequisites: EDPT 4005 or the equivalent.

This course is structured to study and analyze methods for designing a curriculum for teaching Spanish. Discussions on new trends and strategies in curriculum planning will enable students to propose alternatives to the existing Spanish curriculum. These alternatives will be based on the observation, analysis, and evaluation of a curriculum that emphasizes systematic instructional analysis. Students will visit schools and educational projects that feature innovations in the formulation and implementation of Spanish curricula at the secondary school level.

## **EDUC 6285 Pragmatic Teaching of the Spanish Grammar**

Three credits. Three hours of lecture per week.

The development of the abilities in the identification, production and teaching of the grammatical elements and structures of the Spanish language using modern methodology of pragmatic nature. To fulfill these goals a variety of practical exercises, among others, that are enhanced by pragmatic synthesis of various grammatical theories are offered.

# **EDUC 6290 Innovative Approach in the Teaching of History and Other Fields in the Social Studies**

Three credits. Three hours of lecture per week.

Analysis of the innovations related to the teaching and strategies of history and other fields of social studies. In the implementation of the course, emphasis will be given to laboratory experiences, the use of education technology, and relevant literary analysis. Face to face hybrid and online course.

#### **EDUC 6300 Programmatic Tendencies in Social Studies Curriculum**

Three credits. Three hours of lecture per week.

Prerequisites: EDPT 4005 or the equivalent.

This course involves the study and analysis of recent trends in the structuring of history and other social studies curricula. Curricula from various countries will be examined and updated in terms of their philosophies, course programs, guidance processes, and student experiences. The course will be conducted as a seminar, and participants will be required to complete a curriculum design project, applying the theories discussed. The course is offered in face-to-face, hybrid, and online formats.

#### **EDUC 6356 Approaches to the Teaching of Literary Genres**

Three credits. Three hours of lecture per week.

Analysis of research on tendencies and approaches to literary production and its educational dimension. Application of recent trends to the analysis of texts. The creation and application of



innovative strategies and techniques for teaching literary genres will be used. Development of daily plans, exams and demonstrative classes.

## **EDUC 6370 Seminar: Teaching Strategies and Resources in Secondary School Science**

Three credits. Three hours of lecture per week

Study of selected topics relevant to the teaching of secondary school science. Emphasis is given to the following aspects: teaching strategies, techniques and resources for the teaching of secondary school science; evaluation of learning in science and problems related to the adoption and teaching of new science courses.

## EDUC 6380 Workshop for Curriculum Design

Three credits. Three hours of lecture or laboratory work per week.

Prerequisite: EDUC 6501-6502 and 6517.

This course emphasizes curriculum design and the production of instructional materials across various disciplines, based on a systematic analysis of instruction. Curriculum materials such as guides, manuals, textbooks, audiovisual aids, and programmed materials are reviewed, analyzed, selected, and evaluated. General and small group sessions, conducted by cross-disciplinary teams, will explore and discuss issues and challenges in curriculum development. Topics such as educational innovation, action learning modules, extended school year models, programmed instruction, audiovisual materials, and behavioral objectives, as they relate to curriculum design, will be given proper attention.

### **EDUC 6395 Workshop on Computerized Educational Data Processing**

Three credits. One and a half hour of lecture and three hours of laboratory per week.

Prerequisite: EDUC 6509, EDUC 6390.

The course consists of a workshop divided into three units which include the content, the organization, and the functioning of the programs which compose the statistical package for the social sciences. At the introductory stage of the course there will be a review of the scientific process. Reference will also be made to levels of measurement, appropriate statistical techniques and procedures, conceptualization of a research problem data gathering process, and data coding procedures. The course will be developed in two consecutive semesters. The first semester will include unit one (the content) and unit two (the organization). unit three (the functioning of the programs), will be covered during the second semester.

#### EDUC 6430 Study of Technology and its Role in Curriculum Design

Three credits. Three hours of lecture per week.

This course focuses on developing skills in the use of technology, including its evaluation, selection, and systematic application to the curriculum. Students will have the opportunity to apply this knowledge by designing and producing a project in their area of specialization.

#### **EDUC 6450 Advanced Physical Education for the Handicapped (Practicum)**

Six credits. Fifteen lectures in the summer session

The course offers advanced laboratory experiences and practicum in physical education for handicapped children. Emphasis will be on motor learning theories skills and process through short internships in setting for handicapped and non-handicapped children. The course will be based on performance criteria in mastery of specific competencies.

#### EDUC 6500 Training Institute on Bilingualism in Puerto Rico

Six credits. Twenty-five hours per week.

Prerequisite: Bachelor's degree

This course explores the sociological, historical, and cultural background of the Nuyorican child, with a focus on identity development. It examines their linguistic characteristics and introduces teaching strategies in both English and Spanish tailored to these children. The course also covers strategies for evaluation and research in this context.

# EDUC 6516 Linguistics and Teaching of Literacy in English to Spanish-Dominant Children Three credits. Three hours of lecture per week.

Analysis of the elements of language; examination of teaching and learning in the development of bi (literacy); oral and written expression in English with an emphasis on building on students' cultural and linguistic resources; comparative linguistic analysis of Spanish and English. This course will be offered in face-to-face, hybrid, and online formats.

# EDUC 6518 Teaching of Reading in Spanish to English Dominant Bilingual and Bicultural Children

Three credits. Three hours of lecture per week.

Analysis of teaching and learning problems in developmental reading, oral and written expression in Spanish; analysis of elements of language and cognitive style; relationship of audio-lingual perception to bilingualism and language development; comparative linguistic analysis of Spanish and English.

#### **EDUC 6519 The Secondary School Curriculum**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6517. Admission to the graduate program.

The main developments in curriculum from the 1890's (the committee of ten) to the present. An examination of issues and trends in curriculum making and an analysis of conditions affecting curriculum change. Special attention to current committees working nationally on curriculum improvement.

#### **EDUC 6526 Strategies for Curricular Changes**

Three credits. Three hours of lecture per week.

This course examines the contribution of research to curriculum development and the role of educational leaders in driving curriculum change and improvement. Emphasis is placed on the use

and necessity of laboratories and research as tools for producing innovations related to curriculum changes.

#### **EDUC 6528 Curricular Innovations in the Teaching of Mathematics**

Three credits. Three hours of lecture per week.

A focus and appreciation of curricular innovations applied in the field of the teaching of mathematics. The student will have an opportunity to prepare and evaluate curricular designs.

## **EDUC 6530 Workshop in the Production of New Materials to Teach Mathematics**

Three credits. Three hours of lecture per week.

Prerequisites: EDPE 4005 or equivalent.

This course focuses on the creation and development of appropriate models to establish communication channels and techniques for individualizing mathematics instruction. The work is based on a systematic approach to teaching, and students will develop projects applying the theories analyzed. The course is offered in face-to-face, hybrid, and online formats.

#### **EDUC 6535 The Elementary School Curriculum**

Three to seven and a half hours of lectures per week.

Prerequisite: EDUC 6517

A study of the development of the elementary school curriculum with emphasis on issues and trends in curriculum making and analysis of conditions affecting curriculum change.

# **EDUC 6550 History of Educational Ideas in Puerto Rico: Nineteenth and Twentieth Centuries**

Three credits. Three hours of lecture per week.

Prerequisite: EDPT 4005 or its equivalent.

This course involves the investigation and discussion of the educational ideas that have shaped the Puerto Rican educational system since the 19th century. It begins with a general survey of the status of education in Latin America from the 19th century to the present. This survey includes an analysis of the philosophical and educational trends of the 19th century, which are then compared with the educational orientations during the Spanish colonial period. In the context of Puerto Rico, the contributions of influential figures such as Baldorioty, Tapia, and Eugenio María de Hostos to the history of educational ideas will be emphasized.

#### **EDUC 6566 Diagnosis and Correction of Deficiencies in Elementary Mathematics**

Three credits. Three hours of seminar per week.

Seminar directed to the diagnosis, identification, and analysis of deficiencies in elementary mathematics, and the design of teaching-learning strategies for their remediation. It will include laboratory experiences with children.

#### **EDUC 6569 Educational Innovations and Strategies for their Implementation**

Three credits. Three hours of lecture per week.

This course involves a comprehensive study of educational innovations and an analysis of strategies for their effective implementation in educational organizations. The course will be offered in a hybrid format.

#### **EDUC 6570 Designing Educational Material for Elementary School**

Three credits. Three hours of workshop per week.

Prerequisite: For students majoring in elementary education; EDUC 6535; for students majoring in preschool education: EDUC 6115.

This course takes a practical approach, focusing on the design of educational materials that promote concept acquisition and skill development across various curricular domains. Recent research findings on how children learn will be considered throughout the course.

# **EDUC 6576 Curriculum Development and Its Relationship to Learning Within the Social, Cultural and Philosophical Structure**

This course provides an in-depth study of curriculum theory and design as they relate to the educational needs and realities of Puerto Rico. Special emphasis is placed on the analysis and research pertaining to curriculum development. Students will gain field experience to develop the necessary skills for designing and preparing individualized curricula.

### EDUC 6588 Research Writing: Style and Language Usage

Three credits. Three hours of lecture per week.

This course aims to develop students' awareness of language usage and to help them use it more efficiently as a means of communication. It includes an analysis of the nature of language as both a science and an art, with a focus on the appropriate use of style in various contexts, particularly in written language.

#### **EDUC 6596 Classroom Evaluation**

Three credits. Three hours of lecture per week.

Study of the theory and methodology of evaluation of student learning. Emphasis on the development, adaptation, and use of techniques and instruments. Data analysis and interpretation to evaluate student achievement.

#### **EDUC 6607 Education in Rural Areas**

Three credits. Three hours of lecture per week.

This course is designed for administrators, supervisors, counselors, and classroom teachers working in schools serving rural populations. It aims to provide these school personnel with a comprehensive understanding of the concept of "rural," which is characterized by low population density, ties to agricultural economics, traditional values, and challenges posed by rapid social

change. The mission of schools in rural areas is examined in relation to rural social organization, social processes, social problems, and rural development planning.

#### **EDUC 6615 Vocational and Technical Education: Principles and Practices**

Three credits. Three hours of lecture per week.

Analysis and development of vocational education with emphasis on its projections and implications for preparing persons for work.

#### **EDUC 6617 Curriculum Development in Vocational Education**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Analysis and application of curriculum models for vocational education, emphasis in curriculum model based on teaching competencies.

#### **EDUC 6618 Educational Leadership in Vocational Education**

Three credits. Three hours of lecture per week.

Study and analysis of theory and practice in vocational educational leadership. Study of specific problems faced by the vocational administrator in technical and vocational schools.

## **EDUC 6620 Foundations of Physical Education**

Three credits. Three hours of lecture per week.

This course involves the analysis and study of the foundations of physical education, with discussions centered on their relevance to physical education programs. The course is offered in face-to-face, hybrid, and online formats.

#### **EDUC 6625 History of Physical Education**

Three credits. Three hours of lecture per week.

This course explores the role of physical education in people's lives throughout history, emphasizing the events, movements, and individuals who have influenced its development. It compares Greek and Roman concepts with those from the Renaissance and Reformation periods and highlights significant events in the history of physical education in Puerto Rico.

#### **EDUC 6627 Graded Exercise Testing: Methods and Procedures**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization of the director.

The human physiological, anatomical, pathophysiological, and psychological basis needed for effective graded exercise testing will be discussed. The following topics will be included: electrocardiography, equipment calibration, patient screening, protocol selection, data collection and summary, basic cardiopulmonary resuscitation, emergency procedures, and exercise prescription.

# **EDUC 6629 Organization and Administration of Physical Education Programs and Secondary and Postsecondary Sports Administration**

Three credits. Three hours of lecture per week.

This course examines the nature and importance of organizing and administering physical education programs, both academic and extracurricular. Emphasis is placed on the application of theories, concepts, and administrative skills in the development of physical education programs within K-12 and postsecondary school systems.

## **EDUC 6645 Principles of Instructional Design**

Three credits. Three hours of lecture per week.

This course focuses on the essential characteristics of instruction that contribute to a successful teaching-learning process. It analyzes external instructional events and their impact on the internal processes of learning, referencing various learning theories. Different models of systematic instructional design are studied, along with their contributions to improving the teaching-learning process as revealed by research. The course is offered in a hybrid format.

# EDUC 6646 Design, Implementation and Evaluation of an Instructional Technology Program

Three credits. Three hours of lecture per week.

This course focuses on developing skills in the design, development, implementation, and evaluation of instructional technology programs across various levels and educational contexts. It includes an analysis of the social, human, philosophical, and economic factors that affect the integration of technology into the educational system. Students will examine system components such as utilization, selection and evaluation, cataloging, production, maintenance, and repair of equipment from the perspective of curriculum design and development. The course emphasizes new technologies, including computerized instruction and other learning systems, as well as their implications. Additionally, students will identify paradigms that can be utilized in program development.

#### **EDUC 6647 Design and Production of Multi-Sensory Materials**

Three credits. Three hours of lecture per week.

This course develops skills and knowledge in designing and producing a learning unit using multisensory materials. It emphasizes the relationship between the objectives, the materials, and the target audience for whom they are designed.

#### EDUC 6649 Contemporary Themes in Technology: Television for Children

Three credits. Three hours of lecture per week.

This course provides a review of the literature related to children's television. It covers the history of television programming for children and analyzes key issues such as stereotypes, violence, advertisements, consumerism, regulations, and future trends. Additionally, it examines the

symbolic messages conveyed in various children's programs to understand their impact on children's behavior.

### **EDUC 6650 Creating Online Courses Workshop**

Three credits. One-hour lecture, one-hour discussion and one-hour workshop per week.

In this course focuses on skills, and concepts related to partial or total online course creation. Topics concerning designs and production using commercial computer applications will be covered. Face to face and hybrid course.

### **EDUC 6659 Computer Mediated Telecommunication and its Application in Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6055

This course covers the general aspects of telecommunications through local computer networks and the internet. It focuses on utilizing internet resources and discusses educational projects and applications of telecommunications via microcomputers. Students will develop documents for publication on the World Wide Web and analyze ethical issues, trends, and other current topics related to telecommunications and microcomputers.

#### **EDUC 6660 Needs Assessment in Education**

Three credits. Three hours of lecture per week.

Study of the process for the design and production of needs assessment in the educational field.

#### **EDUC 6666 Needs Assessment and Educational Planning**

Three credits. Three hours of lecture per week.

This course focuses on needs assessment and its role in educational planning, emphasizing its implications for the administrator's decision-making process. As future administrators, students will engage with various types, models, strategies, techniques, instruments, tasks, and activities related to needs assessment. These experiences will culminate in the implementation of a needs assessment within an educational institution.

#### **EDUC 6668 Seminar of Planning Techniques**

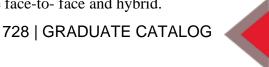
Three credits. Three hours of lecture per week.

This course offers an in-depth study of educational planning techniques, including their descriptions, advantages, disadvantages, and guidelines for implementation. Students will gain practical experience by applying these planning techniques to real-world situations within the educational context of Puerto Rico.

#### **EDUC 6675 Instructional Message Design**

Three credits. Three hours of lecture per week.

Study and analysis of research in educational psychology and instructional media for the development of instructional materials design principles. Course face-to- face and hybrid.



### **EDUC 6915 Knowledge Production and Writing**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6588

This course examines and applies writing processes and resources at the final stage of the research text. The student analyzes and interprets data in relation to writing strategies towards transformation and converting content knowledge into a written text. The global coherence and cohesiveness of the text is achieved by its final revision.

#### **EDUC 6995 Independent Study**

One to three credits. From one to three contact hours.

Prerequisites: Authorization from the professor.

This course is designed to provide graduate students with the opportunity for individual or independent work in an area of particular interest or specialization that does not duplicate existing courses in the graduate studies department. Course activities may include research projects, practical experiences, cooperative projects, monographic papers, and other assignments aimed at maximizing curricular flexibility and addressing students' interests. Registration requires professor's approval, and students may earn up to a maximum of nine credits in this course.

### **EDUC 6997 Independent Study**

One to Three Credits. From one to three contact hours.

Prerequisites: Professor's authorization.

This course is designed to provide graduate students with the opportunity for individual or independent work in a specific area of interest or specialization that does not duplicate courses offered in the graduate studies department. Course activities may include research projects, practical experiences, cooperative projects, monographic papers, and other assignments aimed at maximizing curricular flexibility and addressing students' interests. Registration requires professor's authorization, and students may earn up to a maximum of nine credits for this course.

## EDUC 6998 Field Work for Curriculum Design and Strategies for the Instruction

Two to six credits. Two-six hours of lecture or laboratory work per week.

Students will dedicate a portion of their weekly schedule to one or more educational centers—such as public or private schools, Head Start programs, colleges, and universities—with a focus on curriculum-related issues. They will engage in developing new curricular designs and creating innovative instructional strategies, as well as implementing strategies for curricular changes.

## **EDUC 8007 The Teaching of Opposing Viewpoints in Social Studies**

Three credits. Three hours of lecture per week.

Analysis and discussion of outstanding topics in social studies for which opposing viewpoints exist. The course includes the study of possible strategies for content presentation in classroom. This course is offered in face-to-face, hybrid, and online modalities.

#### **EDUC 8028 Curriculum Evaluation**

Three credits. Three hours of lecture per week.

Advanced study and analysis of the principles that underlie the different strategies followed in curriculum evaluation, in both its formative and summative aspects. Recommended methodology the curriculum evaluations; selection and application of strategies and models for curriculum evaluation.

#### **EDUC 8029 Curriculum Construction and Design**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6517

Study and analysis of the principles that underlie curriculum construction and design and their application to our situation. Issues and problems in curriculum design; emphasis on the development of curriculum theory and research in this area.

### **EDUC 8030 Evaluation of Educational Programs and Systems**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6509 and EDUC 6390 or equivalent.

The study of procedures utilized to evaluate educational programs. This course is offered in face-to-face, hybrid, and online modalities.

# EDUC 8031 Seminar: Paradigms, Changes, and Trends in Educational Technology I One credit. Three hours of seminar per week.

This course involves a critical analysis of paradigms of theoretical and practical interest within the field of educational technology. Emphasis will be placed on the study of historical backgrounds, philosophies, paradigms, theoretical frameworks, and research in educational technology. This seminar is the first in a sequence of three seminars offered over consecutive semesters, providing opportunities for enrichment as students progress through their study plan. The course is delivered in a hybrid format.

# EDUC 8032 Seminar: Paradigms, Changes and Trends in Educational Technology II One credit. Three hours of seminar per week.

This course involves a critical analysis of changes in the professional practice of educational technology. Emphasis will be placed on examining the role of professional associations in the development of educational technology, along with their legal and ethical implications for teaching and learning. This course is the second in a sequence of three seminars offered over three consecutive semesters, designed to provide opportunities for enrichment as students' progress through their study plan. The course will be offered in both face-to-face and hybrid formats.

# EDUC 8033 Seminar: Paradigms, Changes and Trends in Educational Technology III One credit. Three hours of seminars per week.

This course entails a critical analysis of trends and future developments of theoretical and practical interest within the field of educational technology. It is the final seminar in a sequence of three offered over consecutive semesters, designed to provide opportunities for enrichment as students progress through their study plan. The course will be conducted in both face-to-face and hybrid formats.

## **EDUC 8045 Advanced Course in the Teaching of Reading**

Three credits. Three hours of lecture per week.

This course involves a critical analysis of theories and contemporary practices, trends, challenges, and controversial issues in the teaching of reading from an interdisciplinary perspective. It explores current research methods and techniques in cognitive-conceptual psychology, as well as reading and comprehension processes, with a focus on curriculum design and instructional practices.

## **EDUC 8048 Curriculum Development Theories**

Three credits. Three hours of lecture per week.

Study and analysis of the theories, models and research that guide curricular development in diverse dimensions and from different points of view for the curriculum planning and organization process in different teaching levels.

# **EDUC 8049 Models for the Teaching of Natural Sciences at the Secondary and Post-Secondary Levels**

Three credits. Three hours of lecture per week.

This course provides an analysis of major theories of human cognition that have implications for instruction. Students will evaluate instructional events in terms of their impact on learning and will gain experience in assessing instructional problems from a theoretical perspective. The course aims to equip students with the ability to describe these theories and their applications in designing and delivering instruction in traditional natural science subjects, as well as to formulate models that support effective learning and thinking strategies.

#### **EDUC 8050 Educational Implications of the Theories About Science**

Three credits. Three hours of lecture per week.

This course explores concepts related to the nature and philosophy of science through a critical analysis of various theories concerning scientific thinking, knowledge, and inquiry processes. The development and evolution of these theories are examined within their historical and social contexts. Additionally, the course investigates the implications of these theories for science education and reviews research on issues pertinent to the topic of study.

### **EDUC 8057 Linguistic and Didactic Theory of Language**

Three credits. Three hours of lecture per week.

This course focuses on the application of linguistic theories to the teaching of Spanish as a vernacular language. It considers general principles of language acquisition, emphasizing the integration of lexical, morphosyntactic, and cognitive aspects of language into the curriculum.

# **EDUC 8059** Models for the Teaching of Mathematics at the Secondary and Postsecondary Levels

Three credits. Three hours of lecture per week.

Study, analysis, and evaluation of teaching models used for teaching mathematics, with emphasis on the creation, preparation, and adaptation of learning material appropriate to secondary and postsecondary levels.

#### **EDUC 8060 Education as Science: A Critique**

Three credits. Three hours of lecture per week.

This course identifies the common human image across all human and social sciences. It isolates the generic properties of this image and examines their implications for education.

### **EDUC 8065 Linguistic Research Techniques in Education and in the Curriculum**

Three credits. Three hours of lecture per week.

This course explores linguistic research, its current diversification, and its applications in the pedagogical field, with special emphasis on the Puerto Rican context.

# **EDUC 8066 Public and Private Postsecondary Educational Institutions in Puerto Rico** Three credits. Three hours of lecture per week.

This course examines the historical development of public and private postsecondary educational institutions in Puerto Rico. It includes an analysis of the diversity and types of these institutions, focusing on their philosophies, administrative structures, educational programs, student services, faculty types, and fee structures. Additionally, it addresses some of the central challenges faced by these institutions.

#### **EDUC 8078 Computer Telecommunications and its Application to Education**

Three credits. Three hours' lecture and discussion per week.

Prerequisite: EDUC 6055

Study of telecommunications using local and wide area networks. Evaluation of research studies, projects, and educational applications of telecommunications using computers. Analysis of ethical and legal aspects, current and other related topics. Course face-to-face and hybrid.

#### EDUC 8079 Technology, Technique, Society and Education

Three credits. Three hours of lecture and discussion per week.

Study of the relation between technology, society and education from the historical, philosophical and ethical perspective. Analysis of the impact of technology in education and its comparison with



other professional fields, as well as the role of research in the integration of technology in education. Course face-to-face and hybrid.

#### **EDUC 8087 Teacher Preparation Programs in Physical Education**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: EDUC 6620

This course involves the study of the philosophical, theoretical, and curricular foundations of teacher education programs in physical education. It focuses on the comprehensive design and evaluation of teacher education programs in this field.

# **EDUC 8130 Models of Teaching, Supervision and Evaluation of Programs of English as a Second Language**

Three credits. Three hours of lecture per week.

This course offers an in-depth examination of the theories and principles underlying the teaching of first and second languages. It integrates various models and methods for teaching and supervising ESL curricular development. Additionally, the course includes the analysis and design of evaluation instruments for TESOL.

#### **EDUC 8135 Seminar: Issues in Education**

Three credits. Three hours of lecture per week.

This course involves an analysis of the challenges faced by educational administrators in both public and private educational systems in Puerto Rico and other countries. While specific issues may vary across different contexts, several common controversial areas are identified, including the social function of education, the relationship between education and individual liberty, external influences on educational practices, the aims of education, and the role of educators in the educational process.

#### **EDUC 8137 The Teaching of History as a Dynamic Process**

Three credits. Three hours of lecture per week.

This course explores the interrelation of current events and influential personalities that impact human development, all within a historical context. It considers these personalities as significant historical variables. The course includes discussions, analyses, and modeling of methodologies and strategies to effectively integrate these events into educational settings. Continuous and timely revisions of course content are required. The course is offered in face-to-face, hybrid, and online formats.

#### **EDUC 8138 Educational Implications if Historiography**

Three credits. Three hours of lecture per week.

Study and analysis of new tendencies in historiography and their interrelation with education. Emphasis will be given to the importance of this field of study for the different social studies areas, mainly history. Face to face hybrid and online course.

## EDUC 8139 The Education, History and Culture of Africa and its People

Three credits. One hour of lecture, one hour of discussion, and one hour of workshop per week.

This course focuses on the study of education related to African history and culture, highlighting the contributions of Black people to society. It includes an analysis of African issues across various historical periods and examines the current evolution of the continent. The course also discusses the impact of African history on Puerto Rico and explores educational strategies for effectively integrating this content into the classroom.

### **EDUC 8140 Language Acquisition and Learning**

Three credits. Three hours of lecture per week

Intensive analysis and application of theories of learning and intellectual development, as proposed by Thorndike, Skinner, Piaget, Brunner, Bandura, and others, to the teaching and learning of English as a second language. The principles underlying language acquisition and learning will be an integral part of the course. Dependent and independent cognitive style and their implications for second language learning will also be included.

# **EDUC 8145 Implications of Modern Linguistic Theories in the Teaching of English as a Second Language**

Three credits. Three hours of lecture per week.

This course involves the study and analysis of various linguistic schools, including traditional grammar, structuralism, and transformational grammar. It will cover fundamental concepts of traditional grammar and emphasize their impact on teaching English as a second language.

#### **EDUC 8205 Models of Teaching Literary Text Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6280 or EDUC 8029.

This course examines teaching models that support traditional, structural, semiotic, and sociological approaches to literary analysis. It explores the correlation between literary text analysis and curricular knowledge and experiences. Students will design curricular materials aimed at enhancing literary analysis skills among Spanish learners at the secondary and post-secondary levels.

#### **EDUC 8206 The Teaching of the Spanish in Puerto Rico**

Three credits. Three hours of lecture per week.

This course focuses on documentary research and the analysis of methods employed in teaching Spanish at the elementary, secondary, and post-secondary levels in Puerto Rico. It includes the definition and examination of challenges related to Spanish instruction, along with a critical evaluation of both theory and practice in the field.

**EDUC 8215 Needs Assessment: Context Evaluation** 

Three credits. Three hours of lecture per week.

This course involves the study of the processes for identifying and analyzing needs to translate them into goals, objectives, and plans. It emphasizes analyzing the gap between the current state of a scenario, project, or program and the desired state during the planning, design, implementation, and evaluation phases of educational systems.

# **EDUC 8235 Seminar: Practices, Trends and Issues in the Teaching ff Mathematics** Three credits.

This course offers a study and critical analysis of special topics, specific problems, trends, issues, and contemporary theories and practices in mathematics education, with a focus on secondary and post-secondary levels. It will be offered in face-to-face, hybrid, and online modalities.

#### **EDUC 8237 Seminar: Research Themes in Mathematics Education**

Three credits. Three hours of seminar per week.

Critical analysis of the latest research in the curriculum and teaching of mathematics and its educational implications.

### **EDUC 8245 Interdisciplinary Study of Educational Topics**

One credit. One hour and a half of lecture per week.

This interdisciplinary course explores educational and cultural topics arising from historical and intellectual thought. It includes a critical analysis of theories and concepts, as well as the identification of problems, alternatives, and educational practices.

# **EDUC 8305 Sociology of the Scientific and Technological Knowledge: Educational Consequences**

Three credits. Three hours of lecture per week.

Students and teachers explore scientific and technological development through the lens of the sociology of science and its social impact. This course examines the socio-cultural foundations of the natural sciences as a substantial complement to epistemology and the history of science, along with their educational consequences. Participants will also analyze controversial sociological interpretations of natural sciences and technology, as well as various teaching-learning models for designing instructional lessons on the course's thematic content.

#### **EDUC 8308 African Presence in Puerto Rico: Impact on Education**

Three credits. Three hours of conferences per week.

This course examines the origin and development of the African presence in Puerto Rico, providing a critical analysis of its role and contributions to the national identity, customs, and traditions of Puerto Rico. Students will explore the influence of African heritage on various aspects of society, including politics, economy, education, media, arts, theater, music, dance, literature, and religion. The development of racial identity and the concept

of "bleaching" will be analyzed, with particular emphasis on racial relationships, racism, oppression, exclusion, and marginalization, as well as their impacts on Puerto Rican society in the 21st century. This course is situated within the broader context of educational research, fostering awareness of African roots and the racial issues that affect the Puerto Rican educational system.

#### **EDUC 8309 Curricular Impact of the Africa Geography**

Three credits. Three hours of lecture per week.

This course focuses on the geography of Africa and its curricular implications, facilitating a comparative analysis between African and Puerto Rican realities. Students will conduct research and develop relevant curricular strategies, emphasizing the use of interdisciplinary methods to enhance understanding and application.

#### **EDUC 8900 Candidacy Examination**

No credits..

The doctoral examination is a requisite for graduate students and is considered a full-time commitment.

#### **EDUC 8981 Doctoral Dissertation**

Six credits.

Prerequisites: Students must successfully pass the doctoral examination.

Students must present a certificate of completion for the Information Competencies Workshop granted by the Gerardo Selles Sola Library. Additionally, evidence of completion for the online module on Responsible Conduct in Research, provided by the CITI Program, must be submitted in accordance with Certification 029 of the UPR-RP Administrative Board for the academic year 2012-2013.

This course focuses on the preparation of the doctoral dissertation, emphasizing the proposal development and the general procedures for writing a doctoral dissertation.

#### **EDUC 8982 Continuation of Doctoral Dissertation**

Credits: 0These courses can be repeated three times.

Prerequisite: All courses required for the degree in the specialty must be completed for the student to be eligible for graduation.

Continuation of doctoral dissertation giving emphasis to the implantation of the research study and to the preparation of the dissertation.

### **EDUC 8995 Directed Specialized Study**

One to three credits. One to three contact hours Prerequisite: Authorization from the department.

Exploration of special topics or problems of particular interest to groups of graduate students under the direction of a faculty member or visiting professor. This course may be taken up to a maximum of nine credits.



Dean: Dra. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Exercise Science Program Coordinator**: Dra. Lucía del R. Martínez

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89203, 89253

Website: http://ege.uprrp.edu/

#### **DEGREE:**

# Doctor of Education in Curriculum and Teaching Plan B - Accelerated Route to the Doctorate (75 credits)

The Department of Graduate Studies in the College of Education offers an accelerated Doctorate in Education with a specialization in Curriculum and Teaching, available in the following subspecialties:

Curriculum and Teaching in Science Education

Curriculum and Teaching in Mathematics Education

Curriculum and Teaching in Spanish

Curriculum and Teaching in History and Social Studies

Curriculum and Teaching in Learning Technology

Curriculum and Teaching in Curriculum Theory, Design and Evaluation

Curriculum and Instruction in Teaching English as a Second Language (TESL)

#### **FACULTY:**

**Gladys R. Capella Noya,** Ed.D., Harvard University, 1995. Professor. Power relations within learning environments; curriculum and culture; democracy and educational practice.

**Kevin S. Carroll,** Ph.D., University of Arizona, 2009. Associate Professor. Language planning and policy, translanguaging, bilingual education, and teachers of English to speakers of other languages.

**Ileana M. Quintero Rivera,** Ed.D., Harvard University, 1996. Full Professor. Curricular design and Methodology of Teaching and Learning in Social Study and History. Interest in the integration of theory, reflection and practice. Collaboration in Community Projects. Qualitative and Ethnographic Research.

**Omar A. Hernández Rodríguez,** Ed.D., University of Puerto Rico, 2002. Associate Professor. Study of conceptual development in mathematics, cognitive and metacognitive processes in solving mathematical problems; incorporation of new technologies in the teaching of mathematics and the professional development of teachers.

**Edwin Martínez Hernández,** Ed.D., University of Puerto Rico, 2000. Associate Professor. Integration of technologies in instructional events and its effect on learning.

**Rose Marie Santiago Villafañe,** Ph.D., University of Murcia, 2005. Associate Professor. sociolinguistic analysis of texts; the development of linguistic awareness; writing and reading as cognitive processes; curricular design in the area of Spanish; students as language researchers; the linguistic attitudes of teachers towards the language they teach; curricular development by competencies.

**José Soto Sonera,** Ed.D., University of Puerto Rico, 2006. Associate Professor. Curriculum design and evaluation; science teaching and learning; cognitive processes and conceptual development from historical-cultural and anthropological perspectives.

#### **ADMISSION REQUIREMENTS:**

General Requirements of the Río Piedras Campus: https://graduados.uprrp.edu/

# Specific Admission Requirements Minimum requirements of the Doctorate in Education Program through accelerated route (Plan B) for all subspecialties:

- 1. Baccalaureate from an accredited university or its equivalent.
- 2. Minimum academic index of 3.00 on a scale of 4.00 in the bachelor's degree.
- 3. Additional requirements for the subspecialties of Science Education, Mathematics, Education, Spanish, History and Social Studies:
- 4. Eighteen (18) credits at the baccalaureate level in the subspecialty.

#### **Teaching English as a Second Language subspecialty:**

1. Eighteen (18) credits at the baccalaureate level in the subspecialty (courses in TESL will be considered as courses meeting this requirement).

#### Specific requirements for the Learning Technology subspecialty:

- 1. Competence in the management of Information and Communication Technologies (ICT). Confirmation will take place during the interview process.
- 2. Three (3) credits in learning technology.

#### **Documents and Other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies.
- 2. Two (2) official academic transcripts.
- 3. Two (2) letters of recommendation for Graduate Studies in electronic or paper format Interview.
- 4. Proficiency in both Spanish and English.

### **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the courses with a grade of no less than "C".
- 3. Minimum academic index of 3.00 in the courses that are considered for graduation.
- 4. Students must meet all requirements within four (4) years from the start of their graduate studies. To facilitate this process, it is essential for students to create a study plan in collaboration with their academic advisor.

#### STUDY PROGRAM:

The Doctorate in Education program with a specialty in Curriculum and Teaching (Plan B) comprises four (4) components: General Professional Area, Specialized Professional Area, Subspecialty Area, and Elective Courses Area. Students will select courses based on their subspecialty interests, which include both required courses and directed electives. The table below outlines the general curriculum for Plan B through an accelerated route:

#### PLAN B

Distribution of credits by Components / Study Areas	Credits
Component: General Professional Area	
Fundamentals of Education	6
Research and Evaluation	12
Component: Specialized Professional Area	
Core Curriculum	9
EDUC 6905 Doctoral Qualifying Examination	0
EDUC 8900: Candidacy Exam	0
Dissertation	6
Component: Subspecialty	
Required courses	15
Elective-directed courses	18
Component: Elective Courses Area	
Free electives	9
Total credits	75

#### **CORE CURRICULUM COURSES**

EDUC 6517 Curriculum Principles
EDUC 8028 Curriculum Evaluation
EDUC 8029 Construction and Curriculum Design

### REQUIRED COURSES BY SUB-SPECIALTY AREA

#### Courses required for the Curriculum and Teaching Subspecialty in Science Education

EDUC 6370	Science Teaching Seminar in Secondary School
EDUC 6599	Programmatic trends in science teaching at the secondary and
	postgraduate levels
EDUC 8049	Models for teaching Natural Sciences at secondary and
	postgraduate levels
EDUC 8050	Educational implications of theories about sciences.

### Choose one (1) course among the following:

EDUC 6127	Teaching-learning of science at the elementary level
EDUC 8305	Sociology of scientific and technological knowledge

# **Courses required for the Curriculum and Teaching Subspecialty in Mathematics Education**

EDUC 8059	Model for Teaching Mathematics at the level secondary and post-
secono	lary

EDUC 8235 Seminar: Practices, trends, and controversial issues in teaching mathematics

EDUC 8237 Research Topics in Mathematics Education

#### Choose two (2) courses from the following:

EDUC 6058 Calculators and computers in the teaching of Mathematics at the intermediate and higher level

EDUC 6128 Teaching and Learning Mathematics at school elementary: theory and practice

EDUC 6528 Curricular innovations in the teaching of mathematics

EDUC 6530 Workshop for the preparation of new materials for mathematics teaching

# Courses required for the Curriculum and Instruction Subspecialty in Teaching English as a Second Language

EING 6565 Advanced Seminar: The Principles of the Teaching and Learning of English as a Second Language

EING 6566 Seminar, Curriculum, Instruction, and Evaluation of English Program

EDUC 8130 Models of Teaching, Supervision, and Evaluation in Programs of English as a Second Language



EDUC 8140	Language Acquisition and Learning
EDUC 8145	Implications in the linguistics of English as a second language

## Courses required for the Curriculum and Teaching in Spanish Subspecialty

EDUC 6280	Study and design of curricular content in Spanish
EDUC 6520	Reading in Secondary School
EDUC 8045	Advanced course on teaching reading
EDUC 8057	Linguistic theory and language teaching
EDUC 8205	Teaching methods for the analysis of literary text

# Courses required for the Curriculum and Teaching Subspecialty in History and Social Studies

EDUC 6290	Innovative approaches in the teaching of History and Social
	studies
EDUC 6300	Programmatic trends in the curricular teaching of social studies
EDUC 8007	Teaching of points in controversy in Studies Social

## Choose three (3) courses from the following:

timee (5) courses from the following.	
EDUC 8137	Teaching of History as a dynamic process
EDUC 8138	Educational implications in historiography
EDUC 8139	Education, history and culture about Africa and the Black
EDUC 8308	African presence in Puerto Rico: impact on education
EDUC 8309	Curricular implications of the geography of Africa

## Courses required for the Curriculum and Teaching Subspecialty in Learning Technology

EDUC	6645	Principles of Instructional Design
EDUC	6720	Learning Technologies
EDUC	8031	Seminar: Paradigms, changes, and trends in the educational
	technol	ogy I
EDUC	8032	Seminar: Paradigms, changes, and trends in educational
	technol	ogy II
EDUC	8033	Seminar: Paradigms, changes, and trends in educational
	technol	ogy III
EDUC	8078	Telecommunications through the computer and its application in
	educati	on
<b>EDUC</b>	8079	Technology, technique, society, and education

# $\label{lem:courses} \textbf{Courses required for the Curriculum and Teaching Subspecialty in Curriculum Theory,} \\ \textbf{Design and Evaluation}$

EDUC 6730	Curricular design of educational programs	
EDUC 8048	Theories of Curriculum Development Choose three (3) courses	
from the following:		



EDUC 6735	Seminar on practices, trends, and controversial issues in curriculum
design	
EDUC 8160	Theory and conceptualization of the integrated curriculum
EDUC 8165	Planning, design, and evaluation of the integrated curriculum
EDUC 8167	Curricular changes and educational transformations
EDUC 8169	Planning and implementation of curricular projects
EDUC 8170	Seminar: Curricular development

#### ELECTIVE COURSES DIRECTED BY SUB-SPECIALTY AREA

# Elective-directed courses for the Subspecialty of Curriculum and Teaching in Science Education

Graduate courses in scientific disciplines

# **Elective-directed courses for the Curriculum and Teaching Subspecialty in Mathematics Education**

Six credits in courses with MATE 5000 coding Twelve credits in courses with MATE 6000, MATE 8000 coding.

### Elective-directed courses for the subspecialty of Teaching English as a Second Language

Graduate-level content courses in the areas of linguistics or literature in English. Students may also select courses EING 6420, EING 6575, or EING 6577.

#### Elective-directed courses for the Subspecialty of Curriculum and Teaching in Spanish

Graduate courses that offer both a comprehensive overview and a specialized perspective on the content covered. These courses should include, among others, topics in literature, linguistics, literary criticism, and technology.

# Elective-directed courses for the Curriculum and Teaching Subspecialty in History and Social Studies

Graduate courses in history, and social sciences offered in the Department of History, in the Faculty of Social Sciences .

# Elective-directed courses for the Curriculum and Teaching Subspecialty in Learning Technology

Graduate courses in learning technology or related areas (for example cognition, computing, technologies, and communications), related to the student's academic interests and professional projections, subject to prior approval from the academic advisor.

# Elective-directed courses for the Curriculum and Teaching Subspecialty in Curriculum Theory, Design, and Evaluation

Graduate courses are tailored to align with the student's academic interests and professional aspirations, subject to prior approval from their advisor.

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **EDUC 6008 Written Language in Spanish**

Three credits. Three hours of lecture per week.

This course involves a critical examination of the acquisition and development of written language from a cognitive-interactive social perspective. It explores the relationship between the learner and the writing process, analyzing the implications of existing theories, curricular practices, and methodological approaches. Students will conduct field research to design curricular units that incorporate the essential elements of the writing development process, aimed at enhancing writing competency.

## **EDUC 6009 Writing Academic Articles**

Three credits. One hour of lecture, one hour of discussion and one hour of workshop.

This course explores the academic writing process and provides resources as students compose an article on a topic within their discipline. Writing and research strategies are applied and contextualized according to the fundamental components of academic discourse intended for publication, including function, purpose, types, content depth, and reader profile.

#### **EDUC 6036 Methods for Teaching Adults**

Three credits. Three hours of lecture per week.

This course offers a comprehensive review of learning theories and teaching methods in adult education, emphasizing the adoption of a systems approach to learning and the competencies required of adult educators. The course will incorporate available research to support its content.

#### **EDUC 6037 Trends in Adult Education**

Three credits. Three hours of lecture per week.

Analysis of demographic, social and technological trends that justify adult education; outreach and projection of the program and factors affecting learning in the adult. Available statistics and research will be examined.

EDUC 6038 Teaching, Learning and Creativity Through the Natural Sciences Curriculum Three credits. Three hours of lecture, discussion and seminar per week.



Critical analysis of perspectives and theories which account for human learning and creativity in the natural sciences. This course investigates the theoretical and empirical foundations that support these perspectives as well as the analysis of their implications for the teaching of natural sciences at different school levels. Analysis of the factors that influence and propitiate the learning and creativity -genetics, social and cultural environment, ideologies, erroneous concepts, among others- and how to pay attention to them through the education process. Evaluation of education programs and teaching models according to the theories.

#### **EDUC 6045 Curriculum of adult education**

Three credits. Three hours of lecture per week.

This course provides a critical evaluation of adult education curricula. Students will study and analyze current research and literature in the field, focusing on principles and concepts of curriculum planning that address the needs and characteristics of adult learners. As part of the course, students will evaluate existing adult education curricula and propose revisions.

#### **EDUC 6046 The Role of the Adult Educator**

Three credits. Three hours of lecture per week.

Analysis of the role of the adult educator. The competencies that adult educators must possess and the application of these competencies in accordance with the role performed. Available research concerning these issues will be used.

# **EDUC 6047 In-Service Education in Educational Settings: Theory, Research and Action** Three credits. Three hours of lecture and fifteen of supervised fieldwork per week.

Critical analysis of the in-service education process to facilitate the professional development of educational setting's personnel. Focused on the conceptual, technical, and social competences to facilitate the design, implementation, evaluation, and review of in-service education programs in diverse educational settings.

#### EDUC 6048 Instructional Reflection: Theory, Research and Action

Three credits. An hour and a half of conference and an hour and a half of discussion per week.

Conceptualization, demonstration, and practice of options and processes directed to support and facility educator's reflection of their practice based on the analysis of research, issues, challenges and possibilities.

#### **EDUC 6055 Microcomputers in Education**

Three credits. Three hours of lecture per week.

Introduction to the use of microcomputers in education. Computer literacy will be developed in the students so that they will be able to use microcomputers in their professional endeavors as teacher, administrator or supervisor, counselor, or educational researcher.

# **EDUC 6058 Calculators and Computers in the Teaching of Mathematics at the Intermediate and High School Level**

Three credits. Three hours of lecture per week.

The use of pocket calculators and microcomputers in the teaching of mathematics. The application of the scientific calculator or microcomputer to several classical mathematical algorithms. Topics include problems in statistics and probability as well as the Monte Carlo method.

#### **EDUC 6059 Design of Computer-Based Instruction**

Three credits. Three hours of discussion per week.

Discussion of the models and techniques for the design, development and evaluation of computer-based instruction. Analysis of the various computer systems available for production. Discussion of the research literature on the design of computer-based instruction. The students will prepare a design for an educational computer program.

### **EDUC 6061 Development of Computer-Based Instruction**

Three credits. Two hours of discussion and two hours of laboratory work per week.

Prerequisite: EDUC 6055

Practical course in the development of computer-based instruction. discussion of the various types of authoring systems and resources such as software for designing graphics, animations and movies, and hardware such as digitizers. CD-ROMs and video cameras. Development of the skills necessary for the production of educational software.

### **EDUC 6063 Design and Production of Multimedia Presentation**

Three credits. Two hours of discussion and two hours of laboratory work per week Prerequisites: EDUC 6055, 6059.

This course focuses on the planning and production process of multimedia presentations, emphasizing the relationship between learning objectives, materials, and target audience, alongside relevant educational theories. Students will explore literature on the design and production of graphic materials and analyze available software and hardware for developing multimedia presentations. As a practical component, students will create a multimedia presentation incorporating peripheral equipment such as videodisc players, CD-ROMs, or compact discs.

### EDUC 6068 Discipline Models and Strategies in the Process of Teaching

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

A study and analysis of discipline models and strategies in the process of teaching and learning.

# **EDUC 6069 Alternative Conceptions in Chemistry: Educational Implications and Didactic Approaches**

Three credits. Three hours of lecture, discussion and seminar per week.

Prerequisites: CHEM 3001-3002.

This course examines students' alternative conceptions in chemistry and the mental processes behind the construction of scientific knowledge. It incorporates contributions from philosophical, psychological, and neurobiological perspectives to enhance understanding of these cognitive processes. The course analyzes seminal studies that explore alternative student conceptions of scientific concepts such as heat, temperature, the nature of matter, covalent bonding, kinetics, chemical equilibrium, and electrochemistry. It also evaluates the methodologies used to investigate these misconceptions and discusses how students' prior conceptions and research-backed methodologies can facilitate conceptual change in the classroom.

#### **EDUC 6085 Computer Programming in Basic Language for Teaching**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6056

This course extends the fundamentals of BASIC programming from an educator's perspective, focusing on the development of software designed to leverage the microcomputer's capabilities. The goal is to equip participants with the skills needed to create educational software that enhances and facilitates the teaching-learning process.

#### EDUC 6105 Study, Analysis and Design of School Theater Curricular Content

Three credits. Three hours of lecture per week.

Study and analysis of various processes, methods, and techniques related to drama as an academic discipline, with a particular emphasis on theatrical animation. The course includes the design and development of a curriculum for a school theater program.

## **EDUC 6106 Supervision of The Teaching in School Theater**

Three credits. Three hours of lecture per week.

Processes, methods and techniques for the teaching of theater from educational and supervisory perspective.

#### EDUC 6127 Teaching-Learning Science in Elementary School: Theory and Practice.

Three credits. Three hours of seminar per week.

Seminar for the analysis and evaluation of research on the construction of knowledge and learning in the natural sciences. Application of relevant theorical frames on the instructional design and effective teaching of children in elementary school based on the instructional objectives of science at the national and local levels. Clinical, laboratory and field work required.

# **EDUC 6128 The Teaching and Learning of Mathematics in Elementary School: Theory and Practice**

Three credits. Three hours per week of seminar.

Analysis and evaluation of research on the construction of knowledge and learning of elementary school mathematics. Research and application of theoretical frameworks relevant to instructional



design and effective teaching of children in elementary school, based on instructional objectives and standards of the discipline.

# **EDUC 6135** The Development of Scientific and Logic-Mathematical Thinking in the Early Years

Three credits. Three hours of lecture per week.

Analysis of the sequence of cognitive development leading to the construction of scientific and logical-mathematical knowledge. A review of related research and its relevance to educational interactions in the preschool classroom. Clinical experiences are designed to observe, analyze, and implement educational activities that promote the development of scientific and logical-mathematical thinking within the home and school contexts.

# EDUC 6140 Role of the Puerto Rican Cultural and Historical Experience in the Bilingual Bicultural Education

Three credits. Three hours of lecture per week.

This course is designed to provide background knowledge, awareness, and sensitivity to the cultural and historical heritage of Puerto Rican children and its role in the bilingual and bicultural learning process, as well as in curriculum development. It explores the relationship between this heritage and schools undergoing transition. Field excursions may be included. The course also examines the role of ethnic studies. It will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6155 Recent Trends on Social Studies in Elementary School**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6095

Analysis of recent research literature on social studies in elementary school.

# EDUC 6280 Study, Analysis and Designing of Curricular Content for the Teaching of Spanish

Three credits. Three hours of lecture per week. Prerequisites: EDPT 4005 or the equivalent.

The course has been structured to cover study and analysis of the methods of designing a curriculum for the teaching of Spanish. Discussion of new trends and strategies for curriculum planning will enable the students to present program alternative to the Spanish curriculum. These will be based on the observation analysis and evaluation of a curriculum that emphasizes the systematic analysis of instruction. The students will visit schools and educational projects with innovations for the formulation and implementation of a curriculum for the teaching of Spanish in the secondary school.

#### **EDUC 6285 Pragmatic Teaching of the Spanish Grammar**

Three credits. Three hours of lecture per week.

The development of the abilities in the identification, production and teaching of the grammatical elements and structures of the Spanish language using modern methodology of pragmatic nature. To fulfill these goals a variety of practical exercises, among others, that are enhanced by pragmatic synthesis of various grammatical theories are offered.

# **EDUC 6290 Innovative Approach in the Teaching of History and Other Fields in the Social Studies**

Three credits. Three hours of lecture per week.

This course provides an analysis of innovations in the teaching methods and strategies related to history and other fields within social studies. Emphasis is placed on laboratory experiences, the use of educational technology, and the analysis of relevant literature. The course will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6300 Programmatic Tendencies in Social Studies Curriculum**

Three credits. Three hours of lecture per week.

Prerequisites: EDPT 4005 or the equivalent.

Study and analysis of recent trends in the structuring of history and other fields of the social studies curriculum. School curriculum from different countries will be studied and updated in terms of their philosophies, course programs, guidance processes and student experiences. The course will proceed as a seminar and the participants will be required to do a curricular design project, using and applying the theory discussed. Face to face hybrid and online course.

### **EDUC 6356 Approaches to the Teaching of Literary Genres**

Three credits. Three hours of lecture per week.

Analysis of research on tendencies and approaches to literary production and its educational dimension. Application of recent trends to the analysis of texts. The creation and application of innovative strategies and techniques for teaching literary genres will be used. Development of daily plans, exams and demonstrative classes.

# **EDUC 6370 Seminar: Teaching Strategies and Resources in Secondary School Science** Three credits. Three hours of lecture per week.

Study of selected topics relevant to the teaching of secondary school science. Emphasis is given to the following aspects: teaching strategies, techniques and resources for the teaching of secondary school science; evaluation of learning in science and problems related to the adoption and teaching of new science courses.

#### **EDUC 6380 Workshop for Curriculum Design**

Three credits. Three hours of lecture or laboratory work per week.

Prerequisite: EDUC 6501-6502 and 6517.

The course emphasizes curriculum design and the production of instructional materials across various disciplines, based on a systematic analysis of instruction. Curriculum resources, including

guides, manuals, textbooks, audiovisual, and programmed materials, are reviewed, analyzed, selected, and evaluated. Both general and small group sessions are conducted by interdisciplinary teams to explore and discuss curriculum-related problems and issues. Special attention is given to innovations in education, action learning modules, extended school year models, programmed instruction, audiovisual resources, and behavioral objectives as they relate to curriculum development.

## **EDUC 6395 Workshop on Computerized Educational Data Processing**

Three credits. One and a half hour of lecture and three hours of laboratory per week. Prerequisite: EDUC 6509, EDUC 6390.

This course comprises a workshop divided into three units, focusing on the content, organization, and functioning of programs within the Statistical Package for the Social Sciences (SPSS). The course begins with an overview of the scientific process, followed by discussions on levels of measurement, appropriate statistical techniques, and procedures. Students will learn about conceptualizing a research problem, the data-gathering process, and data coding procedures. The course will be conducted over two consecutive semesters: the first semester will cover Unit One (Content) and Unit Two (Organization), while Unit Three (Functioning of the Programs) will be addressed in the second semester.

### EDUC 6430 Study of Technology and its Role in Curriculum Design

Three credits. Three hours of lecture per week.

Development of skills in the use of technology, its evaluation, selection and systematic application to the curriculum. Provides opportunity to the student to apply this knowledge to the design and production of a project in his area of specialization.

#### **EDUC 6450 Advanced Physical Education for the Handicapped (Practicum)**

Six credits. Fifteen lectures.

The course offers advanced laboratory experiences and practicum in physical education for handicapped children. Emphasis will be on motor learning theories skills and process through short internships in setting for handicapped and non-handicapped children. The course will be based on performance criteria in mastery of specific competencies.

#### **EDUC 6500 Training Institute on Bilingualism in Puerto Rico**

Six credits. Twenty-five hours per week.

Prerequisite: Bachelor's degree.

This course explores the sociological, historical, and cultural background of the Nuyorican child, focusing on the development of their identity and linguistic characteristics. It includes teaching strategies in both English and Spanish tailored for these children, as well as evaluation methods and research strategies relevant to their educational context.

#### **EDUC 6509 Research Methods in Education**

Three credits.



Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. emphasis on planning, conducting and evaluating types of research. Face-to-face online and hybrid course.

# EDUC 6516 Linguistics and Teaching of Literacy in English to Spanish-Dominant Children Three credits. Three hours of lecture per week.

Analysis of the elements of language; examination of teaching and learning in the development of bi(literacy); oral and written expression in English with an emphasis on building on students' cultural and linguistic resources; comparative linguistic analysis of Spanish and English. This course will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6517 Principles of Curriculum**

Three credits. Three hours of lecture per week.

Discussion of problems and issues related to curriculum development and improvement study of curriculum decision and the theoretical framework to make and posit those decisions. Particular consideration will be given to the need for curriculum changes and research.

# EDUC 6518 Teaching of Reading in Spanish to English Dominant Bilingual and Bicultural Children

Three credits. Three hours of lecture per week.

Analysis of teaching and learning problems in developmental reading, oral and written expression in Spanish; analysis of elements of language and cognitive style; relationship of audio-lingual perception to bilingualism and language development; comparative linguistic analysis of Spanish and English.

#### **EDUC 6519 The Secondary School Curriculum**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6517. Admission to graduate program.

The main developments in curriculum from the 1890's (the committee of ten) to the present. An examination of issues and trends in curriculum making and an analysis of conditions affecting curriculum change. Special attention to current committees working nationally on curriculum improvement.

#### **EDUC 6526 Strategies for Curricular Changes**

Three credits. Three hours of lecture per week.

This course examines the contributions of research to curriculum development and highlights the role of educational leaders in driving curriculum change and improvement. It emphasizes the importance of laboratories and investigations as essential means for producing innovations related to curriculum modifications.

#### **EDUC 6528 Curricular Innovations in the Teaching of Mathematics**

Three credits. Three hours of lecture per week.

A focus and appreciation of those curricular innovations with are applied in the field of the teaching of mathematics. The student will have an opportunity to prepare and evaluate curricular designs.

#### **EDUC 6530 Workshop in the Production of New Materials to Teach Mathematics**

Three credits. Three hours of lecture per week.

Prerequisites: EDPE 4005 or equivalent.

This course focuses on the development and creation of effective models to establish communication channels and individualized techniques in the teaching of mathematics. Students will engage in a systematic approach to instruction, designing projects that apply the theories discussed. The course will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6535 The Elementary School Curriculum**

Three to seven and a half hours of lectures per week.

Prerequisite: EDUC 6517

This course explores the development of the elementary school curriculum, emphasizing key issues and trends in curriculum design. It also involves an analysis of the conditions that influence curriculum changes.

# **EDUC 6550 History of Educational Ideas in Puerto Rico: Nineteenth and Twentieth Centuries**

Three credits. Three hours of lecture per week.

Prerequisite: EDPT 4005 or its equivalent.

This course investigates and discusses the educational ideas that have shaped the Puerto Rican educational system since the 19th century. It begins with a general overview of the state of education in Latin America during the 19th century and continues to analyze the philosophical and educational trends of that period. These trends are then compared with the educational orientations prevalent during the Spanish colonial period. Special emphasis is placed on the contributions of key figures in Puerto Rico's educational history, such as Baldorioty, Tapia, and Eugenio María de Hostos.

#### **EDUC 6551 Research and Creation Seminar in Curriculum and Teaching**

Three credits. Three hours of seminar.

Prerequisite: Successfully complete the comprehensive exam.

Integrative experience in which the student demonstrates research and creative skills in curriculum and teaching. This experience stems from the professional and academic interests of the student.

### **EDUC 6566 Diagnosis and Correction of Deficiencies in Elementary Mathematics**

Three credits. Three hours of seminar per week.

This seminar focuses on diagnosing, identifying, and analyzing deficiencies in elementary mathematics. Participants will design effective teaching-learning strategies to remediate these deficiencies. The course includes hands-on laboratory experiences with children to apply and evaluate the developed strategies.

## EDUC 6569 Educational Innovations and Strategies for their Implementation

Three credits. Three hours of lecture per week.

A study of educational innovations and an analysis of the strategies that may be used for their implementation in educational organizations. course hybrid.

## **EDUC 6570 Designing Educational Material for Elementary School**

Three credits. Three hours of workshop per week.

Prerequisite: For students majoring in elementary education; EDUC 6535; students majoring in preschool education: EDUC 6115

This course takes a practical approach to designing educational materials that promote concept acquisition and skill development across various curricular domains. It incorporates recent research findings on children's learning processes to enhance the effectiveness of the materials created.

# **EDUC 6576 Curriculum Development and Its Relationship to Learning Within the Social, Cultural and Philosophical Structure**

This course offers an in-depth study of curriculum theory and design, focusing on the educational needs and realities of Puerto Rico. It places special emphasis on the analysis and research related to curricular development. Additionally, the course provides field experience to develop the necessary skills for designing and preparing individualized curricula.

#### EDUC 6588 Research Writing: Style and Language Usage

Three credits. Three hours of lecture per week.

This course aims to enhance students' awareness of language usage and improve their efficiency in communication. It includes an analysis of the science and art of style, focusing on its appropriate application in various contexts, particularly in written language.

#### **EDUC 6596 Classroom Evaluation**

Three credits. Three hours of lecture per week.

Study of the theory and methodology of evaluation of student learning. Emphasis on the development, adaptation, and use of techniques and instruments. Data analysis and interpretation to evaluate student achievement.

#### **EDUC 6607 Education in Rural Areas**

Three credits. Three hours of lecture per week.

This course is designed for administrators, supervisors, counselors, and classroom teachers in schools serving rural populations. It aims to provide these educational professionals with an understanding of the concept of "rural," characterized by low population density and an economy rooted in agriculture, while also navigating the challenges posed by rapid social change. The mission of schools in rural areas is explored in relation to rural social organization, social processes, prevalent problems, and development planning.

#### **EDUC 6615 Vocational and Technical Education: Principles and Practices**

Three credits. Three hours of lecture per week.

This course involves the analysis and development of vocational education, emphasizing its implications for preparing individuals for the workforce.

#### **EDUC 6617 Curriculum Development in Vocational Education**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

This course focuses on the analysis and application of curriculum models in vocational education, with a particular emphasis on competency-based curriculum models.

### **EDUC 6618 Educational Leadership in Vocational Education**

Three credits. Three hours of lecture per week.

This course examines the theories and practices of leadership in vocational education, addressing the specific challenges faced by vocational administrators in technical and vocational schools.

#### **EDUC 6620 Foundations of Physical Education**

Three credits. Three hours of lecture per week.

This course provides an analysis of the foundations of physical education, discussing their relevance to the physical education program. It is offered in face-to-face, hybrid, and online formats.

### **EDUC 6625 History of Physical Education**

Three credits. Three hours of lecture per week.

This course explores the role of physical education throughout history, emphasizing the events, movements, and individuals that have shaped its development. It includes a comparison of Greek and Roman concepts with those from the Renaissance and Reformation periods, as well as significant events in the history of physical education in Puerto Rico.

### **EDUC 6627 Graded Exercise Testing: Methods and Procedures**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the director.

This course discusses the human physiological, anatomical, pathophysiological, and psychological foundations essential for effective graded exercise testing. Topics covered include electrocardiography, equipment calibration, patient screening, protocol selection, data collection and summary, basic cardiopulmonary resuscitation (CPR), emergency procedures, and exercise prescription.

# EDUC 6629 Organization and Administration of Physical Education Programs and Secondary and Postsecondary Sports Administration

Three credits. Three hours of lecture per week.

This course examines the nature and significance of organizing and administering physical education programs, both academic and extracurricular. Emphasis is placed on the application of theories, concepts, and administrative skills in developing physical education programs within K-12 and postsecondary school systems.

#### **EDUC 6645 Principles of Instructional Design**

Three credits. Three hours of lecture per week.

This course explores the essential characteristics of instruction necessary for successful teaching and learning. It analyzes external instructional events and their impact on the internal processes of learning, using various learning theories as reference points. Different models of systematic instructional design are studied, along with their contributions to enhancing the teaching-learning process as revealed by research. This course is offered in a hybrid format.

# EDUC 6646 Design, Implementation and Evaluation of an Instructional Technology Program

Three credits. Three hours of lecture per week.

This course focuses on the skills required for designing, developing, implementing, and evaluating instructional technology programs across various educational levels and contexts. It analyzes the social, human, philosophical, and economic factors influencing the integration of technology into the educational system. The course includes an examination of system components such as utilization, selection and evaluation, cataloguing, production, maintenance, and repair of equipment from a curriculum design and development perspective. Emphasis is placed on new technologies, including computerized instruction and other learning systems, along with their implications. The course also identifies paradigms that can be applied in program development.

#### **EDUC 6647 Design and Production of Multi-Sensory Materials**

Three credits. Three hours of lecture per week.

This course focuses on developing skills and knowledge in designing and producing a learning unit that incorporates multi-sensory materials. Emphasis is placed on the relationship among the objectives, the materials, and the target audience for whom they are intended

#### **EDUC 6649 Contemporary Themes in Technology: Television for Children**

Three credits. Three hours of lecture per week.

This course provides a comprehensive review of the literature on children's television. It explores the history of television programming for children and examines critical issues such as stereotypes, violence, advertising, consumerism, regulations, and future trends. Additionally, the course analyzes the symbolic messages conveyed in various children's programs to understand their impact on children's behavior.

### **EDUC 6650 Creating Online Courses Workshop**

Three credits. One-hour lecture, one-hour discussion and one-hour workshop per week

This course focuses on the skills and concepts necessary for creating partial or fully online courses. Topics include design principles and production techniques using commercial computer applications. The course will be offered in face-to-face and hybrid formats.

## **EDUC 6659 Computer Mediated Telecommunication and its Application in Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6055

This course provides an overview of telecommunications, focusing on local computer networks and the Internet. Students will explore the effective utilization of Internet resources and engage in discussions on educational projects and applications that leverage telecommunications via microcomputers. Additionally, the course includes the development of documents for publication on the World Wide Web, along with an analysis of ethical issues, trends, and other contemporary topics related to telecommunications and microcomputing.

#### **EDUC 6660 Needs Assessment in Education**

Three credits. Three hours of lecture per week.

Study of the process for the design and production of needs assessment in the educational field.

#### **EDUC 6666 Needs Assessment and Educational Planning**

Three credits. Three hours of lecture per week.

This course focuses on needs assessment and its role in educational planning, along with its implications for administrators' decision-making processes. Students will engage with various types, models, strategies, techniques, instruments, tasks, and activities pertinent to needs assessment. Practical experience will be gained through conducting a needs assessment within an educational institution.

#### **EDUC 6668 Seminar of Planning Techniques**

Three credits. Three hours of lecture per week.

A comprehensive examination of educational planning techniques, including their description, advantages, disadvantages, and implementation guidelines. Students will have opportunities to apply these planning techniques to practical situations in the educational context of Puerto Rico.



#### **EDUC 6675 Instructional Message Design**

Three credits. Three hours of lecture per week.

This course involves the study and analysis of research in educational psychology and instructional media to develop principles of instructional materials design. It will be offered in face-to-face and hybrid formats.

#### **EDUC 6900 Master Exam**

Credits: 0

## **EDUC 6905 Qualifying Doctoral Exam**

Zero credits.

Prerequisites: EDUC 6517, EDUC 6509, six credits in the minor courses; three credits on foundations of education courses; three credits in the area of emphasis.

Approval of the qualifying exam is required to continue in the uninterrupted bachelor's to doctoral program (Plan B) in curriculum and teaching. This accelerated track is available for graduate students holding only a bachelor's degree. The exam assesses competency in curriculum aspects, the sub-specialty, foundations of education, research methods, and the area of emphasis.

## **EDUC 6915 Knowledge Production and Writing**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6588

This course examines and applies writing processes and resources at the final stage of research text development. Students will analyze and interpret data in relation to writing strategies, transforming and converting content knowledge into written form. Emphasis is placed on achieving global coherence and cohesiveness through final revisions.

## **EDUC 6995 Independent Study**

One to three credits. From one to three contact hours.

Prerequisites: Professor's approval.

Designed for graduate students to pursue individual or independent work in areas of particular interest or specialization, distinct from existing graduate courses. Activities may include research projects, practical experiences, cooperative projects, and monographic papers to maximize curricular flexibility and respond to student interests. Registration requires professor approval, and this course may be taken for a maximum of nine credits.

#### **EDUC 6997 Independent Study**

One to Three Credits. From One to Three Contact Hours.

Prerequisites: Professor's approval.

This course offers graduate students the opportunity for independent work in specialized areas, emphasizing curricular flexibility. Activities include research projects, practical experiences, and cooperative projects, requiring professor approval for registration, with a maximum of nine credits allowed.

## EDUC 6998 Field Work for Curriculum Design and Strategies for the Instruction

Two to six credits. Two-six hours of lecture or laboratory work per week.

Students will devote time weekly to educational centers (public or private schools, Head Start programs, colleges, universities, etc.), focusing on problems related to curriculum. They will engage in creating new curricular designs and strategies for instruction or curricular changes.

### **EDUC 8007 The Teaching of Opposing Viewpoints in Social Studies**

Three credits. Three hours of lecture per week.

This course involves analysis and discussion of significant topics in social studies where opposing viewpoints exist. It includes studying strategies for content presentation in the classroom and will be offered in face-to-face, hybrid, and online formats

#### **EDUC 8028 Curriculum Evaluation**

Three credits. Three hours of lecture per week.

An advanced study of principles underpinning various strategies in curriculum evaluation, focusing on both formative and summative aspects. The course covers recommended methodologies for curriculum evaluations, including the selection and application of evaluation strategies and models.

## **EDUC 8029 Curriculum Construction and Design**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6517

This course studies and analyzes principles of curriculum construction and design, applying them to relevant educational contexts. Issues and challenges in curriculum design will be addressed, emphasizing the development of curriculum theory and research.

### **EDUC 8030 Evaluation of Educational Programs and Systems**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6509 and EDUC 6390 or equivalent.

This course studies the procedures used to evaluate educational programs, offered in face-to-face, hybrid, and online formats.

## **EDUC 8031 Seminar: Paradigms, Changes, and Trends in Educational Technology I** One credit. Three hours of seminar per week.

This seminar offers a critical analysis of theoretical and practical paradigms in educational technology. Students will study historical contexts, philosophies, theoretical frameworks, and research in the field. This is the first of three consecutive seminars designed to enrich students' understanding throughout their study plan, offered in hybrid format.

## EDUC 8032 Seminar: Paradigms, Changes and Trends in Educational Technology II One credit. Three hours of seminar per week.

Building on the first seminar, this course focuses on changes in the professional practice of educational technology, emphasizing the role of professional associations in their development and their legal and ethical implications for teaching and learning. Offered in face-to-face and hybrid formats.

## EDUC 8033 Seminar: Paradigms, Changes and Trends in Educational Technology III One credit. Three hours of seminars per week.

This course critically analyzes trends and future developments of theoretical and practical interest within educational technology. It concludes the sequence of three seminars offered consecutively to enhance students' learning as they progress through their study plans, available in face-to-face and hybrid formats

## **EDUC 8045 Advanced Course in the Teaching of Reading**

Three credits. Three hours of lecture per week.

This course provides a critical analysis of contemporary theories, practices, tendencies, problems, and controversial issues in teaching reading from an interdisciplinary perspective. It examines current research methods related to cognitive-conceptual psychology, reading, and comprehension processes, emphasizing curriculum design and instructional practices.

## **EDUC 8048 Curriculum Development Theories**

Three credits. Three hours of lecture per week.

Students will study and analyze theories, models, and research guiding curricular development across diverse dimensions and perspectives in curriculum planning and organization at different teaching levels.

## **EDUC 8049 Models for the Teaching of Natural Sciences at the Secondary and Post-Secondary Levels**

Three credits. Three hours of lecture per week.

This course analyzes major theories of human cognition relevant to instruction, evaluating instructional events based on their capacity to promote learning. Students will learn to describe these theories and their application in designing and delivering instruction in traditional natural science subjects while formulating models to support effective learning strategies.

### **EDUC 8050 Educational Implications of the Theories About Science**

Three credits. Three hours of lecture per week.

This course studies concepts related to the nature and philosophy of science, critically analyzing various theories of scientific thinking and inquiry processes within their historical and social contexts. It examines the implications of these theories for science education and explores research

on related problems.

## **EDUC 8057 Linguistic and Didactic Theory of Language**

Three credits. Three hours of lecture per week.

Students will apply linguistic theories to the teaching of Spanish as a vernacular language, focusing on general principles of language acquisition and including lexical, morphosyntactic, and mediative aspects of language in the curriculum.

## **EDUC 8059 Models for the Teaching of Mathematics at the Secondary and Postsecondary Levels**

Three credits. Three hours of lecture per week.

This course involves the study, analysis, and evaluation of teaching models for mathematics instruction, emphasizing the creation, preparation, and adaptation of learning materials suitable for secondary and post-secondary levels.

#### **EDUC 8060 Education as Science: A Critique**

Three credits. Three hours of lecture per week.

This course identifies the common human image prevalent in the human and social sciences, isolating its generic properties and examining their implications for education.

## EDUC 8065 Linguistic Research Techniques in Education and in the Curriculum

Three credits. Three hours of lecture per week.

The course focuses on linguistic research, its diversification, and its applications in education, with particular emphasis on the Puerto Rican context.

## **EDUC 8066 Public and Private Postsecondary Educational Institutions in Puerto Rico**

Three credits. Three hours of lecture per week.

This course explores the historical development of public and private postsecondary educational institutions in Puerto Rico, analyzing their diversity in terms of philosophy, administrative structure, educational programs, student services, faculty types, and fees. It also addresses central problems faced by these institutions.

### **EDUC 8078 Computer Telecommunications and its Application to Education**

Three credits. Three hours' lecture and discussion per week.

Prerequisite: EDUC 6055

This course studies telecommunications via local and wide area networks, evaluating research studies, projects, and educational applications. It also includes discussions on ethical and legal aspects, as well as current issues related to telecommunications. The course will be offered face-to-face and hybrid.

## EDUC 8079 Technology, Technique, Society and Education

Three credits. Three hours of lecture and discussion per week.

This course examines the relationship among technology, society, and education from historical, philosophical, and ethical perspectives. Analyzes technology's impact on education compared to other fields and emphasizes research's role in integrating technology. Offered in face-to-face and hybrid formats.

## **EDUC 8087 Teacher Preparation Programs in Physical Education**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: EDUC 6620

Explores the philosophical, theoretical, and curricular foundations of teacher education programs in physical education. Focuses on the comprehensive design and evaluation of these programs.

## **EDUC 8130 Models of Teaching, Supervision and Evaluation of Programs of English as a Second Language**

Three credits. Three hours of lecture per week.

Investigates theories and principles of first and second language teaching. Covers methods and techniques for teaching and supervising ESL curriculum development, including analysis and design of evaluation instruments for TESOL.

## **EDUC 8135 Seminar: Issues in Education**

Three credits. Three hours of lecture per week.

Analysis of those issues faced by educational administrators in public and private educational systems in Puerto Rico and other countries. Although specific issues differ from one country to another, certain common controversial areas can be identified, such as the social function of education, education and individual liberty, external influences on education, the aims of education, and the educator and his or her role in the educational process.

### **EDUC 8137 The Teaching of History as a Dynamic Process**

Three credits. Three hours of lecture per week.

The course examines the interrelation between current events and historical figures that shape human development. Discusses and models methodologies and strategies for integrating these events into educational settings. The course requires ongoing updates. Offered face-to-face, hybrid, and online.

### **EDUC 8138 Educational Implications if Historiography**

Three credits. Three hours of lecture per week.

This course explores new trends in historiography and their relationship with education. It emphasizes the relevance of historiography for various social studies fields, particularly history. Offered as a face-to-face, hybrid, and online course.

## EDUC 8139 The Education, History and Culture of Africa and its People

Three credits. One hour of lecture, one hour of discussion, and one hour of workshop per week.

This course examines African history and culture, focusing on the impact of Black people on society. It includes an analysis of historical and contemporary issues in Africa and their influence on Puerto Rico. The course also addresses educational strategies for teaching African history and culture in the classroom.

### **EDUC 8140 Language Acquisition and Learning**

Three credits. Three hours of lecture per week.

This course provides an in-depth analysis of learning and intellectual development theories, including those by Thorndike, Skinner, Piaget, Bruner, and Bandura, as they apply to teaching and learning English as a second language. It also covers the principles of language acquisition and learning, focusing on cognitive styles and their implications for second language instruction.

## EDUC 8145 Implications of Modern Linguistic Theories in the Teaching of English as a **Second Language**

Three credits. Three hours of lecture per week.

This course examines major linguistic theories, including traditional, structural, and transformational grammar. It explores the impact of these theories on teaching English as a second language, focusing on applying grammatical principles in language instruction.

## **EDUC 8205 Models of Teaching Literary Text Analysis**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6280 or EDUC 8029.

This course studies various models for teaching literary text analysis, including traditional, structural, semiotic, and sociological approaches. It emphasizes the integration of literary analysis with curricular experiences and the design of instructional materials to develop students' analytical skills in Spanish at the secondary and post-secondary levels.

### **EDUC 8206 The Teaching of the Spanish in Puerto Rico**

Three credits. Three hours of lecture per week.

This course focuses on documentary research and the analysis of methods used in teaching Spanish at the elementary, secondary, and post-secondary levels in Puerto Rico. It includes defining and analyzing problems related to Spanish instruction and critically evaluating both theory and practice.

#### **EDUC 8215 Needs Assessment: Context Evaluation**

Three credits. Three hours of lecture per week.

This course studies the process of identifying and analyzing needs to translate them into goals,

objectives, and plans. It focuses on evaluating the gap between the current and desired states during educational systems' planning, design, implementation, and evaluation phases.

## **EDUC 8235 Seminar: Practices, Trends and Issues in the Teaching ff Mathematics** Three credits.

This seminar critically examines specific topics, trends, issues, and contemporary practices in mathematics education, particularly at the secondary and post-secondary levels. It is offered in face-to-face, hybrid, and online formats.

#### **EDUC 8237 Seminar: Research Themes in Mathematics Education**

Three credits. Three hours of seminar per week.

This course offers a critical analysis of recent research in mathematics curriculum and teaching, exploring its educational implications.

## **EDUC 8245 Interdisciplinary Study of Educational Topics**

One credit. One hour and a half of lecture per week.

This course involves an interdisciplinary study of educational and cultural topics arising from historical and intellectual thought. It includes a critical analysis of theories, concepts, and the definition of educational problems and alternative practices.

## **EDUC 8305 Sociology of the Scientific and Technological Knowledge: Educational Consequences**

Three credits. Three hours of lecture per week.

This course explores scientific and technological development from the perspective of the sociology of science and its social impact. Students and teachers analyze the sociocultural foundations of natural sciences and examine teaching models for designing instructional lessons based on these themes. The course also addresses controversial sociological issues related to science and technology and their educational implications.

## **EDUC 8308 African Presence in Puerto Rico: Impact on Education**

Three credits. Three hours of conferences per week.

This course examines the origin and development of the African presence in Puerto Rico, with a critical analysis of its contributions to national identity, customs, traditions, politics, economy, education, media, arts, theater, music, dance, literature, and religion. It addresses the development of racial identity and the concept of "bleaching" and explores racial relationships, racism, oppression, exclusion, and marginalization. The course emphasizes the impact of these issues on 21st-century Puerto Rican society, analyzing African roots and racial dynamics in the context of Puerto Rico's educational system.

## **EDUC 8309 Curricular Impact of the Africa Geography**

Three credits. Three hours of lecture per week.



This course explores Africa's geography and its curricular implications, drawing comparisons between African and Puerto Rican realities. Students will conduct research and design curricular strategies, with a focus on interdisciplinary methods.

#### **EDUC 8900 Candidacy Examination**

No credits.

The doctoral candidacy exam is a requirement for all graduate students. Completing it is considered full-time enrollment.

#### **EDUC 8981 Doctoral Dissertation**

Six credits.

Prerequisites: Passing the doctoral candidacy exam.

Students must present a certificate of completion for the information competencies workshop from the Gerardo Sellés Solá Library and evidence of completing the online Responsible Conduct of Research module (CITI Program), in accordance with UPR-RP Administrative Board Certification 029 (2012-2013).

This course focuses on preparing the doctoral dissertation, with an emphasis on the proposal and general procedures for writing the dissertation.

#### **EDUC 8982 Continuation of Doctoral Dissertation**

Credits: 0This course can be repeated up to three times. Prerequisite: Completion of all degree-required coursework in the specialty.

This course allows students to continue working on their doctoral dissertation after completing all required courses.

### **EDUC 8995 Directed Specialized Study**

One to three credits. One to three contact hours. Prerequisite: Department authorization.

This course provides an opportunity for graduate students to explore special topics or problems of interest under the guidance of a faculty member or visiting professor. It can be taken for a maximum of nine credits.



Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Exercise Science Program Coordinator**: Dra. Lucía del R. Martínez

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89203, 89253

Website: http://ege.uprrp.edu/

#### **DEGREE:**

### **Doctor of Education in Curriculum and Teaching Plan C (51 credits)**

The Department of Graduate Studies of the College of Education offers the Doctorate in Education with a specialty in Curriculum and Teaching, through an accelerated route, in the following subspecialties:

Curriculum and Teaching in Science Education
Curriculum and Teaching in Mathematics Education
Curriculum and Teaching in Spanish
Curriculum and Teaching in History and Social Studies
Curriculum and Teaching in Learning Technology
Curriculum and Teaching in Theory, Design and Evaluation
Curriculum and Teaching in English as a Second Language (TESL)

### **FACULTY:**

**Gladys R. Capella Noya,** Ed.D. Harvard University, 1995. Professor. Power relations within learning environments; curriculum and culture; democracy and educational practice.

**Kevin S. Carroll,** Ph.D. University of Arizona, 2009. Associate Professor. Language planning and policy, translanguaging, bilingual education, and teachers of English to speakers of other languages.

**Ileana M. Quintero Rivera,** Ed. D. Harvard University, 1996. Full Professor. Curricular design and Methodology of Teaching and Learning in Social Study and History. Interest in the integration of theory, reflection and practice. Collaboration in Community Projects. Qualitative and Ethnographic Research.

**Omar A. Hernández Rodríguez,** Ed.D. University of Puerto Rico, 2002. Associate Professor. Study of conceptual development in mathematics, cognitive and metacognitive processes in solving mathematical problems; incorporation of new technologies in the teaching of mathematics and the professional development of teachers.

**Edwin Martínez Hernández**, Ed.D. University of Puerto Rico, 2000. Associate Professor. Integration of technologies in instructional events and its effect on learning.

**Rose Marie Santiago Villafañe**, Ph.D. University of Murcia, 2005. Associate Professor. sociolinguistic analysis of texts; the development of linguistic awareness; writing and reading as cognitive processes; curricular design in the area of Spanish; students as language researchers; the linguistic attitudes of teachers towards the language they teach; curricular development by competencies.

**José Soto Sonera**, Ed.D. University of Puerto Rico, 2006. Associate Professor. Curriculum design and evaluation; science teaching and learning; cognitive processes and conceptual development from historical-cultural and anthropological perspectives.

## **ADMISSION REQUIREMENTS:**

General Requirements of the Río Piedras Campus: https://graduados.uprrp.edu/

## Specific Admission Requirements Minimum requirements of the Doctorate in Education Program through accelerated route (Plan B) for all subspecialties:

- 1. Baccalaureate from an accredited university or its equivalent.
- 2. Minimum academic index of 3.00 on a scale of 4.00 in the bachelor's degree studies.
- 3. Additional requirements for the subspecialties of Science Education, Mathematics Education, Spanish, History and Social Studies.
- 4. Eighteen (18) credits at the baccalaureate level in the subspecialty.

## Teaching English as a Second Language subspecialty:

1. Eighteen (18) credits at the baccalaureate level in the subspecialty (courses in TESL will be considered as courses that meet this requirement).

## Specific requirements for the Learning Technology subspecialty:

- 1. Competence in the management of Information and Communication Technologies (ICT). It will be confirmed during the interview process.
- 2. Three (3) credits in learning technology.

### **Documents and Other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies.
- 2. Two (2) official academic transcripts.
- 3. Two (2) letters of recommendation for Graduate Studies in electronic or paper format.
- 4. Interview.
- 5. Proficiency in both Spanish and English.

### **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the courses with a grade of no less than "C".

- 3. Maintain an academic index of no less than 3.00 in the courses required for graduation.
- 4. Meet all the requirements within a period of four (4) years from the date you begin your graduate studies. For these purposes, it is very important that the student prepare a study plan with his or her academic advisor.

#### **STUDY PROGRAM:**

#### PLAN C

Distribution of credits by Components / Study Areas	Credits
Component: General Professional Area	
Fundamentals of Education	6
Research and Evaluation	
Component: Specialized Professional Area	
Core Curriculum	6
EDUC 8900: Candidacy Exam	0
Dissertation	6
Component: Subspecialty	
Required courses	9
Elective-directed courses	9
Component: Elective Courses Area	
Free electives	6
Total credits	51

### **CORE CURRICULUM COURSES**

EDUC 6517 Curriculum Principles

EDUC 8028 Curriculum Evaluation

EDUC 8029 Construction and Curriculum Design

## REQUIRED COURSES BY SUB-SPECIALTY AREA

## Courses required for the Curriculum and Teaching Subspecialty in Science Education

EDUC 8049 Models for teaching Natural Sciences at secondary and postgraduate levels.

EDUC 8050 Educational Implications of Theories about Sciences

(1) course among the following: Choose one

> EDUC 6127 Teaching-learning of science at the elementary level Sociology of scientific and technological knowledge EDUC 8305

### Courses required for the Curriculum and Teaching Subspecialty in Physical Education

EDUC 6620 Fundamentals of Physical Education

- EDUC 8185 Seminar on emerging issues and controversial issues in Physical education
- EDUC 8405 Curriculum Design in Physical Education Courses required for the Curriculum and Teaching Subspecialty in Mathematics Education
- EDUC 8059 Model for teaching Mathematics at the secondary level and postsecondary
- EDUC 8235 Seminar: Practices, trends and controversial issues in Mathematics teaching
- EDUC 8237 Research Topics in Mathematics Education

## Courses required for the Curriculum and Instruction Subspecialty in Teaching English as a **Second Language**

- EDUC 8130 Models of Teaching, Supervision, and Evaluation in Programs of English as a Second Language
- EDUC 8140 Language Acquisition and Learning
- EDUC 8145 Implications in the linguistics of English as a second language

## Courses required for the Curriculum and Teaching in Spanish Subspecialty

- EDUC 8045 Advanced course on teaching reading EDUC 8057 Linguistic theory and language teaching Teaching methods for the analysis of literary text EDUC 8205
- Courses required for the Curriculum and Teaching Subspecialty in History and Social **Studies** 
  - EDUC 8007 Teaching Controversial Points in Social Studies
  - EDUC 8137 The Teaching of History as a dynamic process Choose one (1) course among the following:
  - EDUC 8138 Educational implications in historiography
  - EDUC 8139 Education, history and culture about Africa and the Black
  - African presence in Puerto Rico: impact on education EDUC 8308
  - Curricular implications of the geography of Africa EDUC 8309

#### Courses required for the Curriculum and Teaching Subspecialty in Learning Technology

- EDUC 8079 Technology, technique, society, and education
- Seminar: Paradigms, changes, and trends in technology educational EDUC 8031

EDUC 8032 Seminar: Paradigms, changes, and trends in technology educational II

EDUC 8033 Seminar: Paradigms, changes, and trends in technology educational III

EDUC 8078 Telecommunications through the computer and its application in education

## Courses required for the Curriculum and Teaching Subspecialty in Curriculum Theory, Design and Evaluation

FDUC 8048	Theories of curriculum development.
	±
Choose two (2) cours	es from the following:
EDUC 6730	Curricular design of educational programs
EDUC 6735	Seminar on practices, trends and controversial issues in curriculum design
EDUC 8160	Theory and conceptualization of the integrated curriculum
EDUC 8165	Planning, design and evaluation of the integrated curriculum
EDUC 8167	Curricular changes and educational transformations
EDUC 8169	Planning and implementation of curricular projects

## ELECTIVE COURSES DIRECTED BY SUB-SPECIALTY AREA

EDUC 8170 Seminar: Curricular development

Elective-directed courses for the Subspecialty of Curriculum and Teaching in Science Education

Graduate courses in scientific disciplines

## **Elective-directed courses for the Curriculum and Teaching Subspecialty in Mathematics Education**

Nine credits in courses with MATE 6000 - MATE 8000 coding

### Elective-directed courses for the subspecialty of Teaching English as a Second Language

Graduated content courses (in the areas of linguistics or literature in English). They can also be the courses EING 6420, EING 6575 or EING 6577.

## Elective-directed courses for the Subspecialty of Curriculum and Teaching in Spanish

Specialized graduate courses may include topics in literary criticism, linguistics, literature, or other subjects recommended by the academic advisor, aligned with the student's research area.

## Elective-directed courses for the Curriculum and Teaching Subspecialty in History and Social Studies

Graduate courses in history and social sciences are offered in the Department of History, in the College of Social Sciences.

## Elective-directed courses for the Curriculum and Teaching Subspecialty in Learning Technology



Graduate courses in learning technology or related fields that align with the student's academic interests and professional goals, subject to prior approval by the academic advisor.

## Elective-directed courses for the Curriculum and Teaching Subspecialty in Curriculum Theory, Design and Evaluation

Graduate courses are defined in accordance with the student's academic interests and professional projections, with the prior approval of the academic advisor.

#### **COURSES DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

### **EDUC 6008 Written Language in Spanish**

Three credits. Three hours of lecture per week.

This course critically examines the acquisition and development of written language from a cognitive-interactive social perspective. It explores the relationship between learners and the writing process, analyzing the implications of existing theories, curricular practices, and methodological approaches. Students will conduct field research and design curricular units that address the key elements of the writing development process necessary for enhancing writing competency.

#### **EDUC 6009 Writing Academic Articles**

Three credits. One hour of lecture, one hour of discussion and one hour of workshop.

This course focuses on the academic writing process, guiding students as they research and write an article relevant to their discipline. It covers writing and research strategies contextualized to the components of academic discourse intended for publication, including function, purpose, content depth, and reader profile.

### **EDUC 6036 Methods for Teaching Adults**

Three credits. Three hours of lecture per week.

This course reviews learning theories and teaching methods in adult education. Emphasis is placed on adopting a systems approach to learning and understanding the competencies required of adult educators. Relevant research will be utilized to inform practices.

#### **EDUC 6037 Trends in Adult Education**

Three credits. Three hours of lecture per week.

This course analyzes demographic, social, and technological trends that justify adult education. It examines the outreach and impact of adult education programs and identifies factors influencing adult learning, supported by relevant statistics and research.

## EDUC 6038 Teaching, Learning and Creativity Through the Natural Sciences Curriculum Three credits. Three hours of lecture, discussion and seminar per week.

This course critically analyzes perspectives and theories related to human learning and creativity in the natural sciences. It investigates theoretical and empirical foundations, examining their implications for teaching natural sciences across various educational levels. Additionally, the course analyzes factors influencing learning and creativity—including genetics, social and cultural environments, and misconceptions—and explores how to address these factors within the educational process. It also evaluates educational programs and teaching models based on these theories.

### EDUC 6045 Curriculum of adult education

Three credits. Three hours of lecture per week.

This course critically evaluates adult education curricula, exploring current research and literature in the field. Students will study curriculum planning principles and concepts to address adult learners' needs and characteristics. The course culminates in the evaluation of existing adult curricula and proposals for their revision.

#### **EDUC 6046 The Role of the Adult Educator**

Three credits. Three hours of lecture per week.

This course analyzes the multifaceted role of the adult educator, focusing on the competencies required for effective practice. Students will examine relevant research on these competencies and their application in various educational contexts.

## EDUC 6047 In-Service Education in Educational Settings: Theory, Research and Action Three credits. Three hours of lecture and fifteen of supervised fieldwork per week.

This course offers a critical analysis of the in-service education process aimed at enhancing the professional development of personnel in educational settings. It emphasizes the conceptual, technical, and social competencies necessary for designing, implementing, evaluating, and revising in-service education programs across diverse educational environments.

#### EDUC 6048 Instructional Reflection: Theory, Research and Action

Three credits. An hour and a half of conference and an hour and a half of discussion per week.

This course focuses on the conceptualization, demonstration, and practice of processes that support educators in reflecting on their teaching practices. Students will engage in analysis of research, issues, challenges, and possibilities to enhance their reflective practices.

## **EDUC 6055 Microcomputers in Education**

Three credits. Three hours of lecture per week.

This course introduces the use of microcomputers in education, aiming to develop computer literacy among students. Participants will learn to effectively utilize microcomputers in their professional roles as teachers, administrators, supervisors, counselors, or educational researchers.

## EDUC 6058 Calculators and Computers in the Teaching of Mathematics at the Intermediate and High School Level

Three credits. Three hours of lecture per week.

This course explores the use of pocket calculators and microcomputers in teaching mathematics at the intermediate and high school levels. It covers the application of scientific calculators and microcomputers to various classical mathematical algorithms, with topics including statistics, probability, and the Monte Carlo method.

## **EDUC 6059 Design of Computer-Based Instruction**

Three credits. Three hours of discussion per week.

This course examines models and techniques for designing, developing, and evaluating computer-based instruction. Students will analyze various computer systems available for instructional production and engage with research literature related to computer-based instructional design. The course culminates in the creation of a design for an educational computer program.

### **EDUC 6061 Development of Computer-Based Instruction**

Three credits. Two hours of discussion and two hours of laboratory work per week.

Prerequisite: EDUC 6055

This practical course focuses on developing computer-based instruction. It discusses different authoring systems and resources, including software for designing graphics, animations, and movies and hardware such as digitizers, CD-ROMs, and video cameras. Students will acquire the skills necessary to produce educational software.

#### **EDUC 6063 Design and Production of Multimedia Presentation**

Three credits. Two hours of discussion and two of laboratory work per week Prerequisites: EDUC 6055, 6059.

This course covers the planning and production processes involved in creating multimedia presentations. Emphasis is placed on aligning learning objectives with materials, audience considerations, and relevant educational theories. Students will analyze literature on graphic material design and production while exploring software and hardware options for developing multimedia presentations. The course culminates in the production of a multimedia presentation utilizing peripheral equipment such as videodisk players, CD-ROMs, or compact discs.

### EDUC 6068 Discipline Models and Strategies in the Process of Teaching

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

This course provides an in-depth exploration of various discipline models and strategies relevant to the teaching process. Students will analyze theoretical foundations and practical applications of discipline in educational settings, guided by the instructor's authorization.

## **EDUC 6069** Alternative Conceptions in Chemistry: Educational Implications and Didactic Approaches

Three credits. Three hours of lecture, discussion and seminar per week.

Prerequisites: CHEM 3001-3002.

This course focuses on the study of students' alternative conceptions in chemistry and their educational implications. It explores how various philosophical, psychological, and neurobiological perspectives contribute to understanding the mental processes involved in constructing scientific knowledge. Students will analyze seminal studies that investigate alternative conceptions related to key scientific concepts, such as heat, temperature, the nature of matter, covalent bonding, kinetic chemistry, chemical equilibrium, and electrochemistry. Additionally, the course examines the methodologies used to address these misconceptions and foster conceptual change, all grounded in a thorough analysis of relevant research literature.

## **EDUC 6085 Computer Programming in Basic Language for Teaching**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6056

This course extends the fundamentals of programming in the BASIC language from an educator's perspective. Participants will learn to create software that leverages the capabilities of microcomputers to enhance and facilitate the teaching and learning process.

### EDUC 6105 Study, Analysis and Design of School Theater Curricular Content

Three credits. Three hours of lecture per week.

This course involves the study and analysis of various processes, methods, and techniques related to drama as an academic discipline, with a particular focus on theatrical animation. Emphasis is placed on designing a curriculum for school theater programs.

## **EDUC 6106 Supervision of The Teaching in School Theater**

Three credits. Three hours of lecture per week.

This course explores the processes, methods, and techniques for teaching theater from both educational and supervisory perspectives. It focuses on developing skills necessary for effective theater instruction and supervision in an educational setting.

## EDUC 6127 Teaching-Learning Science in Elementary School: Theory and Practice.

Three credits. Three hours of seminar per week.

This seminar focuses on analyzing and evaluating research related to the construction of knowledge and learning in natural sciences. Based on national and local instructional objectives, it applies relevant theoretical frameworks to instructional design and effective science teaching for elementary school children. The course includes clinical, laboratory, and fieldwork components.

## **EDUC 6128 The Teaching and Learning of Mathematics in Elementary School: Theory and Practice**

Three credits. Three hours per week of seminar.

This course provides an in-depth analysis and evaluation of research on how students construct mathematical knowledge in elementary school. It examines and applies theoretical frameworks relevant to instructional design and effective teaching practices, aligned with instructional objectives and standards for mathematics education.

## **EDUC 6135** The Development of Scientific and Logic-Mathematical Thinking in the Early Years

Three credits. Three hours of lecture per week.

This course analyzes the cognitive development sequence that leads to scientific and logic-mathematical knowledge construction. It reviews related research and its relevance to educational interactions in preschool classrooms. Clinical experiences are included to observe, analyze, and implement educational activities that promote the development of scientific and logic-mathematical thinking at home and school.

## **EDUC 6140** Role of the Puerto Rican Cultural and Historical Experience in the Bilingual Bicultural Education

Three credits. Three hours of lecture per week.

This course is designed to enhance students' understanding, awareness, and sensitivity to Puerto Rican children's cultural and historical heritage and its role in bilingual and bicultural education. It examines how this heritage influences curriculum development and the challenges faced by schools in transition. Field excursions may be included. The course is offered in face-to-face, hybrid, and online formats.

### **EDUC 6155 Recent Trends on Social Studies in Elementary School**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6095

This course provides an analysis of recent research literature on social studies education in elementary schools, focusing on the latest trends and developments in the field.

## EDUC 6280 Study, Analysis and Designing of Curricular Content for the Teaching of Spanish

Three credits. Three hours of lecture per week. Prerequisites: EDPT 4005 or the equivalent.



This course covers the study and analysis of methods for designing curricula for teaching Spanish. Students will discuss new trends and strategies in curriculum planning, enabling them to propose alternatives to current Spanish curricula. Through observation, analysis, and evaluation of various curricula, the course emphasizes systematic instructional analysis. Students will also visit schools and educational projects to observe innovative curriculum designs and implementations for Spanish instruction at the secondary level.

## **EDUC 6285 Pragmatic Teaching of the Spanish Grammar**

Three credits. Three hours of lecture per week.

This course focuses on developing students' ability to identify, produce, and teach the grammatical elements and structures of the Spanish language using modern, pragmatic teaching methodologies. The course includes a variety of practical exercises that integrate a pragmatic synthesis of several grammatical theories.

## **EDUC 6290 Innovative Approach in the Teaching of History and Other Fields in the Social Studies**

Three credits. Three hours of lecture per week.

This course explores innovative strategies and approaches for teaching history and other social studies subjects. Emphasis is placed on laboratory experiences, the use of educational technology, and relevant literary analysis. The course is offered in face-to-face, hybrid, and online formats.

## **EDUC 6300 Programmatic Tendencies in Social Studies Curriculum**

Three credits. Three hours of lecture per week.

Prerequisites: EDPT 4005 or the equivalent.

This course examines recent trends in the structuring of social studies curricula, with a focus on history and other related fields. Students will study and update curricula from various countries, analyzing their underlying philosophies, course programs, guidance processes, and student experiences. Conducted as a seminar, participants are required to complete a curriculum design project that applies the theoretical concepts discussed. The course is available in face-to-face, hybrid, and online formats.

### **EDUC 6356 Approaches to the Teaching of Literary Genres**

Three credits. Three hours of lecture per week.

This course analyzes research on trends and approaches to literary production and its educational implications. Students will apply recent trends to text analysis and develop innovative strategies and techniques for teaching literary genres. The course includes the creation of daily lesson plans, exams, and demonstrative teaching activities.

## **EDUC 6370 Seminar: Teaching Strategies and Resources in Secondary School Science** Three credits. Three hours of lecture per week.

This seminar covers selected topics relevant to teaching science at the secondary school level. Emphasis is placed on teaching strategies, techniques, and resources, as well as on the evaluation of learning and the challenges associated with adopting and teaching new science courses.

## EDUC 6380 Workshop for Curriculum Design

Three credits. Three hours of lecture or laboratory work per week..

Prerequisite: EDUC 6501-6502 and 6517.

This workshop emphasizes curriculum design and the production of instructional materials across various disciplines, based on systematic instructional analysis. Students will analyze, select, and evaluate curriculum materials such as guides, manuals, textbooks, audiovisual aids, and programmed materials. General and small group sessions will focus on addressing issues in curriculum design, with attention given to educational innovations, action learning modules, extended school year patterns, programmed instruction, audiovisual materials, and behavioral objectives.

## **EDUC 6395 Workshop on Computerized Educational Data Processing**

Three credits. One and a half hour of lecture and three hours of laboratory per week.

Prerequisite: EDUC 6509, EDUC 6390.

This workshop is divided into three units covering the content, organization, and functioning of programs within the statistical package for the social sciences (SPSS). The course begins with a review of the scientific process, including levels of measurement, appropriate statistical techniques, research problem conceptualization, data gathering, and data coding procedures. The course spans two consecutive semesters: the first semester focuses on content and organization (units one and two), while the second semester covers the functioning of SPSS programs (unit three).

## EDUC 6430 Study of Technology and its Role in Curriculum Design

Three credits. Three hours of lecture per week.

This course focuses on developing skills in the use of technology, including its evaluation, selection, and systematic application in curriculum design. Students will have the opportunity to apply this knowledge by designing and producing a project in their area of specialization.

#### **EDUC 6450 Advanced Physical Education for the Handicapped (Practicum)**

Six credits. Fifteen lectures.

The course offers advanced laboratory experiences and practicum in physical education for handicapped children. Emphasis will be on motor learning theories skills and process through short internships in setting for handicapped and non-handicapped children. The course will be based on performance criteria in mastery of specific competencies.

## **EDUC 6500 Training Institute on Bilingualism in Puerto Rico**

Six credits. Twenty-five hours per week.

Prerequisite: Bachelor's degree.

This course examines the sociological, historical, and cultural background of bilingualism in Puerto Rico, with a focus on identity development among Nuyorican children. It explores their linguistic characteristics and presents teaching strategies for instructing these children in both English and Spanish, along with evaluation and research strategies.

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course explores the nature, scope, and methods of educational research, focusing on qualitative and quantitative techniques and computerized technology. Emphasis is placed on planning, conducting, and evaluating various types of research. The course is offered in face-to-face, hybrid, and online formats.

## EDUC 6516 Linguistics and Teaching of Literacy in English to Spanish-Dominant Children Three credits. Three hours of lecture per week.

This course analyzes the elements of language and examines teaching and learning processes in the development of bilingual literacy (biliteracy). It emphasizes oral and written expression in English, building on students' cultural and linguistic resources. The course also includes a comparative linguistic analysis of Spanish and English. It is offered in face-to-face, hybrid, and online formats.

## **EDUC 6517 Principles of Curriculum**

Three credits. Three hours of lecture per week.

Discussion of problems and issues related to curriculum development and improvement study of curriculum decision and the theoretical framework to make and prove those decisions. Particular consideration will be given to the need for curriculum changes and research.

## EDUC 6518 Teaching of Reading in Spanish to English Dominant Bilingual and Bicultural Children

Three credits. Three hours of lecture per week.

Analysis of teaching and learning problems in developmental reading, oral and written expression in Spanish; analysis of elements of language and cognitive style; relationship of audio-lingual perception to bilingualism and language development; comparative linguistic analysis of Spanish and English.

### **EDUC 6519 The Secondary School Curriculum**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6517. Graduate program admission.

This course explores the main developments in curriculum design from the 1890s, starting with the Committee of Ten, to the present. It includes an examination of key issues and trends in

curriculum development, as well as an analysis of the conditions influencing curriculum change. Special emphasis is placed on current national committees working on curriculum improvement.

## **EDUC 6526 Strategies for Curricular Changes**

Three credits. Three hours of lecture per week.

This course examines the role of research in curriculum development, highlighting the educational leader's contribution to curriculum change and improvement. Emphasis is placed on the importance of laboratories and research as essential tools for producing innovations that drive curriculum changes.

## **EDUC 6528 Curricular Innovations in the Teaching of Mathematics**

Three credits. Three hours of lecture per week.

This course focuses on the exploration and application of curricular innovations in the teaching of mathematics. Students will have the opportunity to design and evaluate curricular frameworks, gaining a deeper appreciation for modern approaches to mathematics education.

## **EDUC 6530 Workshop in the Production of New Materials to Teach Mathematics**

Three credits. Three hours of lecture per week.

Prerequisites: EDPE 4005 or equivalent

This course involves the creation and development of effective models for communication and individualized instruction in mathematics. Students will apply systematic instructional approaches to develop projects, incorporating the theoretical concepts studied. The course is offered in face-to-face, hybrid, and online formats.

### **EDUC 6535 The Elementary School Curriculum**

Three to seven and a half hours of lectures per week.

Prerequisite: EDUC 6517

This course explores the development of the elementary school curriculum, with a focus on contemporary issues and trends in curriculum design. It also analyzes the conditions that influence curriculum changes.

## **EDUC 6550 History of Educational Ideas in Puerto Rico: Nineteenth and Twentieth Centuries**

Three credits. Three hours of lecture per week.

Prerequisite: EDPT 4005 or its equivalent.

This course investigates and discusses the educational ideas that have shaped the Puerto Rican education system since the 19th century. It begins with a general survey of education in Latin America during the 19th century, including an analysis of the philosophical and educational trends of the period. Emphasis is placed on Puerto Rican figures such as Baldorioty, Tapia, and Eugenio María de Hostos, and their contributions to the history of educational thought.

## EDUC 6551 Research and Creation Seminar in Curriculum and Teaching

Three credits. Three hours of seminar.

Prerequisite: Successfully complete the comprehensive exam.

This course provides an integrative experience where students demonstrate their research and creative skills in curriculum development and teaching. The seminar is designed to align with students' professional and academic interests.

### EDUC 6566 Diagnosis and Correction of Deficiencies in Elementary Mathematics

Three credits. Three hours of seminar per week.

This seminar focuses on diagnosing, identifying, and analyzing deficiencies in elementary mathematics. Students will design teaching and learning strategies for remediation and will engage in laboratory experiences with children to apply their learning.

## EDUC 6569 Educational Innovations and Strategies for their Implementation

Three credits. Three hours of lecture per week.

This course provides a study of educational innovations and analyzes strategies for their effective implementation within educational organizations. It will be offered in a hybrid format.

## **EDUC 6570 Designing Educational Material for Elementary School**

Three credits. Three hours of workshop per week.

Prerequisite: For majors in elementary education; EDUC 6535; majors in preschool

education: EDUC 6115

This practical course focuses on designing educational materials that promote concept acquisition and skill development across various curricular domains. Recent research findings on how children learn will be integrated into the course.

## **EDUC 6576 Curriculum Development and Its Relationship to Learning Within the Social, Cultural and Philosophical Structure**

This course provides an in-depth study of curriculum theory and design, addressing the educational needs and realities of Puerto Rico. It emphasizes analysis and research related to curriculum development and offers field experiences to develop essential skills for designing and preparing individualized curricula.

### **EDUC 6588 Research Writing: Style and Language Usage**

Three credits. Three hours of lecture per week.

This course aims to enhance students' awareness of language usage, helping them communicate more effectively. It includes an analysis of the science and art of style and its appropriate use in various contexts, particularly in written communication.



#### **EDUC 6596 Classroom Evaluation**

Three credits. Three hours of lecture per week.

This course examines the theory and methodology of evaluating student learning, emphasizing the development, adaptation, and application of evaluation techniques and instruments. Students will learn data analysis and interpretation to assess student achievement effectively.

#### **EDUC 6607 Education in Rural Areas**

Three credits. Three hours of lecture per week.

This course is designed for administrators, supervisors, counselors, and classroom teachers working in rural schools. It provides an understanding of the concept of "rural," which is associated with low population density and agricultural economics. The mission of rural schools is studied in relation to rural social organization, processes, problems, and planning for development.

#### **EDUC 6615 Vocational and Technical Education: Principles and Practices**

Three credits. Three hours of lecture per week.

This course analyzes the development of vocational education, emphasizing its implications for preparing individuals for the workforce.

## **EDUC 6617 Curriculum Development in Vocational Education**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

This course focuses on analyzing and applying curriculum models for vocational education, with particular emphasis on models based on teaching competencies.

### **EDUC 6618 Educational Leadership in Vocational Education**

Three credits. Three hours of lecture per week.

This course explores the theory and practice of leadership in vocational education, addressing specific challenges faced by administrators in technical and vocational schools.

#### **EDUC 6620 Foundations of Physical Education**

Three credits. Three hours of lecture per week.

This course analyzes the foundational aspects of physical education in relation to program development. It will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6625 History of Physical Education**

Three credits. Three hours of lecture per week.

This course examines the role of physical education throughout history, focusing on the events, movements, and individuals that have influenced its development. It includes a comparison of Greek and Roman concepts with those from the Renaissance and Reformation periods, as well as

significant events in the history of physical education in Puerto Rico.

## **EDUC 6627 Graded Exercise Testing: Methods and Procedures**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the director.

This course explores the human physiological, anatomical, pathophysiological, and psychological foundations necessary for effective graded exercise testing. Key topics include electrocardiography, equipment calibration, patient screening, protocol selection, data collection and summary, basic cardiopulmonary resuscitation (CPR), emergency procedures, and exercise prescription.

# **EDUC 6629 Organization and Administration of Physical Education Programs and Secondary and Postsecondary Sports Administration**

Three credits. Three hours of lecture per week.

This course examines the nature and significance of organizing and administering physical education programs, both academic and extracurricular. It emphasizes theories, concepts, and administrative skills necessary for the development of physical education programs in K-12 and postsecondary educational settings.

## **EDUC 6645 Principles of Instructional Design**

Three credits. Three hours of lecture per week.

This course covers the essential characteristics of instruction that contribute to successful teaching and learning processes. It analyzes the external events of instruction and their impact on internal learning processes, referencing various learning theories. Students will study different models of systematic instructional design and their contributions to enhancing the teaching-learning process. This course will be offered in a hybrid format.

# EDUC 6646 Design, Implementation and Evaluation of an Instructional Technology Program

Three credits. Three hours of lecture per week.

This course develops skills in designing, developing, implementing, and evaluating instructional technology programs across various educational levels and contexts. It analyzes the social, human, philosophical, and economic factors affecting the integration of technology into educational systems. Students will examine system components, including utilization, selection, evaluation, cataloging, production, maintenance, and repair of equipment, all within the context of curriculum design and development. The course emphasizes new technologies, such as computerized instruction, and explores paradigms that could be utilized in program development.

### **EDUC 6647 Design and Production of Multi-Sensory Materials**

Three credits. Three hours of lecture per week.

This course focuses on developing the skills and knowledge necessary for designing and producing a learning unit using multi-sensory materials. It emphasizes the importance of aligning objectives with the materials and the intended audience for which they are created.

## EDUC 6649 Contemporary Themes in Technology: Television for Children

Three credits. Three hours of lecture per week.

This course provides a comprehensive review of literature related to television for children. It covers the history of children's television and analyzes significant issues such as stereotypes, violence, advertising, consumerism, regulations, and future trends. Students will critically examine the symbolic messages of various children's programs to understand their effects on children's behavior.

### **EDUC 6650 Creating Online Courses Workshop**

Three credits. One-hour lecture, one-hour discussion and one-hour workshop per week.

This course focuses on the skills and concepts required for creating partial or fully online courses. It covers topics related to design and production using commercial computer applications. The course will be offered in both face-to-face and hybrid formats.

## **EDUC 6659 Computer Mediated Telecommunication and its Application in Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6055

This course explores the fundamental aspects of telecommunications through local computer networks and the Internet. It covers the utilization of Internet resources, discusses educational projects, and examines applications of telecommunications via microcomputers. Students will develop documents for publication on the World Wide Web and analyze ethical issues, trends, and other telecommunications-related matters.

#### **EDUC 6660 Needs Assessment in Education**

Three credits. Three hours of lecture per week.

This course studies the processes involved in designing and producing needs assessments within the educational field.

### **EDUC 6666 Needs Assessment and Educational Planning**

Three credits. Three hours of lecture per week.

This course examines the role of needs assessment in educational planning and its implications for decision-making processes among administrators. As future administrators, students will engage with various types, models, strategies, techniques, instruments, tasks, and activities associated with needs assessment. Practical experience will be gained through conducting a needs assessment within an educational institution.

## **EDUC 6668 Seminar of Planning Techniques**

Three credits. Three hours of lecture per week.

This seminar offers an in-depth study of educational planning techniques. It includes descriptions, advantages, disadvantages, and guidelines for implementing these techniques. Additionally, the course provides opportunities for students to apply planning techniques to practical situations within the educational context of Puerto Rico.

## **EDUC 6675 Instructional Message Design**

Three credits. Three hours of lecture per week.

This course involves the study and analysis of research in educational psychology and instructional media to develop principles for designing instructional materials. The course will be offered in both face-to-face and hybrid formats.

#### **EDUC 6900 Master Exam**

Credits: 0

## **EDUC 6915 Knowledge Production and Writing**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6588

This course examines and applies writing processes and resources during the final stage of research text development. Students will analyze and interpret data in relation to writing strategies, transforming content knowledge into a coherent written text. The course emphasizes achieving global coherence and cohesiveness through the final revision process.

#### **EDUC 6995 Independent Study**

One to three credits. From one to three contact hours.

Prerequisites: Professor's authorization.

This course is designed to provide graduate students with the opportunity for individual or independent work in an area of particular interest or specialization that does not duplicate existing courses within the graduate studies department. Activities may include research projects, practical experience, cooperative projects, monographic papers, and other endeavors aimed at maximizing curricular flexibility and addressing students' interests. Registration requires professor approval, and students may earn up to a maximum of nine credits.

#### **EDUC 6997 Independent Study**

One to Three Credits. From One to Three Contact Hours.

Prerequisites: Professor's approval.

Designed to provide graduate students an opportunity for individual or independent work in an area of particular interest or field of specialization which does not duplicate the courses in the graduate studies department. The courses' activities may include research projects, practical experience, cooperative projects, monographic papers, and others with the purpose of maximizing

curricular flexibility and responding to the student's interests. It requires the professor's approval for registration. This course may be taken up to a maximum of nine credits.

### EDUC 6998 Field Work for Curriculum Design and Strategies for the Instruction

Two to six credits. Two-six hours of lecture or laboratory work per week.

In this course, students will dedicate part of their weekly time to one or more educational centers, including public and private schools, Head Start programs, colleges, and universities. The emphasis will be on addressing curriculum-related issues. Students will work on developing new curricular designs as well as instructional strategies and/or curricular change initiatives.

## **EDUC 8007 The Teaching of Opposing Viewpoints in Social Studies**

Three credits. Three hours of lecture per week.

This course involves the analysis and discussion of significant topics in social studies that present opposing viewpoints. It includes the study of potential strategies for presenting content in the classroom. The course will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 8028 Curriculum Evaluation**

Three credits. Three hours of lecture per week.

This advanced course focuses on the principles underlying various strategies used in curriculum evaluation, covering both formative and summative aspects. Students will explore recommended methodologies for curriculum evaluations, including the selection and application of evaluation strategies and models.

## **EDUC 8029 Curriculum Construction and Design**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6517

This course involves the study and analysis of the principles guiding curriculum construction and design, with applications to local educational contexts. It addresses issues and problems in curriculum design, emphasizing the development of curriculum theory and research in this area.

## **EDUC 8030 Evaluation of Educational Programs and Systems**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6509 and EDUC 6390 or equivalent.

This course examines the procedures utilized to evaluate educational programs. It will be offered in face-to-face, hybrid, and online formats.

## EDUC 8031 Seminar: Paradigms, Changes, and Trends in Educational Technology I

One credit. Three hours of seminar per week.

This seminar entails a critical analysis of paradigms of theoretical or practical interest within the field of educational technology. It emphasizes the study of historical background, philosophy, paradigms, theoretical frameworks, and research in educational technology. This seminar is the

first in a series of three offered over consecutive semesters, providing opportunities for enrichment as students' progress through their study plans. The course will be offered in a hybrid format.

## EDUC 8032 Seminar: Paradigms, Changes and Trends in Educational Technology II One credit. Three hours of seminar per week.

This seminar offers a critical analysis of changes in the professional practice of educational technology. It emphasizes the study of the role of professional associations in the development of educational technology and the legal and ethical implications for teaching and learning. This course is the second in a series of three seminars offered over consecutive semesters to provide enrichment as students progress through their study plans. The course will be offered in both face-to-face and hybrid formats.

## EDUC 8033 Seminar: Paradigms, Changes and Trends in Educational Technology III One credit. Three hours of seminars per week.

Critical analysis of trends and future developments of theoretical or practical interest within the field of educational technology. This seminar is part of sequence of three seminars offered during consecutive semesters to provide the opportunity for enrichment for the student as they progressed through their study plan. Course face-to-face and hybrid.

## **EDUC 8045 Advanced Course in the Teaching of Reading**

Three credits. Three hours of lecture per week.

Critical analysis of theories and contemporary practices, tendencies, problems, and controversial issues in the teaching of reading from an interdisciplinary perspective. Current methods and techniques of research in cognitive-conceptual psychology, reading, and comprehension processes with concerns for curriculum design and instructional practices.

### **EDUC 8048 Curriculum Development Theories**

Three credits. Three hours of lecture per week.

Study and analysis of the theories, models and research that guide curricular development in diverse dimensions and from different points of view for the curriculum planning and organization process in different teaching levels.

## **EDUC 8049 Models for the Teaching of Natural Sciences at the Secondary and Post-Secondary Levels**

Three credits. Three hours of lecture per week.

This course involves an analysis of the major theories of human cognition that have implications for instruction. Students will analyze instructional events in terms of promoting learning and will gain experience in evaluating instructional problems based on theoretical frameworks. It is expected that students will learn to describe these theories and their applications to the design and delivery of instruction in traditional natural science subjects. Additionally, students will formulate models to support effective learning and thinking strategies.

## **EDUC 8050 Educational Implications of the Theories About Science**

Three credits. Three hours of lecture per week.

This course focuses on the study of concepts related to the nature and philosophy of science through a critical analysis of various theories concerning scientific thinking, knowledge, and inquiry processes. The development and evolution of these theories will be examined within their historical and social contexts. Additionally, the course will explore the implications of these theories for science education, accompanied by research addressing relevant problems in this area.

## **EDUC 8057 Linguistic and Didactic Theory of Language**

Three credits. Three hours of lecture per week.

This course applies linguistic theories to the teaching of Spanish as a vernacular. It considers general principles related to language acquisition, with a particular focus on incorporating lexical, morphosyntactic, and mediative aspects of language within the curriculum.

## EDUC 8059 Models for the Teaching of Mathematics at the Secondary and Postsecondary

Three credits. Three hours of lecture per week.

This course involves the study, analysis, and evaluation of teaching models used in mathematics education. Emphasis is placed on the creation, preparation, and adaptation of learning materials appropriate for secondary and post-secondary levels.

### **EDUC 8060 Education as Science: A Critique**

Three credits. Three hours of lecture per week.

Identifies the human image common to all the human and social sciences. Isolates the generic properties of that image and examines their implications for education.

## EDUC 8065 Linguistic Research Techniques in Education and in the Curriculum

Three credits. Three hours of lecture per week.

The linguistic research, its present diversification and applications to the pedagogical field. Special emphasis to the Puerto Rican reality.

## **EDUC 8066 Public and Private Postsecondary Educational Institutions in Puerto Rico**

Three credits. Three hours of lecture per week.

This course examines the historical development of both public and private postsecondary educational institutions in Puerto Rico. It includes an analysis of the diversity and types of these institutions, focusing on their philosophy, administrative structure, educational programs, student services, faculty composition, and tuition fees. The course also explores key challenges faced by these institutions.

## **EDUC 8078 Computer Telecommunications and its Application to Education**

Three credits. Three hours' lecture and discussion per week.

Prerequisite: EDUC 6055

Study of telecommunications using local and wide area networks. Evaluation of research studies, projects, and educational applications of telecommunications using computers. Analysis of ethical and legal aspects, current and other related topics. Course face-to-face and hybrid.

### EDUC 8079 Technology, Technique, Society and Education

Three credits. Three hours of lecture and discussion per week.

Study of the relation between technology, society and education from the historical, philosophical and ethical perspective. Analysis of the impact of technology in education and its comparison with other professional fields, as well as the role of research in the integration of technology in education. Course face-to-face and hybrid.

## **EDUC 8087 Teacher Preparation Programs in Physical Education**

Three credits. Three hours of lecture and discussion per week.

Prerequisite: EDUC 6620

Study of the philosophical, theoretical and curricular foundations of teacher education programs in physical education. Comprehensive design and evaluation of teacher education programs in this area.

# **EDUC 8130 Models of Teaching, Supervision and Evaluation of Programs of English as a Second Language**

Three credits. Three hours of lecture per week.

This course is designed to provide an in-depth examination of the theories and principles of first and second language teaching. It will incorporate models of methods and techniques for teaching and supervising ESL curriculum development. Additionally, the course includes the analysis and design of evaluation instruments for TESOL (Teaching English to Speakers of Other Languages).

#### **EDUC 8135 Seminar: Issues in Education**

Three credits. Three hours of lecture per week.

This course focuses on the analysis of issues faced by educational administrators in both public and private educational systems in Puerto Rico and other countries. While specific challenges may vary from country to country, certain common controversial areas are explored, including the social function of education, the relationship between education and individual liberty, external influences on educational systems, the aims of education, and the role of the educator in the educational process.

### **EDUC 8137 The Teaching of History as a Dynamic Process**

Three credits. Three hours per week.

This course studies the interrelation of current events and personalities that impact human development, framed within a historical context. Personalities are considered as a variable that modifies historical narratives. The course will discuss, analyze, and model methodologies and strategies for integrating these events into educational settings. It requires continuous and instant revision and is offered in face-to-face, hybrid, and online formats.

### **EDUC 8138 Educational Implications if Historiography**

Three credits. Three hours per week.

This course involves the study and analysis of emerging trends in historiography and their implications for education. It emphasizes the significance of this field for various social studies areas, particularly history. The course is available in face-to-face, hybrid, and online formats.

## **EDUC 8139** The Education, History and Culture of Africa and its People

Three credits. One hour of lecture, one hour of discussion, and one hour of workshop per week.

This course examines African history and culture, focusing on the impact of African peoples on society. It analyzes historical problems faced by Africa across different periods and considers the continent's current evolution. Additionally, the course discusses the influence of African history on Puerto Rico and explores educational strategies for teaching this content in the classroom.

#### **EDUC 8140 Language Acquisition and Learning**

Three credits. Three hours of lecture per week.

This course offers an intensive analysis and application of learning theories and intellectual development, drawing on the work of scholars such as Thorndike, Skinner, Piaget, Bruner, Bandura, and others, as they relate to teaching and learning English as a second language. It will cover the principles underlying language acquisition and learning and the implications of dependent and independent cognitive styles for second language learning.

## EDUC 8145 Implications of Modern Linguistic Theories in the Teaching of English as a Second Language

Three credits. Three hours of lecture per week.

This course involves the study and analysis of various linguistic schools, including traditional, structural, and transformational linguistics. It includes basic considerations of traditional grammar and focuses on how these grammatical theories impact the teaching of English as a second language.

### **EDUC 8205 Models of Teaching Literary Text Analysis**

Three credits. Three hours per week.

Prerequisite: EDUC 6280 or EDUC 8029.

This course examines models of teaching that support traditional, structural, semiotic, and sociological techniques of literary analysis. It correlates literary text analysis with knowledge and curricular experiences while designing curricular materials to enhance literary analysis skills among Spanish students at the secondary and post-secondary levels.

## **EDUC 8206** The Teaching of the Spanish in Puerto Rico

Three credits. Three hours per week.

This course involves documentary research and analysis of the methods used to teach Spanish at the elementary, secondary, and post-secondary levels in Puerto Rico. It defines and analyzes problems related to Spanish instruction and provides a critical evaluation of theory and practice.

#### **EDUC 8215 Needs Assessment: Context Evaluation**

Three credits. Three hours per week.

This course focuses on identifying and analyzing needs to translate them into goals, objectives, and plans. It analyzes the gap between the actual and desired states in educational systems' planning, design, implementation, and evaluation phases.

## **EDUC 8235 Seminar: Practices, Trends and Issues in the Teaching ff Mathematics** Three credits.

This seminar involves the study and critical analysis of special topics, trends, issues, and contemporary theory and practice in mathematics education, with a focus on secondary and post-secondary levels. The course is offered in face-to-face, hybrid, and online modalities.

## **EDUC 8237 Seminar: Research Themes in Mathematics Education**

Three credits. Three hours per week.

This seminar critically analyzes the latest research in mathematics curriculum and teaching, along with its educational implications.

### **EDUC 8245 Interdisciplinary Study of Educational Topics**

One credit. One hour and a half per week.

This course provides an interdisciplinary study of educational and cultural topics resulting from historical and intellectual thought. It includes critical analysis of theories, concepts, definitions of problems, and alternative educational practices.

## **EDUC 8305 Sociology of the Scientific and Technological Knowledge: Educational Consequences**

Three credits. Three hours per week.

This course encourages students and teachers to explore scientific and technological developments from the perspective of the sociology of science and its social impact. It analyzes the socio-cultural foundations of natural sciences and their educational consequences, as well as controversial

sociological meanings associated with natural sciences and technology. Teaching and learning models for designing instructional lessons related to the course content will also be studied.

### **EDUC 8308 African Presence in Puerto Rico: Impact on Education**

Three credits. Three hours per week.

This course examines the origin and development of the African presence in Puerto Rico. It involves a critical analysis of its role and contributions to Puerto Rican customs and traditions, politics, economy, education, communication media, arts, theater, music, dance, literature, and religion. The course studies the development of racial identity, concepts of "bleaching," and the implications of racial relationships, racism, oppression, exclusion, and marginalization in Puerto Rican society in the 21st century. It emphasizes educational research and awareness of African roots and racial issues that influence the Puerto Rican educational system.

## **EDUC 8309 Curricular Impact of the Africa Geography**

Three credits. Three hours per week.

This course studies the geography of Africa and its curricular implications, aiming to compare the realities of Africa and Puerto Rico. Students will conduct research and design appropriate curricular strategies, emphasizing the use of interdisciplinary methods.

## **EDUC 8900 Candidacy Examination**

Credits: None

The doctoral examination is a requisite for graduate students and is considered a full-time commitment for the participants.

#### **EDUC 8981 Doctoral Dissertation**

Six credits.

Prerequisites: Successful completion of the doctoral examination; submission of a certificate of completion for the information competencies workshop from the Gerardo Selles Sola library; and presentation of evidence of completing the online module on responsible conduct in research through the CITI program, as required by Certification 029 of the UPR-RP Administrative Board.

This course involves the preparation of a doctoral dissertation, focusing on proposal development and the general procedures for writing a doctoral dissertation.

#### **EDUC 8982 Continuation of Doctoral Dissertation**

Credits: None.

Prerequisite: All courses necessary for degree completion in the specialty must be passed. This course may be repeated three times.

This course emphasizes the research study's implementation and the dissertation's preparation.

#### **EDUC 8995 Directed Specialized Study**

One to three credits. One to three contact hours. Prerequisite: Authorization from the department.



This course involves the exploration of special topics or problems of interest to groups of graduate students under the direction of a faculty member or visiting professor. A maximum of nine credits may be earned through this course.



Dean: Dra. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Exercise Science Program Coordinator**: Dra. Lucía del R. Martínez

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89203, 89253

Website: http://ege.uprrp.edu/

#### **DEGREE:**

### **Master of Education in Child Education (Reading)**

#### **FACULTY:**

**Lisandra Pedraza Burgos, PhD**, The Ohio State University, 2006, Assistant Professor. Early education; multicultural education; childhood, family and community alliance; qualitative research; spirituality of boys and girls.

**Ruth J. Sáez Vega, PhD**, University of Arizona, 1996, Professor. Reading as a process; early literacy; writing development; literature for boys and girls; teaching transformation; qualitative research: ethnographic, case studies, teacher-researcher.

## **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/admisiones-graduadas-enero-2024/

#### **Specific Admission Requirements**

- 1. Recognized and accredited high school degree.
- 2. Minimum academic index of 3.00.
- 3. Two letters of recommendation.
- 4. Interview with teachers from the DEG- Early Childhood Education area.

### **Documents and other requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format.
- 2. Two (2) official academic transcripts of the bachelor's degree.
- 3. Essay on academic background experienes, and their relationship to the students' professional goals (500-1500 words).

### **GRADUATION REQUIREMENTS:**

1. Meet the graduation requirements of the Río Piedras Campus.

- 2. Successfully complete the courses with a grade of no less than "C".
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

#### **STUDY PROGRAM:**

Curricular sequence		
Credits	Curriculum components 30 credits	
9	Core courses	
	EDUC 6096- Theories of childhood development: educational implications	
	EDUC 6098 - A socio-cultural perspective of childhood in Puerto Rico	
	EDUC 6509- Reserach method in Education	
15	Specialty courses	
	EDUC 6116- Theoretical perspectives of reading and writing	
	EDUC 6147- Reading and Writing Assessment	
	EDUC 6202- Pedagogical practices for the training of readers and writers	
	EDUC 6559 - Children's Literature	
	EDUC 6201 - Trends, themes and controversies in contemporary children's	
	literature	
3	Elective course	
0	EDUC 6900- Subject Exam	
3	EDUC 6204 Integrative Seminar on Reading, Writing and Children's Literature	
30	TOTAL CREDITS	

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **EDUC 6096 Theories of Childhood Development: Educational Implications**

Three credits. One hour and a half and one hour and a half per week.

This course involves an analysis of various child development theories, including psychoanalytic, normative-maturation, behavior-environmental, and cognitive-interactionist approaches. Emphasis is placed on topics such as cognition, learning, social-moral cognition, metacognition, memory, and personality development, among others. The course also includes an examination of local research relevant to these paradigms and their implications for educational practice with children aged 0-15 in Puerto Rico. Students will gain clinical experience in both school and home environments.

## EDUC 6098 A Socio-Cultural Perspective On Childhood in Puerto Rico

Three hours of discussion per week.

A study of childhood in Puerto Rico, emphasizing the social and cultural dimensions related to behavior and learning styles in children. Special attention to culture and the social environment

as agents of socialization and to the implications and consequences of group expectations on children and on the learning process.

# **EDUC 6509 Research Methods in Education**

Three credits.

This course covers the nature, scope, and methods of educational research, including qualitative and quantitative techniques, as well as the use of computerized technology. It emphasizes the planning, conducting, and evaluating of various types of research. The course is offered in face-to-face, online, and hybrid formats.

## **EDUC 6116 Theoretical Perspectives on Reading and Writing**

Three credits. One and a half hours of discussion and one and a half hour of lecture per week.

This course conceptualizes reading and writing from diverse theoretical perspectives throughout history. It includes a study of fundamental theories and research related to reading and writing, as well as an analysis of legislation influencing public policy concerning the teaching of these skills. The course places emphasis on the coherence between theory and practice.

# **EDUC 6147 Reading and Writing Evaluation**

Three credits. Three hours of lecture per week.

This course examines the evaluation of reading and writing learning processes. It involves an analysis of literacy evaluation practices and the theories and perspectives that underlie them. Students will study, develop, and apply various evaluation instruments and methods, with a strong emphasis on valuing the learner as both a reader and a writer and documenting their learning processes.

# EDUC 6202 Pedagogical Practices for the Development of Readers and Writers

Three credits. Three hours of lecture per week.

This course is centered on fostering the development of readers and writers at the elementary level (K-6). It conceptualizes reading and writing from the perspective of the reader and writer and emphasizes their creative processes. Students will analyze theoretical perspectives and their methodological implications, studying curricular approaches and strategies for teaching reading and writing. The course focuses on pedagogical practices that create environments conducive to nurturing readers and writers.

## **EDUC 6559 Children's Literature**

Three credits. Three hours of lecture per week.

This course focuses on literature designed for children, analyzing the history of both universal and Puerto Rican children's literature, from its origins to the contemporary picture book. Emphasis is placed on the various genres of children's literature and the contributions of authors and illustrators from Puerto Rico, Ibero-America, and around the world. The course also addresses the role of children's literature in the classroom and its significance in reading promotion programs in various contexts.

# EDUC 6201 Trend, Topic and Controversies in Children's Literature

Three credits. Three hours of lecture per week.

This course examines current trends in contemporary children's literature, focusing on the diverse topics addressed in literature published over the last few decades. Students will analyze existing controversies within the field of children's literature, with an emphasis on the trends, topics, and controversies most relevant at the time the course is taught.

#### EDUC 6900 Examen de Materia

Cero créditos

## **EDUC 6203 Capstone Seminar in Preschool Education**

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6115, EDUC 6117, EDUC 6118, EDUC 6125, EDUC 6145, EDUC 6900.

This seminar focuses on the synthesis and critical evaluation of specialized topics in preschool education. It aims to apply the knowledge and competencies developed during the preschool education degree courses to create individual projects that reflect each student's unique research interests. The seminar represents the final evaluation point of the master's program and carries a full academic load for the student, contributing to the professional field in classroom settings, schools, universities, and the broader community.

#### OTHERS COURSE DESCRIPTION:

### **EDUC 6097 Pre-School Education Programs**

Three credits. One and a half hours of lecture and one and a half hour of discussion per week.

This course involves the study of various contemporary preschool programs and other educational models. Students will apply a conceptual model for programmatic and curricular analysis to identify objectives, select educational experiences, and evaluate resources for different programs. Additionally, the course includes an analysis of research and legislation concerning preschool programs in Puerto Rico and the United States, along with field experiences.

## **EDUC 6099 Recent Trends in Elementary-School Teaching**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6096

Identification, analysis and evaluation of recent trends that influence the teaching-learning process in elementary school and their implications for elementary schools in Puerto Rico.

#### **EDUC 6115 Pre-School Curriculum Design**

Three credits. Three hours of discussion per week.

This course discusses appropriate curricular practices in preschool education. It includes an analysis of research on the organization and sequencing of activities relevant to preschool curriculum and innovative practices. A clinical experience is also part of the course requirements

# **EDUC 6117 Learning and Assessment in the Preschool Years**

Three credits. Three hours of lecture per week.

This course provides an analysis of theories related to cognitive development, learning, and assessment in preschool education, emphasizing their implications for educational practice with infants, toddlers, and preschoolers. Students will review relevant research publications and engage in observations and field experiences to examine learning processes and assessment strategies in early childhood education. The course also includes a study of international educational strategies that promote cognitive development and assessment during preschool years.

#### **EDUC 6118 Children's Literature and Pre-School Education**

Three credits. Three hours of lecture per week. Prerequisites: EDUC 6115 and EDUC 6096.

This course explores the role of children's literature in the holistic development of preschoolers. It includes an analysis of the relationship between children's literature and various areas such as reading and writing, moral development, value formation, and the clarification of non-sexist social roles related to gender. Students will review updated research findings in children's literature, and independent clinical and field experiences will be required.

# **EDUC 6119 Pictorical Expression in The Early Childhood Years**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6096

This seminar analyzes literature on pictorial expression development during early childhood. It explores the relationship among pictorial expression, symbolic function, and creativity within the educational context in Puerto Rico. The course also examines the impact of various developmental factors on children aged 0-8 years old and includes practical experiences with children and workshops in plastic arts.

## EDUC 6125 The Role of Play in the Development and Education of Preschooler's

Three credits. Three hours of seminar per week.

This seminar focuses on the research and analysis of literature related to the role of play in childhood development. Emphasis is placed on the importance of play as an educational strategy in early childhood education. Clinical experiences with children are required for course completion.

## **EDUC 6126 Observation and Research Techniques for Children**

Three credits. Three hours of lecture per week. Prerequisites: EDUC 6095 and EDUC 6096.

This course studies observation as a technique for conducting research and evaluating preschool and elementary school children. It emphasizes the conceptualization, design, implementation, interpretation, and effective use of observational results.

# **EDUC 6145 Literacy as a Developmental Process in Preschoolers**

Three credits. Three hours of lecture per week.

This seminar explores the relationship between oral language development and emerging literacy from diverse theoretical perspectives. It analyzes recent research on how literacy develops in preschoolers before they enter first grade. Observations and field experiences related to these developmental processes in the Puerto Rican context are required.

## EDUC 6204 Capstone Seminar in Reading, Writing and Children's Literature

Three credits. Three hours of seminar per week

Prerequisites: EDUC 6116, EDUC 6147, EDUC 6146, EDUC 6560, EDUC 6559 and EDUC 6900.

This seminar addresses the synthesis and critical assessment of specialized topics in reading, writing, and children's literature. Students will apply the knowledge and research competencies developed throughout their master's program to conduct a project that reflects their research and creative interests and contributions to an existing project. The seminar represents the final evaluation point of the master's program and is equivalent to a full academic load for the student.

# EDUC 6440 Psycholinguistics and Psychology of Reading

Three credits. Three hours of lecture per week

Prerequisite: Bachelo's Degree.

This interdisciplinary course examines the recent contributions of both psychology and linguistics as they relate to one another. It covers the psychological and grammatical aspects of spoken and written language. Fundamental principles from psychology and linguistics are applied to the teaching and learning of reading, emphasizing the efficient use of both written and spoken language in education and culture. The course includes laboratory experiences in public schools and the writing of term papers based on student research.

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course explores the nature, scope, methods, and qualitative and quantitative techniques of educational research and the use of computerized technology. Emphasis is placed on planning, conducting, and evaluating various types of research through face-to-face, online, and hybrid formats.

## EDUC 6595 Language Development and the Process of Reading

Three credits. One hour of lecture and three of laboratory work per week.

This course aims to provide teachers of young children with a better understanding of language



development and the teaching of reading as it relates to success in school learning. Topics include the role of parents and teachers in children's language development and learning to read, screening and diagnostic procedures for identifying children with atypical language development, and methods for compensatory training used in the classroom.

# EDUC 6809 Authentic Assessment as an Instrument for Learning

Three credits. Two hours of lecture and two of laboratory per week.

This course examines assessment as a data collection procedure for various purposes. It emphasizes the importance of understanding philosophical perspectives, as well as the instruments, techniques, and procedures available for authentic assessment that enhance teaching and learning within both regular and special education contexts.

# **EDUC 6830 Specific Reading Curriculum Designs**

Three credits. Three hours of seminar per week.

This inquiry-based course addresses curriculum designs in the field of reading. Students will study programs in terms of their conceptual bases and methodological approaches, analyze and apply reading curricula related to exceptional children and bilingual children from different linguistic and cultural backgrounds, and systematically observe one of these groups. The course culminates in the production and evaluation of a unit and other curricular materials.

# **EDUC 6995 Independent Study**

One to three credits. From one to three contact hours.

Prerequisites: professor's authorization.

This course is designed to provide graduate students with an opportunity for individual or independent work in a specific area of interest or specialization that does not duplicate existing courses. Activities may include research projects, practical experiences, cooperative projects, and monographic papers, allowing for curricular flexibility and responsiveness to student interests. Registration requires professor approval, and students may take this course for a maximum of nine credits.

# **EDUC 8025 Ethical Perspective of Childhood and Education**

Three credits. One hour and half of lecture and one hour and half of discussion per week.

This course involves a philosophical analysis of childhood from constructivist and naturalist perspectives. It explores themes of children's rights in modernity, drawing on the ideas of J.J. Rousseau's naturalism and I. Kant's ethics. Students will analyze the applicability of concepts such as liberty, democracy, authority, and punishment, considering the effectiveness of Socratic ethical precepts that suggest ethical knowledge ensures moral behavior. The course may be offered in face-to-face, hybrid, distance, and online modalities.

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Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Preschool Education Program Coordinator**: Dr. Lisandra Pedraza **Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89253

**Portal**: http://ege.uprrp.edu/

#### **DEGREE:**

### **Master of Education in Child Education (Preschool)**

#### **FACULTY:**

**Lisandra Pedraza Burgos, PhD**, The Ohio State University, 2006, Assistant Professor. Early education; multicultural education; childhood, family and community alliance; qualitative research; spirituality of boys and girls.

**Ruth J. Sáez Vega, PhD**, University of Arizona, 1996, Professor. Reading as a process; early literacy; writing development; literature for boys and girls; teaching transformation; qualitative research: ethnographic, case studies, teacher-researcher.

## **ADMISSION REQUIREMENTS:**

### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/admisiones-graduadas-enero-2024/

### **Specific Admission Requirements**

- 1. Recognized and accredited bachelor's degree.
- 2. Minimum academic index of 3.00.
- 3. Two letters of recommendation.
- 4. Interview with professor from the DEG- Early Childhood Education area.

# Documents and other requirements for the Admission Application

- 1. Application for Admission to Graduate Studies in electronic format.
- 2. Two (2) official academic transcripts of bachelor's degree.
- 3. Essay on academic background experiences, and their relationship to the students' professional goals (500-1500 words).

#### **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the courses with a grade of no less than "C".
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

#### **STUDY PROGRAM:**

Curricular sequence		
Credits	Curriculum components 30 credits	
9	Core courses	
	EDUC 6096 - Theories of childhood development: educational implications	
	EDUC 6098 - A socio-cultural perspective of childhood in Puerto Rico	
	EDUC 6509 - Research Methods in Education	
15	Specialty courses	
	EDUC 6115 - Preschool Curriculum Design	
	EDUC 6118 - Preschool Literature and Education	
	EDUC 6117 - Learning and assessment in preschool childhood	
	EDUC 6125 - Play in preschool development and education	
	EDUC 6145 - Reading and writing as developmental processes in preschool	
3	Elective course	
0	EDUC 6900- Subject Exam	
3	EDUC 6203 Integrating Seminar on Preschool education	
30	Total credits	

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **EDUC 6096 Theories of Childhood Development: Educational Implications**

Three credits. One hour and a half of lecture and one hour and a half of discussion per week.

This course analyzes child development theories, including psychoanalytic, normative-maturation, behavior-environmental, and cognitive-interactionist perspectives. Topics include cognition, learning, social-moral cognition, metacognition, memory, and personality development. The course emphasizes local research relevant to these paradigms and their educational implications for children aged 0-15 in Puerto Rico, with clinical experiences in school and home environments.

# EDUC 6098 A Socio-Cultural Perspective on Childhood in Puerto Rico

Three hours of discussion per week.

This course studies childhood in Puerto Rico, focusing on social and cultural dimensions related

to behavior and learning styles. It examines the role of culture and social environment as agents of socialization and the implications of group expectations on children and their learning processes.

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course studies observation as a research technique for evaluating preschool and elementary school children. It emphasizes conceptualization, design, implementation, interpretation, and effective use of observational results.

## **EDUC 6115 Pre-School Curriculum Design**

Three credits. Three hours of discussion per week.

This course discusses appropriate curricular practices in preschool education. It includes an analysis of research on the organization and sequencing of activities pertinent to preschool curricula and innovative practices alongside a clinical experience component.

# **EDUC 6118 Children's Literature and Pre-School Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6115 and EDUC 6096.

This course examines the role of children's literature in preschool development. It analyzes the relationship between children's literature and reading, writing, moral development, and non-sexist social roles, supported by updated research findings and independent clinical and field experiences.

## **EDUC 6117 Learning and Assessment in the Preschool Years**

Three credits. Three hours of lecture per week.

This course analyzes theories on cognitive development, learning, and assessment pertinent to preschool education and their implications for practice. It includes observations and field experiences with infants, toddlers, and preschoolers, examining international educational strategies that foster cognitive development and assessment.

## **EDUC 6125** The Role of Play in the Development and Education of Preschooler's

Three credits. Three hours of seminar per week.

This seminar focuses on the research and analysis of literature related to the role of play in childhood development. Emphasizing the importance of play as an educational strategy, clinical experiences with children are required.

## **EDUC 6145 Literacy as a Developmental Process in Preschoolers**

Three credits. Three hours of lecture per week.

Seminar geared towards the study of the relationship between oral language development and the development emerging literacy from diverse theoretical perspectives. Analysis of recent research

on how literacy emerges in preschoolers before first grade. Observations and field experiences around these developmental processes in the Puerto Rican context will be required.

#### **EDUC 6900 Master Exam**

Zero credits.

### **EDUC 6203 Capstone Seminar in Preschool Education**

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6115, EDUC 6117, EDUC 6118, EDUC 6125, EDUC 6145, EDUC 6900.

This seminar addresses the synthesis and critical evaluation of specialized topics in preschool education, in order to apply the knowledge and competencies of research inherent in these, that were developed during the preschool education degree courses. Each student elaborates a project that responds to her or his particular creative research interest. It implies a contribution to the professional field in the classroom, within the context of the preschool setting, the school, the university of the community at large. This seminar represents the final evaluation point of the master's program and is equivalent to full academic load for the student.

#### OTHERS COURSE DESCRIPTION:

## **EDUC 6097 Pre-School Education Programs**

Three credits. One and a half hour of lecture and one and a half hour of discussion per week.

Study of various contemporary pre-school programs and other education models. Application of the conceptual model for programmatic and curricular analysis to identify objectives, select educational experiences and evaluate means for different programs. Analysis of the research and legislation on pre-school programs in Puerto Rico and the united states. Field experiences.

## **EDUC 6099 Recent Trends in Elementary-School Teaching**

Three credits. Three hours of seminar per week

Prerequisite: EDUC 6096

Identification, analysis and evaluation of recent trends that influence the teaching-learning process in the elementary school and their implications for the elementary school in Puerto Rico.

## **EDUC 6116 Theoretical Perspectives on Reading and Writing**

Three credits. One and a half hour of discussion and one and a half hour of lecture per week.

Conceptualization of reading and writing from diverse theoretical perspectives throughout history. Study of fundamental theories and research in the fields of reading and writing. Analysis of legislation that influences public policy related to the teaching of reading and writing. Emphasis on theoretical-practical coherence.

# **EDUC 6119 Pictorical Expression in The Early Childhood Years**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6096

Seminar aimed at analyzing literature related to the development of the pictorical expression during the early childhood years. Study of the relationship among pictorial expression, the symbolic function and creativity within the educational context in Puerto Rico. Analysis of the impact of diverse development in children aged 0-8 years old. Includes experiences with children and workshops in plastic arts.

## EDUC 6126 Observation and Research Techniques for Children

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6095 and EDUC 6096.

This course studies observation as a research technique for evaluating preschool and elementary school children. It emphasizes conceptualization, design, implementation, interpretation, and effective use of observational results.

# **EDUC 6147 Reading and Writing Evaluation**

Three credits. Three hours of lecture per week.

This course studies the evaluation of reading and writing learning processes, analyzing evaluation practices and the theories underpinning them. It includes the development and application of various evaluation instruments and methods.

# EDUC 6201 Trend, Topics and Controversies in Children's Literature

Three credits. Three hours of lecture per week.

This course studies contemporary trends in children's literature, examining the diversity of topics covered in literature published in recent decades and analyzing existing controversies in the field.

## EDUC 6202 Pedagogical Practices for the Development of Readers and Writers

Three credits. Three hours of lecture per week.

This course focuses on creating readers and writers at the elementary level (K-6). It analyzes theoretical perspectives, methodological implications, and pedagogical practices that promote reading and writing development.

## EDUC 6204 Capstone Seminar in Reading, Writing and Children's Literature

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6116, EDUC 6147, EDUC 6146, EDUC 6560, EDUC 6559, and EDUC 6900.

This interdisciplinary course examines the interplay between psychology and linguistics in the context of language development. Students will analyze both psychological and grammatical aspects of spoken and written language. The course emphasizes applying foundational psychological and linguistic principles to enhance teaching and learning in reading. A special focus will be on the efficient use of written and spoken language, its educational significance, and the

development of thought and language skills in children. Activities include laboratory experiences in public schools and the completion of research-based term papers.

# EDUC 6440 Psycholinguistics and Psychology of Reading

Three credits. Three hours of lecture per week.

Prerequisite: B.A

This interdisciplinary course explores recent contributions from both psychology and linguistics, highlighting their interrelationships. It includes a comprehensive examination of the psychological and grammatical aspects of spoken and written language. Fundamental principles from both fields will be applied to enhance the teaching and learning of reading in educational settings and contemporary life. Emphasis will be placed on the effective use of written and spoken language, as well as its significance for education and culture. Special attention will be given to the value of printed materials and the skills required for their production. The course will also cover the development of thought and language skills in children, discussing various theories related to this phenomenon. Activities include laboratory experiences in public schools and the writing of term papers based on student research.

#### **EDUC 6509 Research Methods in Education**

Three credits.

Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. Emphasis on planning, conducting and evaluating types of research. Face-to-face online and hybrid course.

# **EDUC 6559 Children's Literature**

Three credits. Three hours of lecture per week.

Study of literature geared towards children. Analysis of the history of universal and Puerto Rican children's literature, from its origins to the picture book. Emphasis on children's literature genres and its creators-authors and illustrators-from Puerto Rico, Ibero-American and the rest of the world. Addresses the role of children's literature in the classroom and in other contexts and reading promotion programs.

# EDUC 6595 Language Development and the Process of Reading

Three credits. One hour of lecture and three of laboratory work per week.

This course aims to provide teachers of young children with a comprehensive understanding of language development and effective reading instruction. The relationship between language skills and academic success will be emphasized. Key topics will include the roles of parents and teachers in facilitating language development and reading acquisition, as well as screening and diagnostic procedures to identify children who may be experiencing delays in language development and reading skills. The course will also cover methods of compensatory training to support these children within the classroom setting.

## EDUC 6809 Authentic Assessment as an Instrument for Learning

Three credits. Two hours of lecture and two hours of laboratory per week.





This course involves an examination of assessment as a vital data collection procedure serving various educational purposes. Emphasis will be placed on understanding philosophical perspectives and exploring the instruments, techniques, and procedures available for implementing authentic assessments. These assessments aim to enhance teaching and learning in both regular and special education contexts.

# **EDUC 6830 Specific Reading Curriculum Designs**

Three credits. Three hours of seminar per week.

This course focuses on inquiry into curriculum designs specific to the field of reading. Students will study various programs, analyzing their conceptual foundations and methodological approaches. The course includes an examination of reading curricula related to exceptional children and bilingual learners from diverse linguistic and cultural backgrounds. Participants will engage in systematic observations of these groups and will be tasked with producing and evaluating a unit along with other curricular materials.

## **EDUC 6995 Independent Study**

One to three credits. From one to three contact hours.

Prerequisites: professor's approval.

This course is designed to provide graduate students with the opportunity for individual or independent work in an area of personal interest or specialization that does not duplicate existing courses in the graduate studies department. Course activities may include research projects, practical experiences, cooperative projects, monographic papers, and other initiatives aimed at maximizing curricular flexibility and addressing students' interests. Registration requires professor approval. Students may take this course for a maximum of nine credits.

## **EDUC 8025 Ethical Perspective of Childhood and Education**

Three credits. One hour and half of lecture and one hour and half of discussion per week.

This course offers a philosophical analysis of childhood through constructivist and naturalist perspectives. It explores themes related to children's rights in modernity, drawing upon the naturalism of J.J. Rousseau and the ethics of Immanuel Kant. The course examines the applicability of concepts such as liberty, democracy, authority, and punishment, considering the effectiveness of Socratic ethical precepts, which posit that ethical knowledge is sufficient to ensure moral behavior. This course can be offered in face-to-face, hybrid, distance, and online modalities.

**Interim Dean**: Dr. Grace Marie Carro Nieves **Department Director**: Dr. José Soto Sonera



**Mailing Address**: 13 Ave University Ste 1301 San Juan, PR 00925-2533 **Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89253

**Portal**: http://ege.uprrp.edu/

#### **DEGREE:**

## Master of education in Special and Differentiated Education

#### **FACULTY:**

**Yolanda González Román,** DMD, MEd, University of Puerto Rico, 1984, 2012. Assistant Professor. Special and differentiated education; teacher training in the area of autism, evidence-based practices for the education of people with autism and developmental differences, and transition processes.

**Edwin Vega Milan, EdD,** University of Puerto Rico, 2008, Associate Professor. Special and differentiated education. Leadership in educational organizations. Use of assistive technologies in curricular adaptation at the university level. Attention to diversity in teacher preparation programs.

## **ADMISSION REQUIREMENTS:**

### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Admission Requirements**

- 1. Recognized and accredited high school degree.
- 2. Minimum academic index of 3.00 on a scale of 4.00.
- 3. Admission Exam for Graduate Studies (optional).
- 4. Two letters of recommendation from education professionals.
- 5. Capacity for critical and creative analysis.
- 6. Learning experiences in the field.
- 7. Experiences with exceptional people or diverse populations.
- 8. Participate in an interview with professors and peers.

# **Documents and Other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format.
- 2. Two (2) official academic transcripts of Baccalaureate credits.
- 3. Essay on experiences, academic background, and its relationship to professional goals. (500-1500 words).

## **GRADUATION REQUIREMENTS:**

1. Meet the graduation requirements of the Río Piedras Campus.

- 2. Successful complete the courses with a grade of no less than "C".
- 3. Academic index of 3.00 or more in the courses considered for graduation.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Core courses and learning experiences	9
EDUC 6578: Advanced Seminar: Nature, needs, and education of exceptional individuals, or EDUC 6800: Problems and controversies in special education	3
EDUC 6807: Intelligences, talents, and creativity: Foundations, trends, and implications for education	3
EDUC 6809: Authentic assessment as an instrument for learning	3
EDUC 6809: Authentic assessment as an instrument for learning	9
EDUC - Course in some field of special and differentiated education	3
EDUC - Course in teaching methodology and curriculum in some field of special and differentiated education	3
EDUC 6855: Integration of knowledge and practices in special and differentiated education.	3
Educational Research and Evaluation course	3
EDUC 6509: Research Methods in Education or EDUC 6415: Action research in educational contexts	
Free electives	6
Grade Exam EDUC 6900	0
Research/Creation Project EDUC 6865: Research/creation project seminar in special and differentiated education	3
Total Credits	30

#### **COURSE DESCRIPTIONS:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **EDUC 6578 Advanced Seminar on the Nature, Needs and Education of the Exceptional Student**

Three credits. Three hours of lecture per week.

This course explores the etiology, identification, characteristics, and learning difficulties of exceptional children and youth. It emphasizes modern teaching practices and examines the

sociological, philosophical, and psychological factors that influence the education and placement of exceptional individuals.

### **EDUC 6800 Problems and Issues in Special Education**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6578

This course provides an in-depth discussion and analysis of contemporary problems and issues impacting special education. Emphasis will be placed on social, philosophical, and psychological theories, alongside economic and legal factors that influence the development and implementation of special education for exceptional children and youth.

# **EDUC 6807 Intelligences, Talents and Creativity: Foundations, Trends and Educational Implications**

Three credits. Three hours of lecture per week.

This course offers a broad and integrative overview of the foundations of an education focused on the optimal development of students' intelligences, talents, and creativity. It emphasizes the formation of the educator's metaphorical, theoretical, and practical thinking concerning current trends in the field. Through self-reflection, collaborative reflection, participatory action research, and creative work, educators will explore strategies to enhance their practice and foster student growth.

# **EDUC 6809 Authentic Assessment as an Instrument for Learning**

Three credits. Two hours of lecture and two of laboratory per week.

This course examines assessment as a vital data collection procedure serving various purposes in education. It emphasizes the importance of understanding philosophical perspectives as well as the instruments, techniques, and procedures necessary to implement authentic assessment. The focus is on improving teaching and learning outcomes within both regular and special education contexts.

# **EDUC 6855 Integrated Experience of Knowledge and Practices in Special Differentiated Education**

Three credits. Three hours of lecture per week.

Prerequisite: completion of core courses.

This course provides an integrated experience of knowledge and practices across a diverse range of scenarios, with a particular focus on populations in vulnerable situations. Students will apply various special and differentiated education practices, including teaching strategies, curriculum design, assessment, evaluation, leadership, assistive technology, development of didactic materials, and consultancy services. Emphasis will be placed on theoretical-practical reflection, action research, creative endeavors, service learning, and multidisciplinary teamwork. Students will contribute through proposals for change and innovative projects in their areas of emphasis and

specialization. The course includes ongoing mentoring and requires 150 hours of assigned tasks as part of the work plan.

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course explores the nature, scope, methods, and both qualitative and quantitative techniques of educational research, along with the use of computerized technology. Emphasis will be placed on planning, conducting, and evaluating various types of research. The course is offered in face-to-face, online, and hybrid formats.

#### **EDUC 6415 Action Research in Educational Contexts**

Three credits. Three hours of discussion per week.

This course examines the epistemological, axiological, and theoretical foundations of action research, along with its methods and techniques. Emphasis is placed on the connection between research and action to enhance teaching and learning processes and to address problems in educational settings. The course includes practical experience in planning, implementing, and disseminating action research. It is offered in face-to-face, hybrid, and online formats.

#### **EDUC 6900 Master Exam**

Credits: 0

# EDUC 6865 Research/Creation Project Seminar in Special and Differentiated Education

Three credits. Three hours of seminar per week.

Prerequisites: Approval of core courses EDUC 6578 or EDUC 6800, 6807, 6809, 6855, and one research course (EDUC 6509 or EDUC 6415).

This personalized, differentiated, and contextualized learning experience is designed to establish foundational ideas and practices for students in the special and differentiated education program as they develop their creative and research projects. The seminar focuses on a) the creative construction of projects grounded in educational research; b) the research and creation processes from an educational perspective; c) project design informed by systematic reflection on academic and professional experiences; d) methodologies for developing and designing innovative educational projects; e) the foundational and contextual aspects of creative and research projects; f) potential contributions of their projects to the innovation and transformation of authentic educational settings.

This integrated seminar culminates in the completion of the master's research or creative project within the student's area of specialty.

### OTHER COURSE DESCRIPTION:

## EDUC 6086 Persons with Special Needs in the Digital World

Three credits. Three hours of discussion per week.



This course explores how assistive technology enables individuals with special needs to access the digital world, fostering greater opportunities for their inclusion in society. It examines the relationship between digital technologies and assistive technology to enhance the participation of individuals with special needs in educational, vocational, and community contexts. The course will be offered in face-to-face, hybrid, distance, and online modalities. Effective August 2021.

# EDUC 6416 Research and Creation in the Field of Assistive Technology: Trends, Developments and Implications.

Three credits.one hour of lecture and two hours of discussion per week.

Prerequisite: EDUC 6415 or EDUC 6509.

This course focuses on research, creation, and knowledge transfer in the field of assistive technology (AT). It discusses pivotal research and innovations that have shaped the evolution of AT, while exploring emerging topics that drive the development of new studies and technologies. Emphasis is placed on the research process as essential for developing new technological alternatives to support individuals with diverse capabilities.

# **EEDU 6450 Advanced Physical Education for the Handicapped (Practicum)**

Six credits. Fifteen lectures.

The course offers advanced laboratory experiences and practicum in physical education for handicapped children. Emphasis will be on motor learning theories skills and process through short internships in setting for handicapped and non-handicapped children. The course will be based on performance criteria in mastery of specific competencies.

## **EDUC 6455 Child Abuse Among the General and Special Needs Population**

Three credits. One hour of lecture and two hours of discussion per week.

This course discusses the human rights foundations and legislation protecting minors in Puerto Rico, including the types of maltreatment and neglect recognized in the region. It addresses general risk factors affecting both the general population and those with special needs, as well as the implications of abuse associated with various disabilities. The course will explore intervention models and education programs available in Puerto Rico, providing opportunities to familiarize students with the work of protective services. It also emphasizes how educators, particularly those in special education, can collaborate in prevention and intervention efforts to reduce the incidence of child abuse.

# EDUC 6685 Assistive Technology: Fundamental, Issues, and Applicability

Three credits. Two hours of lecture and one hour of discussion per week.

This course provides an analysis of assistive technology (AT) as a vital tool for promoting the independence and productivity of individuals with diverse abilities in educational, workplace, and community settings. It examines the historical and legal foundations that justify and advocate for the use of AT to enhance inclusion for individuals with various exceptionalities. Students will study different technologies related to this field, focusing on their alignment with the characteristics, strengths, and challenges associated with each group of exceptionalities. The course will be offered in face-to-face, hybrid, and online modalities.

# EDUC 6700 Audiology: Speech and Language

Three credits. Three hours of lecture per week.

A study of the auditory system, auditory pathologies, hearing measurement, audiometric interpretation and amplification.

# **EDUC 6705** Curriculum Development and Instructional Methods for the Hearing-Impaired Three credits. Three hours of lecture per week.

Curriculum planning and instructional strategies for teaching hearing-impaired students at all levels with emphasis on the elementary and intermediate. Selection, modification, development and use of instructional media with the hearing-impaired.

# EDUC 6706 Aural-Oral Communication Skills for the Hearing-Impaired

Three credits. Three hours of lecture per week.

This course is designed to provide students with knowledge based in aural-oral communication and to enable them to serve as advocates for speech and audition in educational programs. The course provides methods for speech and the use of audition and speech reading for the hearing impaired.

# EDUC 6707 Education and Psychology of the Hearing-Impaired

Three credits. Three hours of lecture per week.

Historical, philosophical, psychological and social aspects of the hearing-impaired. An orientation on problems, issues, and research in the field of the hearing-impaired with consideration to historic and current objectives, techniques and results.

# EDUC 6708 Diagnosis and Remediation of Reading Difficulties of Hearing-Impaired Children

Three credits. Three hours of lecture per week.

The problems of teaching reading to hearing-impaired children and the development of skills in diagnosing and correcting specific reading problems of deaf children.

## **EDUC 6709 Language Development of the Hearing-Impaired**

Four credits. Four hours of lecture per week.

Provides students with a knowledge of the syntax and semantics of Spanish and English for language assessment and programming. It also includes techniques, methods, curricula, integration of language with other areas of the curricula.

# EDUC 6710 Understanding Autism: Biopsychosocial Foundations, Research and Educational Practices

Three credits. Three hours of seminar per week.

This general introductory course analyzes the biological, psychological, and social foundations of autism, along with therapeutic and educational interventions. It addresses historical, etiological, and research aspects within a paradigm that emphasizes strengths and differences in neurodevelopment. Special focus is placed on early diagnosis, identification, and intervention; the design of differentiated communication and socialization strategies; and alternative methods of educational assessment and accommodation. Current themes and innovations related to the autism continuum are explored from a multidisciplinary perspective.

## **EDUC 6711 Simultaneous Communication I**

Two credits. Two hours of lecture per week.

Prerequisite: EDUC 6709

This course will provide the future teacher of hearing-impaired children with a basic vocabulary of about 500 signs. They will be trained on how to use those signs simultaneously with speech and fingerspelling.

## **EDUC 6712 Simultaneous Communication II**

Two credits. Two hours of lecture per week.

Prerequisite: EDUC 6711

This course will expand the basic simultaneous communication skills that students taking this course must have. It will introduce 500 new signs and will provide basic experience in expressive interpreting in simultaneous communication.

# EDUC 6715 Teaching Methodology and Differentiated Educational Spaces for Learners with Autism Spectrum Disorder (Asd)

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6710

This seminar focuses on teaching methodologies and the creation of differentiated educational spaces for learners with Autism Spectrum Disorder (ASD). It includes a study of the history and evolution of education for this population, as well as the public policies established to support them. Participants will analyze various programmatic approaches, strategies, and interventions used to educate learners with autism across different ages and functional levels. Emphasis will be placed on research, emerging educational models, and innovative strategies, complemented by field experience.

## EDUC 6719 Diagnostic-Prescriptive Teaching of Deaf Children with Multiple Handicaps

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6707, EDUC 6709.

This course will examine the most common combinations of multiple handicapped conditions associated with deafness. It will focus on instructional techniques, classroom management strategies, and the implementation of Individualized Education Programs (IEPs) tailored for this population.

# EDUC 6726 Design and Development of Assistive Technology Alternatives

Three credits. One hour and a half of discussion and one hour and a half of workshop per week.

This course focuses on the design and development of low-cost assistive technology alternatives and adaptations to high-tech solutions for individuals with special needs in educational, vocational, and community contexts. Students will evaluate mainstream technologies—those commonly used in society—through a reflective and critical lens. The course aims to deepen students' understanding of their role in facilitating access for citizens with special needs to various activities within their environments. It will be offered in face-to-face, hybrid, and online modalities.

# EDUC 6740 Diagnostic Evaluation and Differentiated Educational Assessment for Students with Autism Spectrum

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6710

This seminar focuses on the study of multidisciplinary diagnostic evaluations for learners with autism spectrum disorder (ASD). Participants will examine various evaluation instruments, comparing traditional forms of educational assessment with innovative alternatives tailored for individuals with autism. The course includes an analysis of different assessment approaches and the creation of activities and instruments for alternative assessment methods. Emphasis will be placed on research, related projects, and emerging models and strategies. Field experience is required.

# **EDUC 6745 Addressing Behavior in Learners with Autism and the Development of their Social Competences**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6710

This seminar explores multiple theoretical approaches to the behavioral and socioemotional development of learners with autism. Students will engage in a comprehensive study of the evaluation and screening processes for identifying autistic behavioral manifestations, examining various methods and instruments employed for this purpose. The course will discuss educational strategies, as well as prevention and intervention models, focusing on the support and assistance provided to learners with autism during their transition from childhood to adolescence and into young adulthood. Field experience is included.

# **EDUC 6746 Strategies to Overcome the Communication Challenges of Learners of with Autism**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6710

This seminar explores the principles and components of typical communication, as well as the communication differences and challenges faced by learners with autism spectrum disorder (ASD). It focuses on teaching strategies that enhance communication skills and promote social interaction. Special emphasis is placed on the use of augmentative and alternative communication (AAC), assistive technology, educational technology, and environmental modifications in the



preparation of individualized education programs (IEPs). Field experience is included to provide practical application of these strategies.

# **EDUC 6755 Curriculum and Methodology for Teaching Individuals with Severe Disabilities**

Three credits. Three hours of lecture per week.

Analysis and development of special and regular curricular models and materials adapted for the optimum integration of children and youth with severe disabilities in school and communities.

# EDUC 6805 The Teaching of Children and Youth from a Constructive and Humanistic Perspective of Learning

Three credits. Two hours of lecture and two of laboratory work per week. Prerequisites: Three graduate credits from the curriculum or equivalent.

The course provides students the theoretical and practical knowledge regarding the teaching of children and youth with mild handicaps based on their abilities. It discusses and provides practical opportunities in designing and implementing holistic educational activities to promote the learning of reading, writing and mathematics. It emphasizes a constructivist and humanistic model of learning in the elaboration of educational activities giving particular attention to learner's developmental processes. The course allows regular and special education teachers to address the educational needs of learners with difficulties based on a model stressing strengths.

# **EDUC 6835 Curriculum and Teaching for the Optimal Development of Intelligences, Talents and Creativity**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6807

This course offers a critical and creative analysis of curricular and teaching theories, research studies, models, projects, and initiatives focused on the optimal development of students' intelligences, talents, and creativity. Emphasis is placed on the educator's role as both planner and reformer, highlighting their action-oriented thinking, collaborative action-research, and the process of creative innovation in education. The course underscores the importance of educators in transforming curriculum and teaching practices to foster a more dynamic and student-centered learning environment.

**Dean:** Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Mailing Address**: 13 Ave University Ste 1301 San Juan, PR 00925-2533 **Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89253

**Portal**: http://ege.uprrp.edu/

#### **DEGREE:**

Master of Education with a specialty in Educational Research and Evaluation

# **FACULTY:**

**Claudia X. Álvarez Romero,** Ph.D., University of Connecticut, 2006, Associate Professor. Evaluation of education programs; teacher preparation; early education; multicultural research; construction and validation of instruments in the affective area; Hierarchical Linear Modeling (HLM).

**Víctor E. Bonilla Rodríguez,** Ph.D., Loyola University Chicago, Illinois, 2002, Professor. Construction of instruments and their psychometric qualities; Research Methods; Survey research; Research ethics; Technology in the classroom; Teaching and learning process; Early education. María del R.

María del R. Medina Díaz, Ph.D., University of Wisconsin, 1991; JD, University of Puerto Rico, 2014. Professor. Construction and validation of achievement tests and other measurement instruments; theory and practice of educational measurement; academic integrity in educational institutions; ethics in educational research and evaluation; assessment of student learning; evaluation of educational and social programs, projects, and services; learning, teaching and assessment in mathematics.

**Joseph F. Carroll Miranda,** Ph.D., New Mexico State University, 2006. Assistant Professor. Technology adoption, learning technologies, critical pedagogy, emerging curriculum, youth culture, school effectiveness, computer science education, big data, emerging research methods.

**Juan P. Vázquez Pérez,** Ph.D., Pontifical University of Salamanca, 2012, Assistant Professor. Quantitative and qualitative research; Learning Assessment; program evaluation; construction of instruments for research and evaluation; evidence for the validity of the inferences; pedagogical training of the university professor.

## **ADMISSION REQUIREMENTS:**

# **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/admisiones-graduadas-enero-2024/

## **Specific Admission Requirements**

- 1. Baccalaureate Degree (or its equivalent) in any subject.
- 2. Minimum academic index of 3.30.
- 3. Credit statistics course (A person who does not meet the requirement of having taken a statistics course may be conditionally accepted).
- 4. Minimum of 9 credits in mathematics, quantitative methods, computers, research, evaluation, or a combination of these.
- 5. Take the Graduate Studies Admission Test.



- 6. Interview.
- 7. Three letters of recommendation, two of these from professors who can comment on the applicant's ability to pursue graduate studies.
- 8. International students must meet the requirements established by the University of Puerto Rico, Río Piedras Campus to study at the institution.

## **Documents and Other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies in electronic format platform.
- 2. Two (2) letters of recommendation for Graduate Studies in electronic or paper format.
- 3. Two (2) official academic transcripts of Baccalaureate degree.

# **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the specialty courses with a grade of no less than "B" and obtain a grade of no less than "C" in the other courses.
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

## **STUDY PROGRAM:**

Program Requirements	Credits
Specialty courses (include research methodology, statistics, evaluation and foundations of education, among others)	18
Elective Courses	9
Thesis	3
Total of credits	30

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **EDUC 6268 Biographical Research in Education**

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6400, EDUC 6513.

This course provides an in-depth study of biography as a research method for exploring educational problems, phenomena, and processes from the perspective of educational agents. It includes the examination of the ideas, achievements, and contributions of educational leaders in relation to the educational needs of Puerto Rican society, approached from a biographical perspective. The course emphasizes critical analysis of related literature and the development of competencies necessary for conducting biographical studies.

# **EDUC 6269 Life Story in Education**

Three credits. Three hours of seminar per week.

Prerequisite: EDUC 6400, EDUC 6513 or its equivalent.

Study of life story as a research design for examining educational themes. Critical analysis of related literature and the development of competencies for life stories research.

#### **EDUC 6330 Seminar in Educational Research**

Three credits. One hour of lecture and two of laboratory work per week.

Prerequisites: EDUC 6400

Workshop in educational research that provides practical experience combined with discussions on the planning and development of the various phases of a research project. The course allows students to observe in the field the problems they might encounter during the course of an actual research project: administrative, personnel, interagency relations, among others.

# **EDUC 6340 Theory of Measurement I**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6405

Study of the classical and modern theory that underlies the use and development of measurement instruments in education and psychology.

### **EDUC 6390 Applied Statistics in Education I**

Three credits. Three hours of lecture per week.

This course offers an in-depth exploration of biography as a research method to investigate educational problems, phenomena, and processes from the perspective of educational agents. It focuses on the examination of the ideas, accomplishments, and contributions of educational leaders, particularly in addressing the educational needs of Puerto Rican society, through a biographical lens. The course emphasizes critical analysis of relevant literature, and the development of skills required to conduct biographical research studies.

#### **EDUC 6395 Workshop on Computerized Educational Data Processing**

Three credits. One and a half hours of lecture and three hours of laboratory work per week. Prerequisite: EDUC 6509, EDUC 6390.

The course consists of a workshop divided into three units which include the content, the organization, and the functioning of the programs which compose the statistical package for the social sciences. At the introductory stage of the course there will be a review of the scientific process. Reference will also be made to levels of measurement, appropriate statistical techniques and procedures, conceptualization of a research problem data gathering process, and data coding procedures. The course will be developed in two consecutive semesters. The first semester will include unit one (the content) and unit two (the organization). Unit three (the functioning of the programs), will be covered during the second semester.

## **EDUC 6400 Research Designs**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6509, EDUC 6390.

This course focuses on the study, analysis, and development of research designs in education. It includes discussions on the strengths and challenges of various designs, as well as issues related to reliability, validity, and credibility. Students will analyze research that illustrates different designs. The course is offered in face-to-face, hybrid, and online modalities.

#### **EDUC 6415 Action Research in Educational Contexts**

Three credits. Three hours of discussion per week.

This course involves the study of the epistemological, axiological, and theoretical foundations of action research, alongside its methods and techniques. Emphasis is placed on the connection between research and action to enhance teaching-learning processes and address problems within educational contexts. The course includes practical experience in planning, implementing, and disseminating action research. It is offered in face-to-face, hybrid, and online modalities

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course examines the nature, scope, and methods of educational research, including both qualitative and quantitative techniques, and the use of computerized technology. Emphasis is placed on planning, conducting, and evaluating various types of research. The course is offered in face-to-face, online, and hybrid formats.

#### **EDUC 6513 Seminary: Qualitative Research in Education**

Three credits. Three hours of conference per week.

Prerequisites: EDUC 6509 or equivalent.

Critical analysis of theoretical basis, models and contributions of qualitative research to the study and comprehension of educational problems. study of the paradigms and epistemological assumptions that underline the qualitative research approaches and methodologies used. Development of competencies in research proposal writing and conducting research. Faceto-face hybrid and online course.

## **EDUC 6515 Field Experience in Educational Research and Evaluation**

Three credits. Six hours of laboratory work per week.

Prerequisite: EDUC 6400 and authorization from the professor.

This course provides field experience in the various steps involved in the research or evaluation process. Students are required to accumulate a minimum of 90 hours in supervised practice. Experience can be gained by participating in an accredited research center, collaborating on research projects led by faculty members, or conducting evaluations in community programs or agencies. This course may be taken up to two times for a total of six credits.

# **EDUC 6586 Evaluation Theory and Methodology**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6509 and 6390.

This course focuses on the study of evaluation as a specialized form of research. It includes a critical analysis of the main theoretical models, examining their epistemological foundations, value judgments, and methodologies. Students will develop basic skills for planning and conducting evaluations in educational contexts.

#### **EDUC 6596 Classroom Evaluation**

Three credits. Three hours of lecture per week.

Study of the theory and methodology of evaluation of student learning. Emphasis on the development, adaptation, and use of techniques and instruments. Data analysis and interpretation to evaluate student achievement.

## **EDUC 6597 Construction of Measurement Instruments**

Three credits. One hour of lecture and two hours of laboratory work.

Prerequisite: EDUC 6390

This course covers the basic theory and systematic methods for constructing various types of measurement instruments. It includes practical experience in the development of these instruments, allowing students to apply theoretical knowledge to real-world scenarios.

# EDUC 8001 Multivariate Analysis in Educational Research I

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6405

This course focuses on the theory and application of various techniques for educational research analysis, including multiple regression and correlation, multivariate analysis of variance, univariate and multivariate analysis of covariance, and logistic regression. Emphasis is placed on using computerized statistical programs to perform these analyses effectively.

## **EDUC 8002 Multivariate Analysis in Educational Research II**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8001

This course covers the theory and application of advanced educational research analysis techniques, including discriminant analysis, factor analysis, canonical analysis, causal models, and multidimensional scaling. Students will focus on using computerized statistical programs to conduct these analyses, enhancing their research capabilities.

# **EDUC 8018 Correlational and Causal Comparative Research**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6509, 6390.

This course focuses on the study and development of non-experimental quantitative research in education, specifically correlational and causal-comparative research, both cross-sectional and longitudinal. Emphasis is placed on understanding the essential characteristics and methods of these research types. The course includes practical experiences, the use of technology, and report writing. It will be offered in face-to-face, hybrid, distance, and online modalities.

# **EDUC 8020 Experimental Research in Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6405

Theory and practice in the design, analysis and interpretation of experimental and quasi-experimental research. Critical review of substantive and methodological issues in planning and conducting experimental research in educational settings.

### **EDUC 8030 Evaluation of Educational Programs and Systems**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6509 and EDUC 6390 or an equivalent.

The study of procedures utilized to evaluate educational programs. This course is offered in face-to-face, hybrid, and online modalities.

#### **EDUC 8068 Non-Parametric Statistics in Educational Research**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6390 statistics to apply in education.

This course focuses on the statistical tests utilized when the dependent variables in educational research are categorical (nominal or ordinal) and the data is distribution-free. The course covers tests dealing with one, two, or more dependent and independent samples. Students are required to engage in practical experiences using computers to apply these statistical methods.

#### **EDUC 8076 Survey Research**

Three credits. Three hours' discussion per week. Prerequisites: EDUC 6509 and EDUC 6390.

This course focuses on the study and development of survey research in education, incorporating various methods such as telephone, electronic, mail, and in-person surveys. Emphasis is placed on designing samples that accurately represent populations, as well as on the instruments and procedures for data gathering and analysis. The course includes practical experiences, the use of technology, and report writing to enhance students' understanding of effective survey research methodologies.

## **EDUC 8088 Mixed Methods Research**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6400, EDUC 6513.

This course involves the analysis and design of research that incorporates both quantitative and qualitative aspects. It begins with an epistemological analysis of mixed methods research. Special emphasis will be placed on conceptualizing research problems and designing effective studies. Students will analyze various research projects to illustrate different mixed methods designs, identifying their strengths and challenges. The course aims to equip students with the skills necessary to effectively conduct and evaluate mixed methods research in educational contexts.

# **EDUC 8266 Ethnographic Research**

Three credits. Three hours of lecture per week.

Prerequisites: One of the following courses: EDUC 6400, 6513.

Consideration of the theories and paradigms that support ethnographic research. Study of the strategies and techniques of ethnographic research as well as managing and analyzing information.

### **EDUC 8267 Models of Qualitative Analysis**

Three credits. Two hours of lecture and one hour of laboratory per week.

Prerequisites: EDUC 6513 or EDUC 8266.

This course focuses on the study and application of qualitative research models, including dramaturgical analysis, grounded theory, and Wolcott's DAI model. Students will engage with computer software designed for qualitative analysis and apply these models to educational research data. The course will be offered in face-to-face, hybrid, and online formats, providing flexibility for diverse learning preferences.

# EDUC 8268 Seminar: Controversial Issues and Ethical Aspects in Qualitative Research

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6400 or EDUC 6513.

In-depth study of the most relevant historical events of the regulations and international codes currently in force that emerged to protect participants in research in general and in qualitative research in particular. Critical analysis of literature and development of competencies to work with controversial aspects and ethics in qualitative research.

## **EDUC 8340 Theory of Measurement II**

Three credits. Three hours' discussion per week.

Prerequisite: EDUC 6340

This course covers the study of item response theory, generalizability theory, and other models for analyzing test results. Emphasis is placed on the application of these theories in the development of measurement instruments and the interpretation of assessment results. Students will gain handson experience using computer programs for conducting item and test analyses, enhancing their skills in creating effective evaluation tools in educational contexts.



Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

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**Portal**: http://ege.uprrp.edu/

#### **DEGREE:**

## Master of education in Teaching English as a Second Language

#### **FACULTY:**

**Kevin S. Carroll,** Ph.D., University of Arizona, 2009. Catedrático Asociado. Language planning and policy, translanguaging, bilingual education, and *teaching English to speakers of other languages*.

## **ADMISSION REQUIREMENTS:**

# General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu

#### **Specific Admission Requirements**

- 1. Complete an application for admission, including a statement of purpose written in English.
- 2. Academic index of no less than 3.00 on a scale of 4.00 in high school studies.
- 3. Proficiency of English and Spanish.
- 4. Submit an academic official transcript of a bachelor's degree (or its equivalent).
- 5. Successfully complete 6 credits in courses in linguistics or applied linguistics, or instead have 2 years of experience teaching English.

# **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the courses with a grade of no less than "C".
- 3. Academic index of 3.00 in the courses considered for graduation.
- 4. Complete the requirements within a period of four (4) years for full-time students and five (5) years for part-time students from the starting dates of their studies.
- 5. Successfully complete no less than 24 credits, of the total required, taken at the University of Puerto Rico.

# **PROGRAM OF STUDY:**

Program Requirements	Credits
Component Courses: Professional/Required	12
EING 6565: Advanced Seminar: The Principles of Teaching and Learning English as a Second Language	3
EING 6566: Seminar on Curriculum, Teaching, and Assessment of the Secondary School English Program	3
EING 6420: Advanced Methodology of Teaching Oral English to Speakers of Other Languages	3
EDUC 6509: Research Methods in Education	3
Courses Component: Directed Professional	9
Select two (2) courses from the following:  EING 6570: Bilingual Education: Theory and Practice in Bilingual Education  EING 6575: Methodology of Teaching Grammar and Written Composition in Modern English: Techniques and Materials  EING 6577: Methodology of Teaching Contemporary English-speaking Literature: principles, methods and texts	6
Course in applied linguistics, linguistics, English literature, bilingual education or another about the student's area of research (Chosen with the help of the program coordinator).	3
Elective courses	6
Research Seminar	
EING 6601 TESL Research and Creation Seminar	3
Total credits	30

### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# EING 6565 Advanced Seminar: The Principles of the Teaching and Learning of English as a Second Language

Three credits

This course provides an overview of the historical perspective of teaching English in Puerto Rico, focusing on the theoretical foundations of second language acquisition and pedagogy. Students will critically examine trends and methods in second language instruction, exploring how various theories relate to the practice of teaching in formal contexts. The course includes a discussion and analysis of the current English as a Second Language (ESL) methodologies employed in the public schools of the island, considering the socio-linguistic needs of Puerto Rican students. Additionally,

students will engage in research on pertinent issues related to second language teaching and learning. The course is offered in face-to-face, hybrid, and online formats.

# EING 6566 Seminar in Curriculum, Instruction, and Evaluation in the Secondary School English Program

Three credits. Three hours of lecture per week.

Prerequisite: EDEN 6565

The design and evaluation of a course of studies for the teaching of English in public or private schools like those where the students have taught or are likely to teach. The evaluation of student achievement in terms of the curricular goals of the school district and the individual aims of the members of the experimental class selected. Student practice. face-to-face, hybrid, and online course.

# EING 6420 Advanced Methods for the Teaching of Oral English to Speakers of Other Languages

Three credits. Two hours of lecture and two hours of laboratory work per week.

This course involves intensive readings and discussions on the fundamental principles related to teaching oral English to speakers of other languages. Students will apply these principles to teaching methodologies and material usage across various proficiency levels. The course includes a comparison and contrast of the phonology of American English and Puerto Rican Spanish, enabling students to identify the linguistic challenges faced by Puerto Rican students. A critical reevaluation of current teaching practices will be conducted, with an emphasis on developing productive language use. The course is offered in face-to-face, hybrid, and online formats.

## **EDUC 6509 Research Methods in Education**

Three credits.

Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. emphasis on planning, conducting, and evaluating types of research. Face-to-face online and hybrid course.

# EING 6570 Bilingual Education: Theory and Practice in Bilingual Education

Three credits. Three hours of lecture per week.

This course provides an introduction to bilingualism, bilingual education, and the specific needs of students in bilingual programs. Emphasis is placed on the theories and methods of bilingual and English language development instruction. Students will critically examine ESL and bilingual program models, methods, materials, and assessments. The course includes a study of the historical, legal, and theoretical foundations of bilingual approaches, alongside an analysis of general issues in bilingual education and the political and multicultural perspectives surrounding them. Special attention is given to the linguistic, psychological, sociological, and instructional implications of bilingualism, with a focus on the context of Puerto Rico. Research on relevant issues in bilingual education is a key component of the course. It will be offered in face-to-face, hybrid, and online formats.

# EING 6575 Methods for Teaching Grammar and Composition in Modern English: Techniques and Materials

Three credits. Three hours of lecture per week.

This course involves the examination and discussion of various theoretical orientations in teaching grammar and writing, along with their practical applications in the context of teaching English as a second language (ESL). An overview of linguistic theories and a discussion of schools of thought in second language acquisition and learning will set the foundation for analyzing issues related to teaching grammar and composition. Key topics include form-focused instruction, the reading-writing relationship, the writing process, peer revision, the use of technology in writing instruction and composing, and ESL writing assessment challenges. Students will demonstrate teaching techniques, engage in microteaching experiences, and apply metacognitive skills to enhance writing proficiency. Research on pertinent issues related to teaching grammar and composition is required. This course will be offered in face-to-face, hybrid, and online formats.

# EING 6577 The Methodology of the Teaching of Contemporary English Literature: Principles Methods and Contents

Three credits.

This course focuses on the purpose, content, and strategies of classroom instruction in contemporary English-language literature, including drama, poetry, and fiction. Students will assess the values that emerge from studying representative works by authors such as Arthur Miller, Eugene O'Neill, Tennessee Williams, T.S. Eliot, Robert Frost, Ezra Pound, Ernest Hemingway, John Steinbeck, and Herman Wouk. Attention will be given to developing the skills necessary to understand and appreciate literature. Students will investigate and appraise philosophical principles, teaching practices, new resources, and current experiments related to literary instruction. The course will include regular individual conferences, group discussions, and the completion of a research paper. Active and creative participation is encouraged, allowing students to explore a comprehensive problem of personal interest. This course will be offered in face-to-face, hybrid, and online formats.

## **EING 6601 TESL Seminar for Research and Projects**

Three credits. Two hours of research and one hour of seminar work per week. Prerequisite: Last semester on the study program of the master in TESL.

This course explores the theoretical foundations and research methods utilized in the field of Teaching English as a Second Language (TESL). Students will engage in a comprehensive study of various methodologies and theoretical frameworks that inform TESL practices. As a significant component of the course, students will conduct an independent research study aligned with their interests within the field. The work completed will serve as an exit requirement for the M.Ed. in TESL program and will be equivalent to full-time status for enrolled students. This course will be offered in face-to-face, hybrid, and online formats.

#### OTHER COURSE DESCRIPTION:

# EDUC 6140 Role of the Puerto Rican Cultural and Historical Experience in the Bilingual Bicultural Education

Three credits. Three hours of lecture per week.

This course is designed to provide background, awareness, and sensitivity to the cultural and historical heritage of Puerto Rican children and its significant role in the bilingual and bicultural learning process, as well as curriculum development. Students will explore the relationship between this heritage and the evolving context of schools in transition. Field excursions may be included to enhance experiential learning, and the course will examine the role of ethnic studies in education. This course will be offered in face-to-face, hybrid, and online formats

# EDUC 6516 Linguistics and Teaching of Literacy in English to Spanish-Dominant Children Three credits. Three hours of lecture per week.

This course offers an analysis of the elements of language, focusing on the teaching and learning processes involved in the development of bi(literacy). Students will explore both oral and written expression in English, emphasizing the importance of building on students' cultural and linguistic resources. The course includes a comparative linguistic analysis of Spanish and English to enhance understanding of language structures and usage. This course will be offered in face-to-face, hybrid, and online formats.

# **EDUC 6250 Culture and Racism: The Effect on Bilingual and Bicultural Education Environment**

Three credits. Three hours of lecture per week.

This course analyzes the intricate relationship between culture, language, identity, and racism, exploring their implications for the educational experiences of bilingual and bicultural children, as well as for teacher education. It examines how cognitive styles relate to cultural content and analyzes minority identity and stigmatization in terms of indicators of success and failure in school settings. Additionally, the course addresses the social and psychological adjustments of students to their educational environments. This course will be offered in face-to-face, hybrid, and online formats.



Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Educational Leadership Program Coordinator**: Dr. María de los A. Ortiz

Mailing address: 8 University Ave, Ste 801 San Juan PR 00925-2528 Telephone and

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Portal: <a href="https://ege.uprrp.edu/">https://ege.uprrp.edu/</a>

#### **DEGREE:**

Master of education in Leadership in Educational Organizations. Plan A - 30 credits

#### **FACULTY:**

María de los Ángeles Ortiz Reyes, PhD, New York University, 1982, Professor. Program evaluation and assessment; higher education; strategic leadership; "bullying" school harassment; institutional research; "accountability", institutional effectiveness and accreditation; internationalization of higher education; third mission; "project-based learning" k-12 and academic entrepreneurship.

Alicia Montañez García, EdD, University of Puerto Rico. 2011. Certification in Community Development, Rutgers University, Camden Campus, 2016. Assistant Professor. Leadership and organizational change, Culture in educational organizations, Strategic planning, Developing effective K-12 learning contexts, Leadership and community development, School participation and governance, Professional development for educators, Educational coaching, Servant leadership, Leadership in higher education and exemplary leadership practices in diverse educational settings.

**Juan R. Rodríguez-Rivera, EdD**, University of Puerto Rico. 2011. Assistant Professor. Administrative and didactic structures to achieve efficiency and effectiveness in educational systems; Systemic school change; Strategic planning and organizational development; Effective leadership to promote changes in organizational culture (schools and organizations with educational programs or projects), Impact of the transition between levels.

## **ADMISSION REQUIREMENTS:**

## **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/admisiones-graduadas-enero-2024/

**Specific Admission Requirements** 

- 1. Baccalaureate from an accredited university or its equivalent.
- 2. Minimum academic index of 3.00 points on a scale of 4.00.
- 3. Two letters of recommendation from professors or other professionals who can comment on the applicant's ability to pursue graduate studies.
- 4. Proficiency in Spanish and English.

## **Documents and other Requirements for the Admission Application:**

- 1. Application for Admission to Graduate Studies in electronic format.
- 2. Two (2) letters of recommendation for Graduate Studies in electronic or paper format.
- 3. Two (2) official academic transcripts of a bachelor's degree.

## **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete with a grade of no less than "C".
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

## **Additional requirements**

- 1. Successfully complete core, specialty or elective courses with a minimum of C.
- 2. Academic index of no less than 3.00 in the courses considered for graduation.
- 3. Comply with all the aforementioned requirements within a period of six (6) years from the date they begin their graduate studies. For these purposes, it is very important that the student prepare a study plan with their academic advisor. Note: Students may enroll for up to 6 EDUC credits. 6995- Independent study to comply with the requirement for specialty electives or free electives (requires authorization from the professor and the Department Director, refer to the specialized study policy and the independent study policy).

#### STUDY PROGRAM: Plan A

Program Requirements	Credits
Core courses	24
EDUC 6626: Philosophical and Theoretical Foundations of Organizational Leadership	3
EDUC 6521: Administrative Leadership in Education	3
EDUC 6522: Didactic Leadership in Educational Administration	3
EDUC 6665: Strategic Leadership in Educational Organizations	3
EDUC 6509: Research Methods in Education	3
EDUC 6598: Community and Political Leadership in Educational Organizations	3
EDUC 6670: Educational Leadership Internship - Part I	3

EDUC 6210: Educational Leadership Internship - Part II	3
Free elective courses	6
Total Credits	30

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **EDUC 6626 Philosophical and Theoretical Foundations of Organizational Leadership** Three credits. Three hours of lecture per week.

This course focuses on the study and integration of interdisciplinary philosophical frameworks to analyze educational organizations, their structures, and socio-cultural contexts. Through a combination of study and discussion, students will explore various administrative, organizational, and leadership theories to understand and transform educational institutions. Emphasis will be placed on critical analysis and application of these frameworks to real-world educational settings. This course will be offered in face-to-face, hybrid, and online formats.

# **EDUC 6521 Administrative Leadership in Educational Organization**

Three credits. Three hours of lecture per week.

This course examines theories, processes, and principles related to administrative leadership in educational settings. Students will develop the knowledge, skills, and dispositions necessary to understand and improve organizational structures, implement operational plans, manage budgets, and apply decentralized administrative processes and procedures in alignment with the institutional vision. The course includes an analysis of recent research and its implications for the field of educational administrative leadership. This course will be offered in face-to-face, hybrid, and online formats.

## **EDUC 6522 Instructional leadership in Educational Administration**

Three credits. Three hours of lecture per week.

Prerequisites: Admission to graduate program.

This course explores the nature and roles of instructional leadership within the context of educational administration. Emphasis is placed on the study of research, controversies, and ethical and legal considerations related to instructional leadership. Students will critically analyze various perspectives on instructional leadership and its impact on teaching and learning processes. This course will be offered in face-to-face, hybrid, and online formats.

## **EDUC 6665 Strategic Leadership in Educational Organizations**

Three credits. Three hours of lectures per week.



This course examines the theories, concepts, processes, and principles related to strategic leadership in educational settings. It focuses on developing the knowledge, skills, and attributes necessary to identify various contexts, articulate and collectively implement the vision and goals of an organization, analyze information, define problems, and exercise leadership ethically to achieve shared objectives within educational communities. This course will be offered in face-to-face, hybrid, and online formats.

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course provides an in-depth study of the nature, scope, methods, and techniques—both qualitative and quantitative—of educational research. It emphasizes the use of computerized technology in planning, conducting, and evaluating various types of research. Students will learn to critically analyze research methodologies, develop research proposals, and evaluate existing studies to enhance their understanding of effective research practices in education. This course will be offered in face-to-face, hybrid, and online formats.

## EDUC 6598 Community and Political Leadership in Educational Organizations

Three credits. One hour for lecture, one hour for discussion and one hour of investigation.

Prerequisite: EDUC 6521

This course explores models of community development and public relations applicable to educational organizations and community education. It includes an analysis of community leadership and emerging paradigms that facilitate effective community relationships as a fundamental element for achieving educational goals and objectives. Students will evaluate legal provisions, standard rules and regulations, related policies, and the relationship between public policy and community well-being. This course will be offered in face-to-face, hybrid, and online formats and is effective from January 2021.

## EDUC 6670 Internship in Educational Leadership - Part I

Three credits.

Prerequisites: EDUC 6521, 6522, 6665, 6598 and EDUC 6509.

This course examines educational practices relevant to elementary, secondary, and special education schools. It focuses on developing the competencies and dispositions necessary to manage operations and resources effectively within educational organizations to foster a conducive learning environment. The course emphasizes research and creation to analyze the educational context and formulate an action plan addressing identified needs. Additionally, students will participate in a minimum of 15 hours of field experience to apply their learning in real-world educational settings.

# **EDUC 6210 Internship in Educational Leadership: Part II**

Three credits. One hundred fifty hours of field experience. Prerequisites: Successfully approved 21 credits on the major.

This course offers students significant opportunities to engage in a professional setting where they can demonstrate their academic learning by applying knowledge and building capacity. Students will practice and develop essential skills related to strategic, educational, administrative, community, ethical, and political leadership. A minimum of 150 hours of field experience is required, alongside participation in weekly seminars coordinated by the professor throughout the semester. This integration of theory and practice aims to prepare students for effective leadership roles in educational contexts.

#### OTHER COURSE DESCRIPTIONS:

## **EDUC 6005 Management in Educational Leadership**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the director of the graduate program.

This course provides a comprehensive study and critical analysis of the fundamental principles of management within school administration. Students will explore the foundational concepts of school management, focusing on key areas such as accounting, fiscal matters, and the financing of educational institutions. Additionally, the course will cover data processing, operational control, and techniques for management development and training. Through this course, students will gain practical insights and skills necessary for effective leadership and management in educational settings.

# EDUC 6006 Methods and Techniques of School Supervision.

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6521 - 6522.

This course involves the study and critical analysis of methods and techniques in school supervision, with an emphasis on the origin, development, implementation, and effectiveness of various models and strategies for classroom supervision. Students will engage in the observation of classes that they plan, direct, and supervise, as well as participate in laboratory techniques and simulation activities such as microteaching and micro supervision. This hands-on approach will enable students to develop essential supervisory skills and strategies for effective classroom management and instructional leadership.

## **EDUC 6527 Current Trends and Practices in Administrative Leadership**

Three credits. Three hours of lecture per week.

Selection and extensive discussion of pertinent problems and issues relating to school administration, emphasizing modern tendencies and practices based on principles derived from recent research and experience.

## **EDUC 6556 Seminar of Controversies in Educational Leadership**

Three to six credits. Six hours of lecture per week.

Prerequisite: EDUC 6521 - 6522.

This course focuses on the study and analysis of the social issues and challenges faced by school administrators and their impact on the instructional program. Students will explore various strategies for addressing these problems, engaging in discussions and analyses of potential solutions. The course will incorporate clinical experiences and case studies, allowing students to apply theoretical knowledge to real-world scenarios in educational settings. Through this approach, students will develop critical thinking and problem-solving skills essential for effective school leadership.

## EDUC 6598 Community and Political Leadership in Educational Organizations

Three credits. One hour for lecture, one hour for discussion and one hour of investigation per week.

Prerequisite: EDUC 6521

This course examines models for community development and public relations applicable to educational organizations and community education. Students will analyze community leadership and explore emerging paradigms that facilitate effective community relationships, which are essential for achieving educational goals and objectives. The course includes an evaluation of legal provisions, standards, regulations, and policies that affect educational institutions, as well as the relationship between public policy and community well-being. Offered in face-to-face, hybrid, and online formats, this course is effective from January 2021.

# **EDUC 6618 Educational Leadership in Vocational Education**

Three credits. Three hours of lecture per week.

Study and analysis of theory and practice in vocational educational leadership. Study of specific problems faced by the vocational administrator in technical and vocational schools.

#### **EDUC 6669 Organizational Culture in Educational Institutions**

Three credits. Three hours of lecture per week.

Analysis of the implications of organizational culture for leadership, decision making and the process of change in educational institutions. analysis of recent research and their implications for the development of the organizational culture in educational institutions. This course will be offered in face-to-face, and in hybrid format.

## **EDUC 6999 Field Experience in Educational Leadership**

Two to four credits. Two-four hours of lecture or laboratory work per week.

Prerequisites: Authorization from the professor.

The student will work independently, with the assistance of a professor, on a project or research related to one of the dimensions of educational leadership.

## **EDUC 8016 Organizational and Administrative Theories in Education**

Three credits. Three hours of lecture per week.

Study and analysis of the most recent administrative theories and their application to the school setting considering the sociocultural and special characteristics present in the milieu under study.

# **EDUC 8026 Leadership in Educational Administration and Supervision**

Three credits. Three hours of lecture per week.

Study of the principles and theories of leadership and their application to supervision at the different school levels. Leadership in educational institutions.

# **EDUC 8027 Contemporary Practices in Didactic Leadership**

Three credits. Three hours of lecture per week.

Study and analysis of contemporary practices in didactic leadership. Analysis of leader competencies to enhance academic programs.

# **EDUC 8047 Strategic Planning in Educational Organizations**

Three credits. Three hours of lecture per week.

This course explores the concepts, processes, practices, and techniques of strategic planning in educational organizations. It analyzes the philosophy, structure, and processes that form the foundation for developing the vision, mission, goals, and objectives essential for guiding and transforming educational systems across diverse contexts.

## **EDUC 8115 Internship in Educational Leadership**

Six credits. Three hours of lecture and nine hours of laboratory work per week.

Prerequisite: Acceptance as a certified doctoral candidate.

Field experience for students specializing in educational administration. Students will have the opportunity to demonstrate competencies appropriate to an educational administrator by integrating and applying the theoretical knowledge and skills previously learned. The role of students in this course will be that of leaders and agents of change in an educational setting. A seminar will be an integral part of the internship.

## **EDUC 8116 Educational Administration as a Philosophy in Praxis**

Three credits. Two hours of lecture and one hour of discussion per week.

Philosophical bases of educational administration and leadership.

This course examines educational administration and leadership as both a philosophy in practice and a science. It involves research into the contributions of historical philosophical approaches to the development of contemporary educational administration and leadership. Students will analyze administrative and leadership practices within the Puerto Rican educational context through various philosophical lenses, viewing educational administration and leadership as an ethical project.

#### **EDUC 8070 Human Resources Development in Educational Organizations**

Three credits.



Three hours of lecture per week.

This course explores the conceptual, ethical, normative, and empirical frameworks involved in the recruitment, selection, development, and evaluation of human resources capable of transforming educational organizations and fostering a culture of peace. It includes an analysis of the integration of technology in these processes. A minimum of fifteen hours of field experience is required.

# EDUC 8129 Institutional Evaluation, Assessment and Accountability in the Administration of Educational Systems.

Three credits. Three hours of lecture per week.

This course examines the theoretical perspectives and administrative practices for conducting institutional assessments of learning as an integral process. It includes an analysis of various theoretical frameworks and formal models for institutional evaluation. The course emphasizes the use of innovative methodologies to develop indicators of institutional competitiveness and social responsibility within educational systems. A minimum of fifteen hours of field experience is required.



Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

Associate Director of Academic Affairs: Dr. Juan C. Vadi-Fantauzzi Educational Leadership Program Coordinator: Dr. María de los A. Ortiz Mailing address: 8 University Ave, Ste 801 San Juan PR 00925-2528

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89253

Website: https://ege.uprrp.edu/

#### **DEGREE:**

**Doctor of Education in Leadership in Educational Organizations Plan B (69 credits)** 

#### **FACULTY:**

María de los Ángeles Ortiz Reyes, PhD, New York University, 1982, Professor. Program evaluation and assessment; higher education; strategic leadership; "bullying" school harassment; institutional research; "accountability", institutional effectiveness and accreditation; internationalization of higher education; third mission; "project-based learning" k-12 and academic entrepreneurship.

Alicia Montañez García, EdD, University of Puerto Rico. 2011. Certification in Community Development, Rutgers University, Camden Campus, 2016. Assistant Professor. Leadership and organizational change, Culture in educational organizations, Strategic planning, Developing effective K-12 learning contexts, Leadership and community development, School participation and governance, Professional development for educators, Educational coaching, Servant leadership, Leadership in higher education and exemplary leadership practices in diverse educational settings.

**Juan R. Rodríguez-Rivera, EdD**, University of Puerto Rico. 2011. Assistant Professor. Administrative and didactic structures to achieve efficiency and effectiveness in educational systems; Systemic school change; Strategic planning and organizational development; Effective leadership to promote changes in organizational culture (schools and organizations with educational programs or projects), Impact of the transition between levels.

## **ADMISSION REQUIREMENTS:**

**General Requirements of the Río Piedras Campus** 

https://graduados.uprrp.edu/

**Specific Admission Requirements** 

- 1. Master's degree with a concentration in Leadership in Educational Organizations or Educational Administration and Supervision or master's degree and successfully complete the following courses:
  - a. A course in research methods
  - b. A statistics course
  - c. A course related to Philosophical or Sociological Foundations of Education at the undergraduate or master's level.
- 2. Successful completion of specialized graduate courses with an index of no less than 3.50 or higher on a scale of 4.00.
- 3. Proficiency in Spanish and English.
- 4. Critical analysis capacity.

## **Documents and other Requirements for the Admission Application:**

- 1. Application for Admission to Graduate Studies in electronic format through the "ApplyYourself" platform.
- 2. Two (2) letters of recommendation for Graduate Studies in electronic or paper format.
- 3. Two (2) official academic transcripts of Baccalaureate and master's credits 4.
- 4. Interview with a faculty member from the area.

# **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the courses with a grade of no less than "C".
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

## STUDY PROGRAM: Plan B - Master's Degree - Doctorate (69 credits)

Program Requirements	Credits
Master's level course area	18
EDUC 6626: Philosophical and theoretical foundations of organizational leadership	3
EDUC 6521: Administrative Leadership in Education	3
EDUC 6521: Administrative Leadership in Education	3
EDUC 6665: Strategic Leadership in Educational Organizations	3
EDUC 6598: Community and political leadership in educational organizations	3
EDUC 6670: Administrative Leadership Practices in Elementary, Secondary, and Special Education Schools	3
Qualifying exam	0
EDUC 6905- Doctoral Qualifying Exam	
General professional area	18
Advanced courses in the philosophical, social, psychological and legal foundations of education	9

Courses in Research, Statistics and Evaluation	
EDUC 6400: Research Designs, One qualitative and one quantitative	9
research course	
Specialized professional area	24
Core Courses of the Specialty	18
EDUC 8116: Educational administration as philosophy in praxis	
EDUC 8016: Organizational and administrative theories of education	3
EDUC 8070: Development of human resources in educational administration	3
EDUC 6524: Financing and administration of fiscal resources in educational organizations	3
EDUC 8047: Strategic planning in educational organizations	3
EDUC 8129: Institutional evaluation, assessment, and accountability in the administration of educational systems	3
Specialty electives	6
Free electives	6
EDUC 8900 Candidacy Exam	0
Dissertation	
EDUC 8981 Doctoral Dissertation	3
EDUC 8982 Continuation Doctoral Dissertation	0
Total Credits	69

#### **AGREEMENTS:**

- 1. The Leadership in Educational Organizations Program Faculty agreed that any 6000-level course in the specialty area that is not a core course and not taken at the master's level may be taken at the doctoral level as a specialty elective.
- 2. The required courses were selected to ensure that students gain knowledge in various areas such as statistical analysis, evaluation, instrument development, and qualitative research. If a student has already taken one of the required courses for the second specialty at INEVA as part of the nine (9) credits required in the LOE Program to fulfill the research component, they must select a replacement course. This replacement course should be chosen from the "List of Courses to Fulfill the 9 Credits of the Research Component for Students Admitted as of August 2019," in consultation with their academic advisor.
- 3. Starting January 2008, the Faculty of the Leadership in Educational Organizations Program will authorize as free electives only the 8000-level courses or those 6000-level courses approved for both levels and included in the following lists.
- 4. Students who do not have administrative experience occupying a leadership position in an educational organization must successfully complete the doctoral internship course of 6 credits.
- 5. Those students who have held a leadership position in the past five years may submit a portfolio with evidence to be evaluated by their academic advisor using a rubric designed for this purpose. If your experience is validated, you will not have to pass the Internship

- and you will be able to enroll in 6 credits in specialty electives among those presented in the document called Options to fulfill the six (6) elective credits in the specialty and the six (6) credits in free electives, in consultation with your academic advisor.
- 6. Students may enroll in up to 6 EDUC credits. 8995- Specialized study or EDUC. 6995- Independent study to comply with the requirement for specialty electives or free electives (requires authorization from the professor and the Department Chair- refer to the specialized study policy and the independent study policy).

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# EDUC 6626 Philosophical and Theoretical foundations of organizational leadership

Three credits. Three hours of lecture per week.

Study and integration of interdisciplinary philosophical frameworks to the analysis of educational organizations, their structure, and socio-cultural context. Study and discussion of diverse administrative organizational and leadership to understand and transform educational organizations.

# **EDUC 6521 Administrative Leadership in Educational Organization**

Three credits. Three hours of lecture per week.

This course involves the study of theories, processes, and principles related to administrative leadership in education. It focuses on the development of knowledge, skills, and dispositions necessary to understand and improve organizational structures, implement operational plans, manage budgets, and apply decentralized administrative processes to achieve institutional goals. The course also includes an analysis of recent research and its implications for administrative leadership in education.

## EDUC 6522 instructional leadership in educational administration

Three credits. Three hours of lecture per week.

Prerequisites: Admission to graduate program.

Study of the nature and roles of instructional leadership in educational administration. Emphasis on the study of research, controversies, and ethical and legal considerations on instructional leadership.

## **EDUC 6665 Strategic Leadership in Educational Organizations**

Three credits. Three hours of lectures per week.

This course covers the study of theories, concepts, processes, and principles related to strategic leadership in education. It focuses on developing the knowledge, skills, and attributes needed to identify contexts, collectively articulate and implement the vision and purposes of an organization,

analyze information, define problems, and exercise leadership to achieve shared goals. Emphasis is placed on acting ethically within educational communities.

## EDUC 6598 Community and Political Leadership in Educational Organizations

Three credits. One hour for lecture, one hour for discussion and one hour for investigation.

Prerequisite: EDUC 6521

This course explores models for community development and public relations within educational organizations and community education. It includes an analysis of community leadership and emerging paradigms to establish effective community relationships as key to achieving educational goals and objectives. The course also evaluates legal provisions, standard rules, regulations, related policies, and the relationship between public policy and community well-being. Offered in face-to-face, hybrid, and online formats. Effective January 2021.

## EDUC 6670 Internship in Educational Leadership - Part I

Three credits.

Prerequisites: EDUC 6521, 6522, 6665, 6598 and EDUC 6509.

This course examines educational practices in elementary, secondary, and special education schools. It focuses on developing competencies and dispositions needed to manage operations and resources in educational organizations to foster an effective learning environment. Emphasis is placed on research and the creation of an analysis of the educational context, culminating in the preparation of an action plan to address identified needs. The course includes a minimum of 15 hours of field experience.

#### **EDUC 6905 Qualifying Doctoral Exam**

Zero credits.

Prerequisites: EDUC 6517, EDUC 6509, six credits in the minor.

Students must complete three credits in foundational education courses and three credits in the area of emphasis. Approval of the qualifying exam is required to continue in the uninterrupted Bachelor's to Doctoral Program (Plan B) in Curriculum and Teaching. This accelerated program is designed for graduate students who hold only a bachelor's degree and are pursuing a doctoral degree. The qualifying exam assesses competency in curriculum, the sub-specialty, educational foundations, research methods, and the area of emphasis.

#### **EDUC 8116 Educational Administration as a Philosophy in Praxis**

Three credits. Two hours of lecture and one hour of discussion per week.

This course explores the philosophical foundations of educational administration and leadership, examining them as both a philosophy in practice and a science. It includes research on the contributions of historical philosophical approaches to the development of contemporary educational administration and leadership. The course also analyzes administrative and leadership practices in Puerto Rico's educational context through various philosophical lenses, emphasizing educational administration and leadership as an ethical endeavor..

## **EDUC 8016 Organizational and Administrative Theories in Education**

Three credits. Three hours of lecture per week.

Study and analysis of the most recent administrative theories and their application to the school setting considering the sociocultural and special characteristics present in the milieu under study.

## **EDUC 8070 Human Resources Development in Educational Organizations**

Three credits. Three hours of lecture per week.

Study of conceptual, ethical normative, and empirical frameworks in the processes of recruitment, selection, development and evaluation of human resources capable of transforming educational organizations and promoting a culture of peace. Analysis of the integration of technology in those processes, a minimum of fifteen hours of field experience is required.

# **EDUC 6524 Financing and Administration of Fiscal Resources in Educational Organizations**

Three credits. Three hours of seminar per week.

Study of general aspects related to the financing and administration of fiscal resources in educational organizations. Emphasis in the development of entrepreneurial competencies and skills for the administration of finances and the budgeting process. Analysis of the organizational budget according to its mission, goals and objectives. Development of the operational budget using Technology.

## **EDUC 8047 Strategic Planning in Educational Organizations**

Three credits. Three hours of lecture per week.

Study of the concepts, processes, practices and techniques of strategic planning in educational organizations. Analysis of the philosophy, structure and processes, elements that establish the basis for developing the vision, mission, goals and objectives that provide direction and transform educational systems through the study of diverse contexts.

# EDUC 8129 Institutional Evaluation, Assessment and Accountability in the Administration of Educational Systems.

Three credits. Three hours of lecture per week.

This course examines theoretical perspectives and administrative practices for conducting institutional assessments of learning as an integrated process. It involves the analysis of various theoretical frameworks and formal models for institutional assessment and evaluation. The course emphasizes the use of innovative methodologies to develop indicators of institutional competitiveness and social responsibility in educational systems. A minimum of 15 hours of field experience is required.

#### OTHER COURSE DESCRIPTIONS:

## **EDUC 6005 Management in Educational Leadership**

Three credits. Three hours of lecture per week



Prerequisite: Authorization from the director of the graduate program.

This course provides a study and critical analysis of the basic principles of management within school administration. It covers the application of foundational concepts in areas such as accounting, fiscal management, educational institution financing, data processing, operational control, and management development and training techniques.

## EDUC 6006 Methods and Techniques of School Supervision.

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6521 y 6522.

This course involves the study and critical analysis of school supervision methods and techniques, with emphasis on the origin, development, implementation, and effectiveness of classroom supervision models and strategies. It includes observation of classes planned, directed, and supervised by students, as well as laboratory techniques and simulation activities like microteaching and microsupervision.

## EDUC 6210 Internship in Educational Leadership: Part II

Three credits. 150 hours of field experience.

Prerequisites: Successfully completed 21 credits on the major.

Professional experience that provides students with significant opportunities in a working scenario to demonstrate their academic work by applying knowledge and building capacity; and practicing and developing skills related to strategic, educational, administrative, community, ethical and political leadership. A total of 150 hours of field experience are required and participation in weekly seminars during the semester, as coordinated by the professor in charge.

#### **EDUC 6509 Research Methods in Education**

Three credits.

This course explores the nature, scope, and methods of educational research, covering both qualitative and quantitative techniques. It emphasizes the planning, conducting, and evaluation of various types of research, along with the use of computerized technology. The course is offered in face-to-face, online, and hybrid formats.

## **EDUC 6527 Current Trends and Practices in Administrative Leadership**

Three credits. Three hours of lecture per week.

Selection and extensive discussion of pertinent problems and issues relating to school administration, emphasizing modern tendencies and practices based on principles derived from recent research and experience.

## **EDUC 6556 Seminar of Controversies in Educational Leadership**

Three to six credits. Six hours of lecture per week.

Prerequisite: EDUC 6521 y 6522.

Study and analysis of the social situation (problems) that the school administrators faced and their impact on the instructional program. Strategies for the solution of those problems will be discussed and analyzed. The course will include clinical experiences and case studies.

# EDUC 6598 Community and Political Leadership in Educational Organizations

Three credits. One hour for lecture, one hour for discussion and one hour of investigation.

Prerequisite: EDUC 6521

This course examines models for community development and public relations as applied to educational organizations and community education. It includes an analysis of community leadership and emerging paradigms in building effective community relationships as a key element in achieving educational goals. The course also evaluates legal provisions, policies, and regulations, and explores the relationship between public policy and community well-being. Available in face-to-face, hybrid, and online formats. Effective January 2021.

#### **EDUC 6618 Educational leadership in vocational education**

Three credits. Three hours of lecture per week.

Study and analysis of theory and practice in vocational educational leadership. Study of specific problems faced by the vocational administrator in technical and vocational schools.

# **EDUC 6669 Organizational Culture in Educational Institutions**

Three credits. Three hours of lecture per week.

Analysis of the implications of organizational culture for leadership, decision making and the process of change in educational institutions. analysis of recent research and their implications for the development of the organizational culture in educational institutions. Face to face hybrid and online course.

## **EDUC 6999 Field Experience in Educational Leadership**

Two to four credits. Two-four hours of lecture or laboratory work per week.

Prerequisites: Authorization from the professor.

The student will independently conduct a project or research related to one of the dimensions of educational leadership, with guidance from a professor.

## **EDUC 8016 Organizational and Administrative Theories in Education**

Three credits. Three hours of lecture per week.

Study and analysis of the most recent administrative theories and their application to the school setting considering the sociocultural and special characteristics present in the milieu under study.

## **EDUC 8026 Leadership in Educational Administration and Supervision**

Three credits. Three hours of lecture per week.

Study of the principles and theories of leadership and their application to supervision at different school levels. Leadership in educational institutions.

## **EDUC 8027 Contemporary Practices in Didactic Leadership**

Three credits. Three hours of lecture per week.

Study and analysis of contemporary practices in didactic leadership. Analysis of leader competencies to enhance academic programs.

## **EDUC 8115 Internship in Educational Leadership**

Six credits. Three hours of lecture and nine of laboratory work per week.

Prerequisite: Acceptance as a certified doctoral candidate.

Field experience for students specializing in educational administration. Students will have the opportunity to demonstrate competencies appropriate to an educational administrator by integrating and applying the theoretical knowledge and skills previously learned. The role of students in this course will be that of leaders and agents of change in an educational setting. A seminar will be an integral part of the internship.

## **EDUC 8900 Candidacy Examination**

No Credits.

The doctoral exam is a requirement for graduate students and is considered full-time for those taking it.

#### **EDUC 8981 Doctoral Dissertation**

Six credits.

Prerequisites: Successfully complete the doctoral degree exam.

Students must provide a certificate of completion for the Information Competences Workshop granted by the Gerardo Selles Sola Library. They must also present evidence of completing the online module on Responsible Conduct in Research through the CITI Program, in accordance with the requirements of Certification 029 of 2012-2013 from the UPR-RP Administrative Board. Additionally, the course will focus on the preparation of the doctoral dissertation, emphasizing both the proposal development and the general procedures for writing a doctoral dissertation.

#### **EDUC 8982 Continuation of Doctoral Dissertation**

Credits: 0This cours can be repeated three times.

Prerequisite: All prerequisite courses required for the degree in the specialty must be completed before enrolling in this course.

Continuation of doctoral dissertation giving emphasis to the implantation of the research study and to the preparation of the dissertation.



Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

**Associate Director of Academic Affairs**: Dr. Juan C. Vadi-Fantauzzi **Educational Leadership Program Coordinator**: Dr. María de los A. Ortiz

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Website: https://ege.uprrp.edu/

#### **DEGREE:**

Doctor of Education with a specialty in Leadership in Educational Organizations Plan C – Doctorate (51 credits)

#### **FACULTY:**

María de los Ángeles Ortiz Reyes, PhD, New York University, 1982, Professor. Program evaluation and assessment; higher education; strategic leadership; "bullying" school harassment; institutional research; "accountability", institutional effectiveness and accreditation; internationalization of higher education; third mission; "project-based learning" k-12 and academic entrepreneurship.

Alicia Montañez García, EdD, University of Puerto Rico. 2011. Certification in Community Development, Rutgers University, Camden Campus, 2016. Assistant Professor. Leadership and organizational change, Culture in educational organizations, Strategic planning, Developing effective K-12 learning contexts, Leadership and community development, School participation and governance, Professional development for educators, Educational coaching, Servant leadership, Leadership in higher education and exemplary leadership practices in diverse educational settings.

**Juan R. Rodríguez-Rivera, EdD**, University of Puerto Rico. 2011. Assistant Professor. Administrative and didactic structures to achieve efficiency and effectiveness in educational systems; Systemic school change; Strategic planning and organizational development; Effective leadership to promote changes in organizational culture (schools and organizations with educational programs or projects), Impact of the transition between levels.

## **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Admission Requirements**

- 1. Master's degree with a concentration in Leadership in Educational Organizations or Educational Administration and Supervision, or a master's degree and successfully completed the following courses: a) a course in research methods; b) a statistics course; c) a course related to Philosophical or Sociological Foundations of Education at the undergraduate or mter's level.
- 2. Successfully passed the specialized graduate courses with an index of no less than 3.50 or higher on a scale of 4.00.
- 3. Proficiency in Spanish and English.
- 4. Critical analysis capacity.

# **Documents and other Requirements for the Admission Application**

- 1. Application for Admission to Graduate Studies.
- 2. Two (2) letters of recommendation for Graduate Studies in electronic or paper format.
- 3. Two (2) official academic transcripts of Baccalaureate and master's credits.
- 4. Interview with faculty from the area.

## **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete the courses with a grade of no less than "C".
- 3. Academic index of no less than 3.00 in the courses considered for graduation.

## **STUDY PROGRAM** Plan C – Doctorate (51 credits).

Program Requirements	Credits
General Professional Area	18
Courses in Fundamentals of Education	9
Courses in Research, Statistics and Evaluation	9
Specialized professional area	24
Core Courses of the Specialty	18
EDUC 8116: Educational administration as philosophy in praxis	3
EDUC 8016: Organizational and administrative theories of education	3
EDUC 8070: Development of human resources in educational administration	3
EDUC 6524: Financing and administration of fiscal resources in educational organizations	3
EDUC 8047: Strategic planning in educational organizations	3
EDUC 8129: Institutional evaluation, assessment, and accountability in the administration of educational systems	3

Elective courses in specialty area	6
Free electives	6
EDUC 8900 Candidacy Exam Dissertation EDUC 8981 Doctoral Dissertation EDUC 8982 Continuation Doctoral Dissertation	0 3 0
Total credits	51

#### **AGREEMENTS:**

- 1. The Leadership in Educational Organizations Program Faculty agreed that any 6000-level course in the specialty area that is not a core course and not taken at the master's level may be taken at the doctoral level as a specialty elective.
- 2. The required courses were selected so that the student obtains knowledge of various areas: statistical analysis, evaluation, instrument development and qualitative research. If a student took one of the courses required to obtain the second specialty at INEVA as part of the nine (9) credits required in the LOE Program to complete the research component, the student must select another course to replace it. among those presented in the document called List of courses to fulfill the 9 credits of the Research component for students admitted as of August 2019, in consultation with their academic advisor.
- 3. Starting January 2008, the Faculty of the Leadership in Educational Organizations Program will authorize as free electives only the 8000 level courses or those 6000 level courses that have been approved for both levels and that are included in the lists presented to continuation.
- 4. Students who do not have administrative experience occupying a leadership position in an educational organization must successfully complete the doctoral internship course, which is worth 6 credits.
- 5. Those students who have held a leadership position in the past five years may submit a portfolio with evidence to be evaluated by their academic advisor using a rubric designed for this purpose. If your experience is validated, you will not have to complete the Internship and you will be able to enroll in 6 credits in specialty electives among those presented in the document called Options to fulfill the six (6) elective credits in the specialty and the six (6) credits in free electives, in consultation with your academic advisor.
- 6. Students may enroll in up to 6 EDUC credits. 8995- Specialized study or EDUC. 6995- Independent study to comply with the requirement for specialty electives or free electives (requires authorization from the professor and the Department Directorate refer to the specialized study policy and the independent study policy).

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.



## **EDUC 8116 Educational Administration as a Philosophy in Praxis**

Three credits. Two hours of lecture and one hour of discussion per week.

Philosophical bases of educational administration and leadership. Educational administration and leadership as a philosophy in praxis and science. Research on the contributions of historical philosophical approaches on the configuration of contemporary educational administration and leadership. Administrative and leadership praxis in the Puerto Rican educational scenario viewed from diverse philosophical frames. Educational administration and leadership as an ethical project.

## **EDUC 8016 Organizational and Administrative Theories in Education**

Three credits. Three hours of lecture per week.

Study and analysis of the most recent administrative theories and their application to the school setting considering the sociocultural and special characteristics present in the milieu under study.

## **EDUC 8070 Human Resources Development in Educational Organizations**

Three credits. Three hours of lecture per week.

Study of conceptual, ethical normative, and empirical frameworks in the processes of recruitment, selection, development and evaluation of human resources capable of transforming educational organizations and promoting a culture of peace. Analysis of the integration of technology in those processes, a minimum of fifteen hours of field experience is required.

# **EDUC 6524 Financing and Administration of Fiscal Resources in Educational Organizations**

Three credits. Three hours of seminar per week.

Study of general aspects related to the financing and administration of fiscal resources in educational organizations. Emphasis in the development of entrepreneurial competencies and skills for the administration of finances and the budgeting process. Analysis of the organizational budget according to its mission, goals and objectives. Development of the operational budget using Technology.

## **EDUC 8047 Strategic Planning in Educational Organizations**

Three credits. Three hours of lecture per week.

Study of the concepts, processes, practices and techniques of strategic planning in educational organizations. Analysis of the philosophy, structure and processes, elements that establish the basis for developing the vision, mission, goals and objectives that provide direction and transform educational systems through the study of diverse contexts.

# **EDUC 8129 Institutional Evaluation, Assessment and Accountability in the Administration of Educational Systems**

Three credits. Three hours of lecture per week.

Study of the theoretical perspectives and administrative practices to carry out institutional assessment of learning as an integral process. Analysis of different theoretical frameworks and formal models for institutional assessment and assessment of learning as an integral process. Analysis of different theoretical frameworks and formal models for institutional evaluation. Use of innovative methodologies to elaborate indicators of institutional competitiveness and social responsibilities in educational systems. Fifteen hours of field experience are required.

## **EDUC 8900 Candidacy Examination**

No Credits.

#### ChatGPT

The doctoral exam is a prerequisite for graduate students and is considered a full-time commitment for those enrolled.

#### **EDUC 8981 Doctoral Dissertation**

Six credits.

Prerequisites: Successfully complete the doctoral degree exam.

Students must present a certificate of completion for the Information Competences Workshop granted by the Gerardo Selles Sola Library. Additionally, they must provide evidence of having completed the online module on Responsible Conduct in Research through the CITI Program, in accordance with the requirements of Certification 029 of 2012-2013 from the UPR-RP Administrative Board. The course will focus on the preparation of the doctoral dissertation, with particular emphasis on proposal development and the general procedures for writing a doctoral dissertation.

#### **EDUC 8982 Continuation of Doctoral Dissertation**

Credits: 0The course can be repeated three times.

Prerequisite: All courses required for the degree in the specialty are considered incomplete courses that the student must pass to fulfill the degree requirements.

Continuation of doctoral dissertation giving emphasis to the implantation of the research study and to the preparation of the dissertation.

#### OTHER COURSE DESCRIPTIONS:

## **EDUC 6005 Management in Educational Leadership**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the director of the graduate program.

The basic principles of management within school administration. Study and critical analysis of the basic principles of management within school administration. Application of foundations of school management in the areas of accounting, and in fiscal matters and financing of educational institutions, data processing, and control operation, and techniques of management development and training.

## **EDUC 6006 Methods and Techniques of School Supervision**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6521 - 6522.

Study and critical analysis of the methods and techniques of school supervision; emphasis on the origin, development, implementation, and effectiveness of models and strategies of classroom supervision. Observation of classes planned, directed, and supervised by the students, laboratory techniques and simulation activities such as microteaching and micro supervision.

## EDUC 6210 Internship in Educational Leadership: Part II

Three credits. 150 hours of field experience.

Prerequisites: Successfully complete 21 credits in the major.

Professional experience that provides students with significant opportunities in a working scenario to demonstrate their academic work by applying knowledge and building capacity; and practicing and developing skills related to strategic, educational, administrative, community, ethical and political leadership. One hundred and fifty hours of field experience are required and participation in weekly seminars during the semester, as coordinated by the professor in charge.

#### **EDUC 6509 Research Methods in Education**

Three credits.

Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. Emphasis on planning, conducting and evaluating types of research. Face-to-face online and hybrid course.

## **EDUC 6521 Administrative Leadership in Educational Organization**

Three credits. Three hours of lecture per week.

Study of theories, processes and principles related to administrative leadership in education. Development of knowledge, skills and dispositions to understand and improve the organization, implement operational plans, manage budgets and apply decentralized administrative processes and procedures towards the attainment of the institutional vision. Analysis of recent research and its implications for administrative leadership education.

## EDUC 6522 Instructional leadership in educational administration

Three credits. Three hours of lecture per week.

Prerequisites: Admission to graduate program.

Study of the nature and roles of instructional leadership in educational administration. Emphasis on the study of research, controversies, and ethical and legal considerations on instructional leadership.

## **EDUC 6527 Current Trends and Practices in Administrative Leadership**

Three credits. Three hours of lecture per week.

Selection and extensive discussion of pertinent problems and issues relating to school administration, emphasizing modern tendencies and practices based on principles derived from recent research and experience.

## **EDUC 6556 Seminar of Controversies in Educational Leadership**

Three to six credits. Six hours of lecture per week.

Prerequisite: EDUC 6521 - 6522.

This course involves the study and analysis of the social issues faced by school administrators and their impact on the instructional program. Strategies for addressing these problems will be discussed and analyzed. The course will also include clinical experiences and case studies.

## **EDUC 6598 Community and Political Leadership in Educational Organizations**

Three credits. One hour for lecture, one hour for discussion and one hour of investigation.

Prerequisite: EDUC 6521

Study of the models for community development and the public relations applicable to educational organizations and community education. Analysis of community leadership and emerging paradigms in the establishment of effective process of community relationships as a fundamental element for the accomplishment of educational goals and objectives. Evaluation of legal provisions, standard rules and regulations, related polices and the relationship between public policy and community wellbeing. Presential, hybrid and online course. Effective for January 2021.

## **EDUC 6618 Educational leadership in vocational education**

Three credits. Three hours of lecture per week.

Study and analysis of theory and practice in vocational educational leadership. Study of specific problems faced by the vocational administrator in technical and vocational schools.

# **EDUC 6626 Philosophical and Theoretical Foundations of Organizational Leadership**

Three credits. Three hours of lecture per week.

Study and integration of interdisciplinary philosophical frameworks to the analysis of educational organizations, their structure, and socio-cultural context. Study and discussion of diverse administrative organizational and leadership to understand and transform educational organizations.

## **EDUC 6665 Strategic Leadership in Educational Organizations**

Three credits. Three hours of lectures per week.

Study of theories, concepts, processes and principles related to strategic leadership in education. Development of knowledge, skills and attributes to identify contexts; articulate and implement, collectively, the vision and purposes of an organization; analyze information; define problems; and exercise leadership to accomplish shared goals and act ethically in education communities.

## **EDUC 6669 Organizational culture in educational institutions**

Three credits. Three hours of lecture per week.

Analysis of the implications of organizational culture for leadership, decision making and the process of change in educational institutions. analysis of recent research and their implications for the development of the organizational culture in educational institutions. Face to face hybrid and online course.

## EDUC 6670 Internship in Educational Leadership - Part I

Three credits.

Prerequisites: EDUC 6521, 6522, 6665, 6598 and EDUC 6509.

Study of educational practices that are in elementary, secondary and special education schools. Development of the competencies and dispositions to manage operations and resources in educational organizations to promote an effective educational environment. Emphasis in research/creation for the development of an analysis of the educational context and the preparation of an action plan to meet the identified needs. Includes a minimum of 15 hours of field experience.

# **EDUC 6999 Field Experience in Educational Leadership**

Two to four credits. Two-four hours of lecture or laboratory work per week.

Prerequisites: Authorization from the professor.

The student will work independently, with the assistance of a professor, on a project or research related to one of the dimensions of educational leadership.

## **EDUC 8016 Organizational and Administrative Theories in Education**

Three credits. Three hours of lecture per week.

Study and analysis of the most recent administrative theories and their application to the school setting considering the sociocultural and special characteristics present in the milieu under study.

## **EDUC 8026 Leadership in Educational Administration and Supervision**

Three credits. Three hours of lecture per week.

Study of the principles and theories of leadership and their application to supervision in different school levels. Leadership in educational institutions.

## **EDUC 8027 Contemporary Practices in Didactic Leadership**

Three credits. Three hours of lecture per week.

Study and analysis of contemporary practices in didactic leadership. Analysis of leader competencies to enhance academic programs.

## **EDUC 8115 Internship in Educational Leadership**

Six credits. Three hours of lecture and nine of laboratory work per week.

Prerequisite: Acceptance as a certified doctoral candidate.

Field experience for students specializing in educational administration. Students will have the opportunity to demonstrate competencies appropriate to an educational administrator by integrating and applying the theoretical knowledge and skills previously learned. The role of students in this course will be that of leaders and agents of change in an educational setting. A seminar will be an integral part of the internship.



Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

Associate Director of Academic Affairs: Dr. Juan C. Vadi-Fantauzzi

Guidance and Counseling Program Coordinator: Dr. Carmen Rosado Pacheco

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89253

Portal: http://ege.uprrp.edu/

#### **DEGREE:**

## Master of Education in Guidance and Counseling

#### **FACULTY:**

**Ariel Agosto Cepeda,** Ph.D., Michigan State University. 2009. Assistant Professor. Gay identity development; LGBT issues; Human sexuality. Other areas of interest include: Clinical supervision; and ethical virtues.

**Rosy Fernández García Menocal,** Ph.D., University of Michigan-Ann Arbor, 1992, Associate Professor. Investigation methodology; relationships; behavior modification; cognitive behavioral models; violence and aggressive behavior; group counseling; stress; spirituality; women's counseling; counseling education, multicultural counseling.

**Carmen M. Rosado Pacheco,** Ed.D., University of Puerto Rico, 1996, Associate Professor. Emerging issues in counseling, individual counseling, occupational counseling in childhood, occupational counseling, Impact Therapy, Ethical-legal professional issues, Theoretical models in counseling.

## **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Río Piedras Campus**

https://graduados.uprrp.edu/admisiones-graduadas-enero-2024/

## **Specific Admission Requirements**

- 1. Baccalaureate or its equivalent.
- 2. Academic index of 3.00 on a scale of 4.00.
- 3. Two courses related to human behavior, preferably in human development and personality theory.
- 4. Essay on interest in pursuing graduate studies in Guidance and Counseling.
- 5. Individual interview.
- 6. Proficiency in Spanish and English.

# **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus.
- 2. Successfully complete specialty courses with a grade of no less than "B" and obtain a grade of no less than "C" in the other courses.
- 3. Successfully complete an academic index of no less than 3.00 in the courses considered for graduation.

#### **STUDY PROGRAM:**

Program Requirements	Credits
Required specialty courses	18
EDUC 6110- Evaluation in the Counseling Process	3
EDUC 6360- Group Counseling	3
EDUC 6539- Occupational Counseling	3
EDUC 6310- Theory and Practice of Counseling	3
EDUC 6320- Practicum in Counseling I	6
Required courses in research	6
EDUC 6509- Research Methods in Education	3
EDUC 6390- Applied Statistics in Education	3
Counseling Electives	6
Free elective	3
EDUC 6900 Degree Exam	0
Thesis	
EDUC 6511 Thesis	6
EDUC 6512 Continuation Thesis	0
Total Credits	39

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **EDUC 6110 Evaluation in the Counseling Process**

Three credits. Three hours of lecture per week.

Prerequisites: Admission to the graduate program.

Introductory course in the use of test and other evaluation techniques in the counseling process. Includes practices of data collection, interpretation and organization of the information and its integration into the counseling process.

## **EDUC 6360 Group Counseling**

Three credits. Three hours of lecture per week.

This course focuses on guidance activities conducted in groups, including orientation, homeroom sessions, vocational planning, discussion of test results, group dynamics, and group counseling. The course content will vary based on the specific client types with whom the student-counselor may work. Emphasis will be placed on both the theory and practice of group counseling in educational and similar settings.

## **EDUC 6539 Occupational Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6110 - EDUC 6310.

The study of and proposition for new theoretical and practical trends in the design and implementation of intervention programs to promote occupational development. Critical analysis of occupational theories, research, programs and services of occupational counseling in human resource programs and services of occupational counseling in human resources and employment training. Psycho-educative group field experience in a scholar setting.

## **EDUC 6310 Theory and Practice of Counseling**

Three credits. Three hours of lecture per week.

This introductory course covers the principles and processes of individual counseling, emphasizing the integration of counseling theories and their practical applications. Students will explore various theories and schools of thought in counseling, as well as significant issues currently facing the field. The course includes hands-on counseling practice through role-playing, demonstrations, electronic recording of interviews, and analysis of interviews and case studies.

#### **EDUC 6320 Practicum in Counseling I**

Six credits. Fifteen hours of practice and three hours of seminar per week.

Prerequisites: EDUC 6310 or its equivalent.

This course offers supervised experience in a real-world counseling setting, allowing counselor candidates to apply the theories and knowledge they have acquired. This practical experience helps candidates refine their attitudes, skills, and knowledge in the field. Continuous self-evaluation fosters personal and professional growth. The course includes weekly individual consultations and seminar meetings.

# **EDUC 6509 Research Methods in Education**

Three credits.

Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. Emphasis on planning, conducting, and evaluating types of research. Face-to-face online and hybrid course.

## **EDUC 6390 Applied Statistics in Education I**

Three credits. Three hours of lecture per week.

Application of different statistical analysis in education, emphasizing their assumptions, justification, the processing of the data by computers, and the interpretation of the results. frequency distributions, measures of central tendency and variability, probability distributions, correlation (parametric and nonparametric), regression, and hypothesis testing (z, t, chi square, and one-way anova). The use of computers is required.

## **EDUC 6511 Master's Thesis or Project**

Six credits. Meetings will be scheduled by agreement with the professor.

Preparation of the master's thesis or project, giving emphasis to the proposal and to the study of procedures to write the thesis or project.

## **EDUC 6512 Continuation of master's Thesis or Project**

Credits: 0Three hours of lecture per week.

Prerequisite: EDUC 6511

Continue the preparation of the master's thesis or project, giving emphasis to the implantation of the research or project and its defense.

#### OTHER COURSE DESCRIPTIONS:

## EDUC 6065 Guidance and Counseling of the Adult and the Elderly

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

An intensive study of published research on mid-life and elderly development. The course provides the student the opportunity to develop new counseling and consulting skills to help Puerto Ricans of these age levels who are going through a developmental crisis.

## **EDUC 6066 Human Sexuality and the Counseling Process**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

An intensive study of the literature and published research on human sexuality and its implications to the guidance and counseling process in Puerto Rican society.

## **EDUC 6067 Counseling and Guidance of Handicapped Individual**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Techniques and strategies to be used in guidance and counseling of the handicapped individual in the educational setting.

## **EDUC 6070 Counseling for Women**

Three credits. Three hours of lecture per week.

A broad perspective on the social changes that have occurred and their consequences for the gender roles of women in contemporary society. The psychological effects of such changes. The general theories in the discipline of guidance and counseling, their adequacy and applicability to contemporary women. Contemporary strategies of intervention for today's women will be discussed.

# EDUC 6075 Professional Guidance and Counseling at the Elementary-School Level

Three hours. Three hours of lecture per week.

Prerequisite: Director's authorization.

The application of general knowledge in counseling and guidance at the elementary-school level, with emphasis on the relevant foundations, principles, and issues and the development of special skills for appraisal, intervention and scientific evaluation in the management of elementary school children with the school and home environment.

## **EDUC 6076 Adolescence**

Three credits. Three hours of discussion per week.

This course involves a critical review of theoretical and research literature on adolescent development and behavior, addressing the challenges they may encounter, including issues pertinent to populations with special needs. Students will evaluate educational and social programs designed for adolescents.

## **EDUC 6077 Processes and Techniques in Counseling Interviewing Seminar.**

Three credits. Three hours of seminar per week.

Analysis of literature regarding interviewing methods. Concepts, techniques and ethical issues related to the interview in the counseling process. Practice different interviewing modalities to conduct interviews with diverse population and in multiple settings.

## EDUC 6078 Human Development Over the Life Span: Implications for Counseling

Three credits. Three hours of seminar per week.

Study and evaluation of the human development theories, including physical cognitive, socioemotional, moral and cultural aspects across the life span. Integration of concepts from theoretical perspectives serving as a framework for the counseling process.

# **EDUC 6165 Introduction to Counseling Research**

Three Credits.

Co requisites: Authorization of the academic counselor.

This course explores the theoretical, philosophical, and sociological foundations of professional counseling research. It addresses specific ethical, legal, and professional issues within the counseling field, considering recent developments in the profession. Emphasis will be placed on



counseling research, focusing on met methodological approaches, conceptualization, and research implementation.

## **EDUC 6175 Administration of Student Services Program**

Three credits. One-hour lecture and one-hour discussion per week.

Study of the literature and research tasks related to the creation, planning, administration, development and integration of programs and services for personal and academic development of the students in educational institutions. Analysis of responsibility of support programs and student services such as guidance and counseling, social work, sports, health, and others. Analysis of the strategies to create a positive culture that promotes student learning, the collaboration with community agencies which integrate services for students and the development of awareness to deal with individual differences and special needs.

## **EDUC 6207 Introduction to School Counseling**

Three credits. Three hours of lecture per week.

Study of the foundations and trends in professional school counseling. Emphasis on the development and implementation of comprehensive school counseling programs at all grade levels considering the professional counselor's main work areas (personal, career and academic). Discussion of the historical and contemporary contexts, functions of the professional as: counselor, leader, collaborator, advocate and agent of change. Application of ethical-legal principles and considerations.

## **EDUC 6230 Education, Stratification and Social Mobility**

Three credits. Three hours of lecture per week. Prerequisites: Admission to graduate program.

The social phenomena of stratification and mobility in relation to educational problems. Concepts of social structure and social process are reviewed and discussed as a frame of reference.

## **EDUC 6268 Biographical Research in Education**

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6400, EDUC 6513.

In depth study of biography as a research method for approaching educational problems, phenomena, and processes from the viewpoint of educational agent's study of ideas, feats, and contributions made by educational leaders related to the educational needs in Puerto Rico society, from a biography-based perspective critical analysis of related literature and development of competencies to perform biographical studies.

## **EDUC 6270 Social Psychology of Education**

Three credits. Three hours of lecture per week.

A consideration of the structure, function and process of education from the point of view of social psychology. Special consideration will be given to current research.

## **EDUC 6315 Adlerian Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6310

Study of helping intervention strategies and techniques proposed by Alfred Adler and his followers. Learning experiences such as case studies, design of interventions, role-playing and practical experiences will be provided.

## **EDUC 6316 Counseling and Spirituality**

Three credits. One hour of lecture, one hour of discussion and one hour of research per week.

Prerequisite: EDUC 6310

Diverse theorical, research and application approaches in and the spiritual dimension of the human beings are compared. The function of the spiritual domain in the life cycle is examined.

#### **EDUC 6330 Seminar in Educational Research**

Three credits. One hour of lecture and two of laboratory work per week.

Prerequisites: EDUC 6400

Workshop in educational research that provides practical experience combined with discussions on the planning and development of the various phases of a research project. The course allows students to observe in the field the problems they might encounter during the course of an actual research project: administrative, personnel, interagency relations, among others.

## **EDUC 6340 Theory of Measurement I**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6405

Study of the classical and modern theory that underlies the use and development of measurement instruments in education and psychology.

## **EDUC 6350 The Psychology of Adult Learning**

Three credits. Three hours of lecture per week.

Description and analysis of adult behavior from late adolescence to old age with special emphasis on its relationships to the teaching-learning processes.

## **EDUC 6400 Research Designs**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6509, EDUC 6390.

This course focuses on the study, analysis, and development of research designs in education. It discusses the strengths and challenges of various designs, as well as issues related to reliability,



validity, and credibility. Students will analyze research that illustrates different designs. The course is offered in face-to-face, hybrid, and online modalities.

## EDUC 6401 Legal, Ethical and Professional Issues in Counseling

Three credits. One hour and a half of lecture, half an hour of discussion and one hour of workshop.

Analysis of the critical professional issues in counseling with an emphasis on ethical and legal standards of practice and the challenges for the 21st century.

## **EDUC 6405 Applied Statistics in Education II**

Three credits. Three hours' lecture per week.

Prerequisite: EDUC 6390

This course focuses on the application of inferential statistics in education, emphasizing its assumptions, rationale, data processing, and interpretation of results. Topics include sampling, variance and covariance analyses, nonparametric statistics, correlation, and simple and multiple linear regressions. Computer programs will be utilized for these analyses.

## **EDUC 6415 Action Research in Educational Contexts**

Three credits. Three hours of discussion per week.

This course examines the epistemological, axiological, and theoretical foundations of action research, along with its methods and techniques. Emphasis is placed on the connection between research and action to enhance teaching-learning processes and address problems in educational contexts. Students will engage in planning, implementing, and disseminating this type of research. The course is offered in face-to-face, hybrid, and online formats.

#### **EDUC 6431 Advanced Methods in Educational Statistics**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6390

A continuation of statistical theory and analysis began in EDUC 6390. The course covers probability in statistical decisions, theory and methods of sampling and experiments, covariance, multiple correlation and regression, discriminant functions and factor analysis, and non-parametric methods.

## EDUC 6445 Psychopathology, Human Development and Counseling

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6310

Introductory course in the study of psychopathology, human development and its relation to the counseling process. Emphasis will be given to the most common diagnosed mental illnesses and their manifestations during the human developmental stages. Theories, research and the appropriate intervention strategies on mental conditions will be discussed. Emphasis will be given to the competencies a counselor must demonstrate regarding mental conditions.

## **EDUC 6455 Child Abuse Among the General and Special Needs Population**

Three credits. One hour of lecture and two hours of discussion.

This course discusses the human rights foundations and legislation protecting minors, as well as the types of maltreatment and neglect recognized in Puerto Rico. It addresses general risk factors affecting both the general population and individuals with special needs, along with the implications of abuse associated with various disabilities. The course also covers intervention models and educational programs available in Puerto Rico. Students will have opportunities to familiarize themselves with the work of protective services and explore how educators—particularly those in general and special education—can collaborate to reduce the incidence of child abuse through prevention and intervention efforts.

## **EDUC 6460 Seminar on School Laws of Puerto Rico**

Three credits. Six hours of lecture per week.

Analysis and discussion of school laws, rules and regulations of the department of education and supreme court decisions and their application to specific situations of special interest for the student.

# **EDUC 6465 Puerto Rican Personality Representation**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6310

A historical - geographic and sociocultural perspective of the Puerto Rican personality is offered and discussed. Contemporary research is analyzed as well as conducted and their implications for education and counseling are also discussed.

#### EDUC 6501 Advanced Course in Foundations of Education I

Three credits. Three hours of lecture per week.

This course examines educational problems through the lenses of various disciplines associated with the foundations of education. It involves an analysis of diverse philosophical, sociological, and psychological perspectives as they relate to and are applied to specific educational issues at both local and international levels. Special emphasis will be placed on the constitution of subjectivity and the role of educational institutions in this process.

#### **EDUC 6502 Advanced Course in Foundations of Education II**

Three credits. Three hours of lecture per week.

This course explores the origin, nature, mental processes, and personality of humans, integrating the theory of evolution with philosophical and psychological conceptions of human nature and theories of knowledge. It examines the processes and outcomes of learning, the nature of individual personality, and the concept of the rational self. Additionally, the course emphasizes the role and significance of the teacher in the formation and transformation of personality. It also addresses Puerto Rican society from historical and anthropological perspectives, with a particular focus on

social and cultural change. Finally, the course discusses various philosophies of education and provides a philosophical orientation relevant to our educational system.

## **EDUC 6503 Education in Contemporary Society**

Three credits. Three hours of lecture per week.

The socio-economic factors influencing the demands, growth, and development of education in specific cultural areas with emphasis on Latin America, Africa, Europe, the United States and Russia.

#### **EDUC 6507 Education and the Social Order**

Three credits. Three hours of lecture per week.

Prerequisite: Admission to graduate program.

The school as a social institution and its relation to other aspects of society. Special emphasis on the application of general theory to Puerto Rican society and education. A critical evaluation of recent research.

## **EDUC 6510 The Philosophy of John Dewey**

Three credits. Three hours of lecture per week.

Various aspects of the thought of Dewey; the evolution of Dewey thinking from absolutism; to experimentalism; Dewey's theory of knowledge (with special emphasis on his book: logic the theory of inquiry); Dewey's theory of art (with special emphasis on his book, art as experience) Dewey on society, politics and law (with emphasis on the following books: human nature and conduct; reconstruction in philosophy and the public and its problems). Other aspects of Dewey's thought will be discussed, such as, ethics, religion, theory of valuation, theory of experience, psychology, history, schooling and education, etc.

## **EDUC 6513 Seminary: Qualitative Research in Education**

Three credits. Three hours of conference per week.

Prerequisites: EDUC 6509 or equivalent.

Critical analysis of theoretical basis, models, and contributions of qualitative research to the study and comprehension of educational problems. Study of the paradigms and epistemological assumptions that underline the qualitative research approaches and methodologies used. Development of competencies in research proposal writing and conducting research. Face-to-face hybrid and online course.

## **EDUC 6515 Field Experience in Educational Research and Evaluation**

Three credits. Six hours of laboratory work per week.

Prerequisite: EDUC 6400 and authorization from the professor.

This course provides field experience in the various steps of the research or evaluation process. Students are required to accumulate a minimum of 90 hours in this supervised practice. Experience

can be gained by participating in an accredited research center, collaborating on research projects with faculty members, or conducting evaluations in community programs or agencies. This course may be taken up to two times, allowing for a total of six credits.

# **EDUC 6529 Cultural Deprivation, Family Dynamics, and Education in Puerto Rico**

Three credits. Three hours of lecture per week.

Class related patterns of experience or living are seen from a socio-cultural point of view and related to personality dynamics, using socialization processes as the connecting link between the theoretical frames of reference. Case studies provide illustrative material. Results of psycho-social analyses are related to the educational problems of culturally-disadvantage students.

# **EDUC 6537 Introduction to Guidance and Counseling**

Three credits. Three hours of lecture per week.

This course offers a systematic study of counseling as both a discipline and a professional field. It will cover various aspects, including the historical perspective of the profession, personal characteristics of professional counselors, theoretical approaches, and the counseling assistance process. Additional topics include conceptualizing client problems, assessment in counseling, developmental and occupational counseling, and future perspectives of the profession. The course will be offered through face-to-face, hybrid, distance, and online modalities.

# EDUC 6538 Study of New Skills in Investigation and Learning Theories

Two credits. Two hours of lecture per week.

Includes the study of theories, methods, strategies and research of recent investigations related to the process of teaching and learning.

# **EDUC 6545 Practicum in Counseling II**

Three credits. Fifteen hours of practice and three hours of seminar per week.

Prerequisite: EDUC 6320

Intensive experience in counseling under supervision. Emphasis on the interpersonal factors of the counseling relationship and self-understanding on the part of the counselor.

# **EDUC 6547 Seminar on Socioeconomic Changes in Latin America and their Consequences in Education**

Three credits. Three hours of lecture per week.

The purpose of this seminar is to show the close relationship between socioeconomic changes and educational development. Latin America is used as a sample of such a relationship.

#### **EDUC 6549 Seminar in Recent Trends in Guidance**

Three credits. Three hours of lecture per week.

Recent trends and innovative procedures or ideas which are having or show promise of

having a great impact on the field of guidance and related activities.

# **EDUC 6550 History of Educational Ideas in Puerto Rico: Nineteenth and Twentieth Centuries**

Three credits. Three hours of lecture per week.

Prerequisite: EDPT 4005 or its equivalent.

This course investigates and discusses the educational ideas that have shaped the Puerto Rican educational system since the 19th century. It begins with a general survey of the status of education in Latin America during the 19th century, analyzing the philosophical and educational trends of the time. These trends are then compared to the educational orientations during the Spanish colonial period. Special emphasis is placed on the contributions of key figures in Puerto Rican education, such as Baldorioty, Tapia, and Eugenio María de Hostos.

## EDUC 6551 Research and Creation Seminar in Curriculum and Teaching

Three credits. Three hours of seminar.

Prerequisite: Successfully complete the comprehensive exam.

Integrative experience in which the student demonstrates research and creative skills in curriculum and teaching. This experience stems from the professional and academic interests of the student.

# EDUC 6555 Sociological Analysis of the School as an Institution

Three credits. Three hours of lecture per week.

This course examines the school as a social institution, focusing on educational roles and role relationships within the school environment. It explores the etiology and resolution of role conflicts, as well as the social structure of the school and its effects on communication, learning, and leadership. Additionally, the course addresses school-community relations and their impact on the functioning of the school, incorporating a study of recent research in the field.

# **EDUC 6561 Seminar: Readings and Research in Educational Problems**

Six credits. Three hours of lecture and three of laboratory work.

Prerequisite: Twenty credits in graduate courses.

This course involves an independent study project focused on a topic or problem selected by the student in consultation with the professor or a group of professors. Students will engage in extensive reading and experimental work related to their chosen topic. Throughout the course, the student will provide periodic progress reports to the professor, culminating in a final written report.

### **EDUC 6575 Intervention Programs**

Three credits. Three hours of lecture per week.

This course provides an overview of intervention programs implemented worldwide, exploring various aspects such as nutrition, education, cognitive development, recreation, and motor development. The programs will be critically analyzed in terms of their objectives,

implementation, and the socio-cultural milieu in which they operate. Emphasis will be placed on evaluation methods designed to assess the effectiveness of these programs.

# **EDUC 6579 Education, Urbanization and Urban Ecology**

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree.

This course is designed for teachers, school administrators, supervisors, advisors, social workers, and other school personnel who require a foundational understanding of the social structure and processes in urban-metropolitan settings. The course will examine the educational needs, problems, and opportunities arising from the changing ecology of cities and the development of metropolitan areas, with a specific focus on Puerto Rico. Key topics include urban ecology, the process and impact of urbanization, personal adjustment within urban environments, and urban renewal and planning. Whenever possible, the course will incorporate field observations and studies of various urban and suburban areas, including the model cities project and initiatives from the urban renewal and housing corporation.

# **EDUC 6580 Introduction to Quantitative Techniques of Research in Education**

No credits. Fifteen hours of lecture per week.

This course will familiarize students with essential techniques for handling quantitative data in educational research projects. It will cover basic statistical tools, research concepts and procedures, problem formulation, and documentation. Students will engage in practical exercises designed to help them become proficient with the computational procedures commonly used in educational research.

# **EDUC 6586 Evaluation Theory and Methodology**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6509 and 6390.

Study of evaluation as specialized type of research. Critical analysis of main theoretical models; their epistemological and value judgmental basis as well as their methodologies. Development of basic skills for planning and conducting evaluation.

# **EDUC 6587 The Psychology of the Young Adult**

One credit. Three hours of laboratory work per week.

This course explores the psycho-social and educational implications of personal challenges, satisfactions, hopes, struggles, encounters, frustrations, conflicts, and attitudes that arise in the journey toward becoming a well-adjusted adult in today's evolving social landscape. Students will examine how these factors influence personal development and adjustment in contemporary society.

# **EDUC 6588 Research Writing: Style and Language Usage**

Three credits. Three hours of lecture per week.

This course is directed toward developing in the student a greater awareness of language usage and in helping him to use it more efficiently as a means of communication. An analysis will be made of the nature of the science and the art of style and its appropriate use in diverse situations, especially in written language.

# **EDUC 6589 Teaching and Systems Analysis**

Three credits. Three hours of lecture per week.

This course focuses on the knowledge, skills, and attitudes necessary for applying systems analysis to improve teaching practices. Emphasis is placed on preparing learning packages by incorporating key components such as structuring operational objectives, selecting content, implementing evaluative procedures (both pre- and post-evaluation), and choosing and preparing materials and teaching methods. Students will have the opportunity to design and create curricular materials using various individualized instruction techniques. Additionally, they will engage in the systematic analysis of course offerings and plan for the effective use of modern technology in the learning process.

#### **EDUC 6597 Construction of Measurement Instruments**

Three credits. One hour of lecture and two hours of laboratory.

Prerequisite: EDUC 6390

Study of the basic theory and main systematic methods for constructing different types of measurement instruments.it includes practical experience in their development.

# **EDUC 6609 Educational Philosophy of Eugenio Maria De Hostos**

Three credits. Three hours of lecture per week.

Prerequisite: Graduate student.

Research, analysis and interpretation of the educational philosophy of Eugenio Maria de Hostos with the goal of deriving recommendations that can be applied to the Puerto Rican educational endeavor.

## **EDUC 6615 Vocational and Technical Education: Principles and Practices**

Three credits. Three hours of lecture per week.

Analysis and development of vocational education with emphasis on its projections and implications for preparing persons for work.

## **EDUC 6616 Multicultural Counseling**

Three credits. One hour and a half of lecture and one hour and a half of discussion per week.

An exploration of multicultural concerns related to the knowledge and research as well as the beliefs, attitudes and skills of counselors. Includes issues related to social justice and advocacy in reference to the counseling processes.



## **EDUC 6616 Multicultural Counseling**

Three credits. One hour and a half of lecture and one hour and a half of discussion per week.

An exploration of multicultural concerns related to the knowledge and research as well as the beliefs, attitudes and skills of counselors. Includes issues related to social justice and advocacy in reference to the counseling processes.

# **EDUC 6617 Curriculum Development in Vocational Education**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Analysis and application of curriculum models for vocational education, emphasis in curriculum model based on teaching competencies.

## **EDUC 8005 Cognitive Processes**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the director of doctoral program.

Empirical and theoretical bases for the cognitive process. Critical and detailed analysis of the conceptual frame of thought, knowledge, reasoning, problem solving and learning of concepts.

## **EDUC 8006 Society and Education**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization.

Study of sociological theories of education. Analysis of controversies and discourses related to current educational issues from the philosophical, historical, social cultural and economic perspectives. Emphasis on contemporary macrosocial issues and their impact in education. Research on problems and challenges of contemporary education.

## **EDUC 8009 Theories of Learning**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Critical analysis of the assumptions, principles and logic of the main learning theories and the scientific methodology used by theorists in education implications of these theories for the curriculum development and teaching.

# EDUC 8010 Society, Culture, and Education in the Caribbean

Three credits. Three hours of lecture per week.

Critical analysis of research regarding the Caribbean area, focusing on regional and specific countries. Analysis of cultural, socio-economic and political trends and realities is emphasized in their relationship with education.

### EDUC 8015 Seminar on Pragmatism, Existentialism, And Knowledge of Self

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6501 - 6502.

This course examines three mutually exclusive perspectives on "human reality," analyzing each in relation to unresolved issues in philosophy, social sciences, and education. Each position is considered valid and will be studied through readings from prominent scholars in their respective fields.

#### **EDUC 8017** The Role of the Counselor in Behavior Modification

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6360

Analysis and application of behavior modification intervention models. Emphasis upon the development and strengthening of behavior considered appropriate in group dynamics.

# **EDUC 8018 Correlational and Causal Comparative Research**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6509 – 6390.

This course focuses on the study and development of non-experimental quantitative research in education, specifically correlational and causal-comparative research, both cross-sectional and longitudinal. Emphasis is placed on understanding the essential characteristics and methods of these research types. The course includes practical experiences, the use of technology, and report writing.

### **EDUC 8019 Research in Guidance and Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6539

Critical analysis of research in the field of guidance and counseling and its application in our circumstance.

# **EDUC 8020 Experimental Research in Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6405

Theory and practice in the design, analysis and interpretation of experimental and quasi-experimental research. Critical review of substantive and methodological issues in planning and conducting experimental research in educational settings.

# **EDUC 8025 Ethical Perspective of Childhood and Education**

Three credits. One hour and half of lecture and one hour and half of discussion per week.

This course provides a philosophical analysis of childhood from constructivist and naturalist perspectives. It explores the themes of children's rights in modernity, beginning with J.J. Rousseau's naturalism and I. Kant's ethics. The course further examines the applicability of the

concepts of liberty, democracy, authority, and punishment, evaluating the effectiveness of Socratic ethical precepts that propose ethical knowledge as sufficient for ensuring moral behavior.

# **EDUC 8035 Controversial Issues in Guidance and Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Critical analysis of controversial issues in the field of guidance and counseling. Emphasis on relevant literature and research.

# **EDUC 8037 Counseling Techniques and Strategies in the Secondary and Post-Secondary School Levels**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8035 and EDUC 8036.

This course involves the study and critical analysis of counseling strategies and techniques tailored for secondary and post-secondary students. Emphasis will be placed on both individual and group counseling processes, focusing on techniques that facilitate effective helping interactions with clients facing vocational, academic, personal, and interpersonal relationship challenges.

# **EDUC 8038 Introduction to Family Counseling**

Three credits. Three hours of lecture per week.

The historical antecedents, philosophical assumptions, and diverse models of family counseling or therapy shall be studied. The different theoretical approaches shall be assessed to determine their applicability to Puerto Rican culture. Special attention shall be given to the utilization of the models discussed in class for intervening with families in conflict or crisis.

# **EDUC 8039 Counseling Techniques and Strategies in the Preschool, Elementary and Intermediate Levels**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8036, EDUC 8019 and EDUC 8025.

This course provides a critical analysis of interview techniques and evaluation strategies in individual, group, and community counseling for preschool, elementary, and intermediate levels. It focuses on the application of these techniques across various issues, including vocational, academic, personal, interpersonal, and family problems. The course will also address the needs of different populations, such as regular, special, and dysfunctional groups, and will explore various approaches, including preventive, extended, and remedial counseling.

# **EDUC 8040 Community Counseling and Human Ecology**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8035 and EDUC 8036.

This course involves the analysis of community psychology and its impact on community and social institutions. It examines the dynamics of these institutions and addresses controversial issues

within the Puerto Rican lifestyle. Emphasis will be placed on the counselor's role as a social change agent, highlighting how counselors can facilitate and promote positive transformations within communities.

# **EDUC 8046 Guidance and Counseling for Career Development**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

An exhaustive analysis of the literature and scientific research development on career development theories and their implications on the process of guidance and counseling of individuals who are going through different stages of growth and who find themselves in different settings (school, at work, etc.) In Puerto Rico.

# **EDUC 8056 Cognitive Development**

Three credits. Three hours of lecture per week.

Analysis of the main theories and empirical evidence relating to cognitive development. Implications of this knowledge for curriculum development and teaching.

# EDUC 8058 Meta philosophy, Epistemology and Ethics in Education

Three credits. Three hours of lecture per week.

This course examines the relationship between philosophy and the philosophy of education, investigating and evaluating the inherent problems associated with teaching from the perspectives of epistemology and ethics. The course may be offered in face-to-face, hybrid, distance, and online modalities.

#### **EDUC 8068 Non-Parametric Statistics in Educational Research**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6390 statistics to apply in education.

Study of the statistical tests used when the dependent variables in educational research are categorical (nominal or ordinal) and the data is distribution free. The tests included deal with one, two or more dependent and independent samples. Practical experience using computers is required.

#### **EDUC 8069 Law and Education**

Three credits. Three hours of lecture per week.

This course covers the legal foundations governing public and private educational institutions at all levels in Puerto Rico, including relevant federal laws. It explores the powers, duties, and procedures related to financing, property management, decision-making, student affairs, working conditions, and other pertinent topics. Additionally, the course involves a critical evaluation of current practices and addresses future needs in the educational landscape.

# EDUC 8075 Ethics and Education: From the Classical Era to Postmodernity

Three credits. Three hours of lecture per week.



This course offers a comparative study of philosophical thought from antiquity to postmodernism and its implications for education. It examines the ethical educational doctrines of key figures such as Socrates, Plato, and Aristotle, and analyzes the relationship between ethics and religion during the medieval period. The course further explores the transition to the modern era, focusing on secularization and its impact on education. Philosophers from the modern period, including Hume, Kant, Rousseau, Eugenio Maria de Hostos, and Dewey, will be studied. Additionally, contemporary trends in education will be explored, with an emphasis on postmodern perspectives.

# **EDUC 8076 Survey Research**

Three credits. Three hours of discussion per week.

Prerequisites: EDUC 6509 and EDUC 6390.

Study and development of survey research in education in which telephone, electronic, mail and in person surveys are considered. Emphasis on design of samples to represent populations, as well as instruments and procedures for data gathering and analysis, includes practical experiences, technology use and report writing.

## **EDUC 8085 Gerontological Counseling**

Three credits. Three hours of lecture per week.

This course involves an intensive study of literature and research findings in the field of human development, with a particular focus on adulthood. Emphasis will be placed on applying knowledge and skills to cases involving citizens over the age of 65, whether they are residing at home or in institutional settings.

# **EDUC 8086 Knowledge's and Gender: Implications for Education**

Three credits. Three hours per week.

Study of the social construction of gender from different theoretical and methodological approaches. Historical background of gender and women's studies, debates surrounding these studies, and research approaches from different fields of knowledge as they relate to education. Emphasis on the impact of gender and women's studies in education, especially in Puerto Rico, as well as its impact on research and educational practice.

### **EDUC 8088 Mixed Methods Research**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6400 - EDUC 6513.

This course focuses on the analysis and design of research incorporating both quantitative and qualitative aspects. It begins with an epistemological examination of mixed methods research. Special attention will be given to the conceptualization of research problems and the overall research design. Additionally, various research studies will be analyzed to illustrate different methodologies, highlighting their strengths and challenges.

# **EDUC 8089 Critical Thinking and Education.**

Three credits. Three hours of discussion per week.

This course examines, analyzes, and assesses the most important reading materials related to critical thinking. The first phase focuses on defining what critical thinking is. The second phase explores the modern objectivist doctrine, addressing the question of whether individuals can transcend their culture and history to achieve an impartial and neutral viewpoint. The final phase examines the postmodern contextual perspective, considering arguments that assert that both thought, and language are relative to culture and the contingent circumstances in which they have developed.

# **EDUC 8097 Counseling for Students with Special Needs**

Three credits. Three hours of lecture per week.

This course involves the analysis of existing counseling models and their application for students with special needs. Students will also focus on the development of counseling models specifically targeting this population. The course will be offered in face-to-face, hybrid, distance, and online modalities.

## **EDUC 8117 The Motivational Moment of Life Therapy (Temomvi)**

Three credits. Three hours' lecture and three hours' discussion per week.

Prerequisites: EDUC 6310 - PSIC 6005.

Study of the motivational moment of life therapy (temomvi in Spanish) developed by Ramos-Melendez, (1990). The therapy procedural and conceptual aspects are thoroughly discussed in this course. Participants are exposed to the study of real or simulated cases. In addition, a critical and comparative analysis of this therapy is included.

### **EDUC 8121 Counseling Internship**

Three credits.

Supervised field, creation or evaluation experiences in counseling to apply the knowledge skills and dispositions under supervision.

## **EDUC 8122 Seminar and Internship in Guidance and Counseling II**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8121

Supervised field work in guidance and counseling in a setting and level of interest to the doctoral student.

# EDUC 8127 Organization and Administration of the Guidance and Counseling Programs at Preschool, Elementary and Intermediate Level

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 8036 and EDUC 8037.

Critical study and analysis of the organization and administration designs and structure of the guidance and counseling programs at pre-school, elementary and secondary level which facilitate its effectiveness.

# **EDUC 8128 Group Design in Guidance and Counseling**

Four credits. Three hours of lecture per week and thirty-six hours of workshop.

Prerequisites: EDUC 6360, EDUC 8035 and EDUC 8019 or authorization from the professor.

Critical analysis of the theory and technology of group design and its application to guidance and counseling on the analysis of group effectiveness criteria as pivotal in the development of appropriate designs for different kinds of groups. Application of group design in situations and problems associated with education general terms.

### **EDUC 8265 Action Research in Education al Contexts**

Three credits. Three hours of discussion per week.

This course explores the epistemological, axiological (value-based), and theoretical foundations of action research, along with its methods and techniques. Special emphasis is placed on the connection between research and action to enhance teaching-learning processes and address problems in educational contexts. The course includes practical experiences in planning, implementing, and disseminating action research.

# **EDUC 8266 Ethnographic Research**

Three credits. Three hours of lecture per week.

Prerequisites: One of the following courses: EDUC 6400 – 6513.

Consideration of the theories and paradigms that support ethnographic research. Study of the strategies and techniques of ethnographic research as well as managing and analyzing information.

# **EDUC 8267 Models of Qualitative Analysis**

Three credits. Two hours of lecture and one hour of laboratory per week.

Prerequisites: EDUC 6513 or EDUC 8266.

Study and application of models of qualitative research such as dramaturgical analysis, grounded theory, and Wolcott's Dai model. Use of computer software for qualitative analysis and application of models of analysis to qualitative educational research data. This course is offered in face-to-face, hybrid, and online modalities.

# **EDUC 8268 Seminar: Controversial Issues and Ethical Aspects in Qualitative Research**

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6400 or EDUC 6513.

In-depth study of the most relevant historical events of the regulations and international codes currently in force that emerged to protect participants in research in general and in qualitative



research in particular. Critical analysis of the literature and development of competencies to work with controversial aspects and ethics in qualitative research.

# **EDUC 8340 Theory of Measurement II**

Three credits. Three hours' discussion per week.

Prerequisite: EDUC 6340

Study of item response and generalization theories, and other models for analyzing test results. Focus on the application of these theories in the development of measurement instruments and the interpretation of the results. includes the use of computer programs for performing item and test analysis.

# **EDUC 8900 Candidacy Examination**

No credits.

The doctoral exam is a requirement for graduate students and is considered a full-time academic commitment for them.

#### **EDUC 8981 Doctoral Dissertation**

Six credits.

Prerequisites: Successful completion of the doctoral degree exam. Submission of a certificate for the completion of the Information Competencies Workshop granted by the Gerardo Selles Sola Library, along with evidence of having completed the online module on Responsible Conduct in Research from the CITI Program, as required by Certification 029 (2012-2013) of the UPR-RP Administrative Board.

Preparation of the doctoral dissertation, giving emphasis to the proposal and to the study of the general procedures to write a doctoral dissertation.

### **EDUC 8982 Continuation of Doctoral Dissertation**

Credits: 0

This course can be repeated three times.

Prerequisite: Completion of all required courses leading to the degree in the specialty area. The student must have passed all courses necessary for the degree.

Continuation of doctoral dissertation giving emphasis to the implantation of the research study and to the preparation of the dissertation.

### **EDUC 8995 Directed Specialized Study**

One to three credits. One to three contact hours.

Prerequisite: Authorization from the department.

Exploration of special topics or problems of particular interest to groups of graduate students under the direction of a faculty member or visiting professor. This course may be taken up to a maximum of nine credits.



Dean: Dr. Grace Marie Carro Nieves

Department Director: Dr. José Soto Sonera

Associate Director of Academic Affairs: Dr. Juan C. Vadi-Fantauzzi

Guidance and Counseling Program Coordinator: Dr. Carmen Rosado Pacheco

**Telephone and extensions**: (787) 764-0000, ext. 89205, 89196, 89253

**Portal**: http://ege.uprrp.edu/

#### **DEGREE:**

# **Doctor of Education in Guidance and Counseling**

#### **FACULTY:**

**Ariel Agosto Cepeda,** Ph.D., Michigan State University. 2009. Assistant Professor. Gay identity development; LGBT issues; Human sexuality. Other areas of interest include: Clinical supervision; and ethical virtues.

**Rosy Fernández García Menocal,** Ph.D., University of Michigan-Ann Arbor, 1992, Associate Professor. Investigation methodology; relationships; behavior modification; cognitive behavioral models; violence and aggressive behavior; group counseling; stress; spirituality; women's counseling; counseling education, multicultural counseling.

**Carmen M. Rosado Pacheco**, Ed.D, University of Puerto Rico, 1996, Associate Professor. Emerging issues in counseling, individual counseling, occupational counseling in childhood, occupational counseling, Impact Therapy, Ethical-legal professional issues, Theoretical models in counseling.

## **ADMISSION REQUIREMENTS:**

## General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/

# **Specific Admission Requirements**

- 1. Master's degree with a specialty in Guidance and Counseling or master's degree in another specialty that includes 18 credits at the graduate level in Counseling.
- 2. Academic index of 3.00 on a scale of 4.00.
- 3. Educational Research Course at the graduate level.
- 4. Course in Statistics at the graduate level.
- 5. Proficiency in Spanish and English.
- 6. Interview with the Admissions Committee.
- 7. Application for admission to graduate studies.

- 8. Two recommendations for graduate studies in electronic or paper format
- 9. Two official academic transcripts from the bachelor's and master's degrees
- 10. Licenses.

# **GRADUATION REQUIREMENTS:**

- 1. Meet the graduation requirements of the Río Piedras Campus
- 2. Successfully complete specialty courses with a grade of no less than "B" and obtain a grade of no less than "C" in the other courses.
- 3. Academic index of no less than 3.00 in the courses considered for graduation

### **STUDY PROGRAM:**

PROGRAM REQUIREMENTS	Credits
General Professional Area	24
Courses in Fundamentals of Education	12
Courses in Research and evaluation	12
Specialized professional area	27
Core courses of the specialty	6
EDUC 8035 Controversial Issues in Guidance	3
EDUC 8019 Research in Guidance and Counseling	3
Elective courses in the specialty area	9
Internship - EDUC 8121 and EDUC 8122	6
Free electives	9
EDUC 8900 Candidacy Exam	0
Dissertation	
EDUC 8981 Doctoral Dissertation	6
EDUC 8982 Continuation Doctoral Dissertation	0
Total Credits	60

#### **COURSE DESCRIPTION:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

# **EDUC 8035 Controversial Issues in Guidance and Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Critical analysis of controversial issues in the Field of Guidance and Counseling. Emphasis on relevant literature and research.

# **EDUC 8019 Research in Guidance and Counseling**

Three credits. Three hours of lecture per week.



Prerequisite: EDUC 6539

Critical analysis of research in the field of guidance and counseling and its application in our circumstance.

# **EDUC 8121 Counseling Internship**

Three credits.

Supervised field, creation or evaluation experiences in counseling to apply the knowledge, skills and dispositions under supervision.

# **EDUC 8122 Seminar and Internship in Guidance and Counseling II**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8121

Supervised field work in guidance and counseling in a setting and level of interest to the doctoral student.

# **EDUC 8900 Candidacy Examination**

No credits.

The doctoral exam is a requirement for graduate students, and it is considered a full-time academic commitment for them.

### **EDUC 8981 doctoral dissertation**

Six credits.

Prerequisites: Successfully complete the doctoral degree exam.

Submission of a certificate indicating completion of the Information Competencies Workshop, granted by the Gerardo Selles Sola Library. Additionally, students must provide evidence of having completed the online module on Responsible Conduct in Research through the CITI Program, as required by Certification 029 (2012-2013) of the UPR-RP Administrative Board. This course focuses on the preparation of the doctoral dissertation, with an emphasis on the proposal and the study of the general procedures for writing a dissertation.

### EDUC 8982 continuation of doctoral dissertation

No credit.

This course can be repeated up to three times. **Prerequisite:** Completion of all required courses for the degree in the specialty.

Continuation of doctoral dissertation giving emphasis to the implantation of the research study and to the preparation of the dissertation.

### OTHER COURSE DESCRIPTIONS:

### EDUC 6065 Guidance and Counseling of the Adult and the Elderly

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

An intensive study of published research on mid-life and elderly development. The course provides the student the opportunity to develop new counseling and consulting skills to help Puerto Ricans of these age levels who are going through a developmental crisis.

# **EDUC 6066 Human Sexuality and the Counseling Process**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

An intensive study of the literature and published research on human sexuality and its implications to the guidance and counseling process in Puerto Rican society.

# EDUC 6067 Counseling and Guidance of Handicapped Individual

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Techniques and strategies to be used in guidance and counseling of the handicapped individual in the educational setting.

# **EDUC 6070 Counseling for Women**

Three credits. Three hours of lecture per week.

A broad perspective on the social changes that have occurred and their consequences for the gender roles of women in contemporary society. The psychological effects of such changes. The general theories in the discipline of guidance and counseling, their adequacy and applicability to contemporary women. Contemporary strategies of intervention for today's women will be discussed.

# EDUC 6075 Professional Guidance and Counseling at the Elementary-School Level

Three hours. Three hours of lecture per week.

Prerequisite: Director's authorization.

The application of general knowledge in counseling and guidance at the elementary school level, with emphasis on the relevant foundations, principles, and issues and the development of special skills for appraisal, intervention and scientific evaluation in the management of elementary school children with the school and home environment.

#### EDUC 6076 Adolescence

Three credits. Three hours of discussion per week.

Critical review of theoretical and research work on adolescent development and behavior, including the challenges they face, particularly as applied to populations with special needs. The course also includes the evaluation of educational and social programs aimed at adolescents.

# EDUC 6077 Processes and Techniques in Counseling Interviewing Seminar.

Three credits. Three hours of seminar per week.

Analysis of literature regarding interviewing methods. Concepts, techniques and ethical issues related to the interview in the counseling process. Practice different interviewing modalities to conduct interviews with diverse population and in multiple settings.

# EDUC 6078 Human Development Over the Life Span: Implications for Counseling

Three credits. Three hours of seminar per week.

Study and evaluation of the human development theories, including physical cognitive, socioemotional, moral and cultural aspects across the life span. Integration of concepts from theoretical perspectives serving as a framework for the counseling process.

## **EDUC 6110 Evaluation in the Counseling Process.**

Three credits. Three hours of lecture per week.

Prerequisites: Admission to the graduate program.

Introductory course in the use of test and other evaluation techniques in the counseling process. Includes practices of data collection, interpretation and organization of the information and its integration into the counseling process.

# **EDUC 6165 Introduction to Counseling Research**

Co requisites: Authorization of the academic counselor.

The course focuses on the theoretical, philosophical, and sociological foundations of professional counseling research, with consideration given to the ethical, legal, and professional issues in counseling, emphasizing recent developments in the profession and placing special attention on research methodology, conceptualization, and implementation.

# **EDUC 6175 Administration of Student Services Program**

Three credits. One-hour lecture and one-hour discussion per week.

Study of the literature and research tasks related to the creation, planning, administration, development and integration of programs and services for personal and academic development of the students in educational institutions. Analysis of responsibility of support programs and student services such as guidance and counseling, social work, sports, health, and others. Analysis of the strategies to create a positive culture that promotes student learning, the collaboration with community agencies which integrate services for students and the development of awareness to deal with individual differences and special needs.

# **EDUC 6207 Introduction to School Counseling**

Three credits. Three hours of lecture per week.

The course involves the study of the foundations and trends in professional school counseling, with an emphasis on the development and implementation of comprehensive school counseling programs across all grade levels. It considers the professional counselor's main areas of focus,



including personal, career, and academic counseling. The course also discusses the historical and contemporary contexts and explores the roles of the counselor as a leader, collaborator, advocate, and agent of change, with attention to the application of ethical-legal principles and considerations.

# **EDUC 6230 Education, Stratification and Social Mobility**

Three credits. Three hours of lecture per week.

Prerequisites: Admission to graduate program.

The social phenomena of stratification and mobility in relation to educational problems. Concepts of social structure and social process are reviewed and discussed as a frame of reference.

# **EDUC 6268 Biographical Research in Education**

Three credits. Three hours of seminar per week.

Prerequisites: EDUC 6400, EDUC 6513.

This course offers an in-depth study of biography as a research method for addressing educational problems, phenomena, and processes from the perspective of educational agents. It focuses on the study of ideas, achievements, and contributions made by educational leaders in relation to the educational needs of Puerto Rican society, from a biographical standpoint. The course includes critical analysis of related literature and the development of competencies necessary for conducting biographical studies.

# **EDUC 6270 Social Psychology of Education**

Three credits. Three hours of lecture per week.

A consideration of the structure, function and process of education from the point of view of social psychology. Special consideration will be given to current research.

# **EDUC 6310 Theory and Practice of Counseling**

Three credits. Three hours of lecture per week.

An introductory course in the principles and processes of individual counseling, with emphasis on the integration of counseling theories and their practical application. Various theories and schools of thought in counseling. Outstanding issues in counseling. Actual counseling practice involving role-playing, demonstrations, electronic recording of interviews and analysis of interviews and cases.

## **EDUC 6315 Adlerian Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6310

Study of helping intervention strategies and techniques proposed by Alfred Adler and his followers. Learning experiences such as case studies, design of interventions, role playing, and practical experiences will be provided.

# **EDUC 6316 Counseling and Spirituality**

Three credits. One hour of lecture, one hour of discussion and one hour of research per week.

Prerequisite: EDUC 6310

Diverse theorical, research and application approaches in and the spiritual dimension of the human beings are compared. The function of the spiritual domain in the life cycle is examined.

# **EDUC 6320 Practicum in Counseling I**

Six credits. Fifteen hours of practice and three hours of seminar per week.

Prerequisites: EDUC 6310 or its equivalent.

This course provides supervised experience in a real-world setting, focusing on counseling. The counselor candidate has the opportunity to apply the theories and knowledge acquired during their studies, helping them refine their attitudes, skills, and understanding. It offers opportunities for personal and professional growth through continuous self-evaluation, with weekly individual consultations and seminar meetings.

### **EDUC 6330 Seminar in Educational Research**

Three credits. One hour of lecture and two hours of laboratory work per week.

Prerequisites: EDUC 6400

Workshop in educational research that provides practical experience combined with discussions on the planning and development of the various phases of a research project. The course allows students to observe in the field the problems they might encounter during the course of an actual research project: administrative, personnel, interagency relations, among others.

## **EDUC 6340 Theory of Measurement I**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6405

Study of the classical and modern theory that underlies the use and development of measurement instruments in education and psychology.

## **EDUC 6350 The Psychology of Adult Learning**

Three credits. Three hours of lecture per week.

Description and analysis of adult behavior from late adolescence to old age with special emphasis on its relationships to the teaching-learning processes.

## **EDUC 6360 Group Counseling**

Three credits. Three hours of lecture per week.

This course focuses on guidance activities in groups, such as orientation, homeroom, vocational planning, discussion of test results, group dynamics, and group counseling. The course content will vary depending on the type of client the student-counselor works with. Special emphasis is



placed on the theory and practice of group counseling within educational settings and other similar environments.

# **EDUC 6390 Applied Statistics in Education I**

Three credits. Three hours of lecture per week.

Application of different statistical analysis in education, emphasizing their assumptions, justification, the processing of the data by computers, and the interpretation of the results. frequency distributions, measures of central tendency and variability, probability distributions, correlation (parametric and nonparametric), regression, and hypothesis testing (z, t, chi square, and one-way Anova). The use of computers is required.

# **EDUC 6400 Research Designs**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6509, EDUC 6390.

This course focuses on the study, analysis, and development of research designs in education. Students will engage in discussions regarding the strengths and challenges of various research designs, as well as issues related to reliability, validity, and credibility. The course includes a thorough analysis of research studies that illustrate these different designs. Instruction will be delivered through face-to-face, hybrid, and online modalities to accommodate diverse learning preferences.

# EDUC 6401 Legal, Ethical and Professional Issues in Counseling

Three credits.

One hour and a half of lecture, half an hour of discussion and one hour of workshop.

Analysis of the critical professional issues in counseling with an emphasis on ethical and legal standards of practice and the challenges for the 21st century.

# **EDUC 6405 Applied Statistics in Education II**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6390

This course focuses on the application of inferential statistics in education, emphasizing its assumptions, rationale, data processing, and interpretation of results. Topics covered include sampling, variance and covariance analyses, nonparametric statistics, correlation, and simple and multiple linear regressions. Students will utilize computer programs to conduct these statistical analyses, enhancing their practical skills in educational research.

#### **EDUC 6415 Action Research in Educational Contexts**

Three credits. Three hours of discussion per week.

This course involves the study of the epistemological, axiological, and theoretical foundations of action research, alongside its methods and techniques. Emphasis is placed on the connection between research and action to enhance teaching-learning processes and address problems in



educational contexts. Students will engage in practical exercises related to planning, implementing, and disseminating action research. The course is offered face-to-face, hybrid, and online modalities

### **EDUC 6431 Advanced Methods in Educational Statistics**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6390

This course serves as a continuation of the statistical theory and analysis introduced in EDUC 6390. It covers key topics such as probability in statistical decision-making, sampling theory and experimental methods, covariance analysis, multiple correlation and regression, discriminant functions, factor analysis, and non-parametric methods.

# EDUC 6445 Psychopathology, Human Development and Counseling

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6310

Introductory course in the study of psychopathology, human development and its relation to the counseling process. Emphasis will be given to the most common diagnosed mental illnesses and manifestations during the human developmental stages. Theories, research and the appropriate intervention strategies on mental conditions will be discussed. Emphasis will be given to the competencies a counselor must demonstrate regarding mental conditions.

# **EDUC 6455 Child Abuse Among the General and Special Needs Population**

Three credits. One hour of lecture and two hours of discussion.

The human rights foundations and legislation for the protection of minors and the types of maltreatment and neglect recognized in Puerto Rico are discussed. General risk factors affecting the general and special needs population as well as the implications of abuse associated with different disabilities are addressed. Intervention models and some education programs available in Puerto Rico will be discussed. Opportunities are provided to become familiar with the work of protection professional services and share ways in which educators in general and special education professionals in particular can contribute to reducing the incidence of child abuse by collaboration in prevention and intervention.

# **EDUC 6460 Seminar on School Laws of Puerto Rico**

Three credits. Six hours of lecture per week.

Analysis and discussion of school laws; rules and regulations of the department of education and supreme court decisions and their application to specific situations of special interest for the student.

### **EDUC 6465 Puertorrican Personality Representation**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6310

A historical - geographic and sociocultural perspective of the Puerto Rican personality is offered and discussed. Contemporary research is analyzed as well as conducted and their implications for education and counseling are also discussed.

#### EDUC 6501 Advanced Course in Foundations of Education I

Three credits. Three hours of lecture per week.

Study of educational problems from the perspectives of diverse disciplines associated with the foundations of education. Analysis of diverse philosophical sociological and psychological standpoints as they pertain and are applied to concrete problems in education at the local and international levels. Special emphasis is placed on the constitution of subjectivity and the role of educational institutions in that process.

#### EDUC 6502 Advanced Course in Foundations of Education II

Three credits. Three hours of lecture per week.

This course explores the concepts of humanity, focusing on human's origin, nature, mental processes, and personality. It delves into the theory of evolution and examines philosophical and psychological perspectives on the nature of man and theories of knowledge. Key topics include the processes and outcomes of learning, the nature of individual personality and rational self, and the pivotal role of the teacher in shaping and transforming personality. Additionally, the course analyzes Puerto Rican society from historical and anthropological viewpoints, emphasizing social and cultural change. Finally, it discusses philosophies of education and the necessary philosophical orientations for our educational system.

# **EDUC 6503 Education in Contemporary Society**

Three credits. Three hours of lecture per week.

The socio-economic factors influencing the demands, growth, and development of education in specific cultural areas with emphasis on Latin America, Africa, Europe, the United States and Russia.

### **EDUC 6507 Education and the Social Order**

Three credits. Three hours of lecture per week.

Prerequisite: Admission to the graduate program.

The school as a social institution and its relation to other aspects of society. Special emphasis on the application of general theory to Puerto Rican society and education. A critical evaluation of recent research.

#### **EDUC 6509 Research Methods in Education**

Three credits.

Study of the nature, scope, methods, qualitative and quantitative techniques of educational research, and the use of computerized technology. Emphasis on planning, conducting and evaluating types of research. Face-to-face online and hybrid course.

# EDUC 6510 The Philosophy of John Dewey

Three credits. Three hours of lecture per week.

This course examines various aspects of John Dewey's philosophy, tracing the evolution of his thought from absolutism to experimentalism. It focuses on Dewey's theory of knowledge, with particular emphasis on his influential work, *Logic: The Theory of Inquiry*. Additionally, the course explores Dewey's theory of art as articulated in *Art as Experience*, as well as his perspectives on society, politics, and law, highlighting key texts such as *Human Nature and Conduct*, *Reconstruction in Philosophy*, and *The Public and Its Problems*. Further discussions will include Dewey's contributions to ethics, religion, valuation, experience, psychology, history, and education, providing a comprehensive understanding of his impact on contemporary thought and educational practices.

## **EDUC 6511 Master's Thesis or Project**

Six credits. Meetings will be scheduled by agreement with the professor.

Preparation of the master's thesis or project, giving emphasis to the proposal and to the study of procedures to write the thesis or project.

# **EDUC 6512 Continuation of master's Thesis or Project**

Credits: 0Three hours of lecture per week.

Prerequisite: EDUC 6511

Continue the preparation of the master's thesis or project, giving emphasis to the implantation of the research or project and its defense.

### **EDUC 6513 Seminary: Qualitative Research in Education**

Three credits. Three hours of conference per week.

Prerequisites: EDUC 6509 or equivalent.

Critical analysis of theoretical basis, models, and contributions of qualitative research to the study and comprehension of educational problems. Study of the paradigms and epistemological assumptions that underline the qualitative research approaches and methodologies used. Development of competencies in research proposal writing and conducting research. Faceto-face hybrid and online course.

## **EDUC 6515 Field Experience in Educational Research and Evaluation**

Three credits. Six hours of laboratory work per week.

Prerequisite: EDUC 6400 and authorization from the professor.

This course provides field experience in the various steps involved in the research or evaluation process. Students are required to accumulate a minimum of 90 hours in supervised practice. This experience can be gained through participation in an accredited research center, collaboration on research projects with faculty members, or conducting evaluations in community programs or agencies. This course may be taken up to two times for a total of six credits.

# EDUC 6529 Cultural Deprivation, Family Dynamics, and Education in Puerto Rico

Three credits. Three hours of lecture per week.

Class related patterns of experience or living are seen from a socio-cultural points of view and related to personality dynamics, using socialization processes as the connecting link between the theoretical frames of reference. Case studies provide illustrative material. Results of psycho-social analyses are related to the educational problems of culturally disadvantage students.

# **EDUC 6537 Introduction to Guidance and Counseling**

Three credits. Three hours of lecture per week.

This course offers a systematic study of counseling as a discipline and professional field. It covers various aspects, including the historical perspective of the profession, the personal characteristics of professional counselors, theoretical approaches, and the counseling process. Key topics include client problem conceptualization, assessment in counseling, and the development of occupational counseling. The course will also explore future perspectives of the profession. Instruction will be delivered through face-to-face, hybrid, distance, and online modalities.

# EDUC 6538 Study of New Skills in Investigation and Learning Theories

Two credits. Two hours of lecture per week.

The course focuses on the study of theories, methods, strategies and research of recent investigations related to the process of teaching and learning.

# **EDUC 6539 Occupational Counseling**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6110, EDUC 6310.

The study of and proposition for new theoretical and practical trends in the design and implementation of intervention programs to promote occupational development. Critical analysis of occupational theories, research, programs, and services of occupational counseling in human resources and employment training, psycho-educative group field experience in scholar setting.

### **EDUC 6545 Practicum in Counseling II**

Three credits. Fifteen hours of practice and three hours of seminar per week.

Prerequisite: EDUC 6320

Intensive experiences in counseling under supervision. Emphasis on the interpersonal factors of the counseling relationship and self-understanding on the part of the counselor.

# **EDUC 6547 Seminar on Socioeconomic Changes in Latin America and their Consequences in Education**

Three credits. Three hours of lecture per week.

The purpose of this seminar is to show the close relationship between socioeconomic changes and educational development. Latin America is used as sample of such relationship.

# **EDUC 6549 Seminar in Recent Trends in Guidance**

Three credits. Three hours of lecture per week.

This course explores recent trends and innovative procedures in the field of guidance and related activities. Emphasis will be placed on ideas and practices that are currently having, or show promise of having, a significant impact on the profession. Participants will analyze emerging methodologies, technologies, and theoretical frameworks that shape modern guidance practices, fostering a deeper understanding of how these innovations can enhance the effectiveness of guidance and counseling services.

# EDUC 6550 History of Educational Ideas in Puerto Rico: Nineteenth and Twentieth **Centuries**

Three credits. Three hours of lecture per week.

Prerequisite: EDPT 4005 or its equivalent.

This course involves an investigation and discussion of the educational ideas that have shaped the Puerto Rican educational system since the 19th century. It begins with a general survey of the status of education in Latin America during the 19th century and progresses to contemporary times. The course includes an analysis of the philosophical and educational trends of the 19th century, comparing these with the educational orientation during the Spanish colonial period. Special emphasis will be placed on the contributions of influential figures in Puerto Rican education, such as Baldorioty, Tapia, and Eugenio María de Hostos, highlighting their impact on the evolution of educational ideas in the region.

### **EDUC 6551 Research and Creation Seminar in Curriculum and Teaching**

Three credits. Three hours of seminar.

Prerequisite: Successfully complete the comprehensive exam.

Integrative experience in which the student demonstrates research and creative skills in curriculum and teaching. This experience stems from the professional and academic interests of the student.

# EDUC 6555 Sociological Analysis of the School as an Institution

Three credits. Three hours of lecture per week.

This course explores the school as a social institution, focusing on the examination of educational roles and role relationships within the school environment. It investigates the etiology and resolution of role conflicts and analyzes the social structure of schools and its effects on communication, learning, and leadership. The course also addresses school-community relations and their impact on the overall functioning of schools. Recent research studies will be reviewed to provide insights into contemporary issues and developments in the field.

# **EDUC 6561 Seminar: Readings and Research in Educational Problems**

Six credits. Three hours of lecture and three hours of laboratory work.



Prerequisite: Twenty credits in graduate courses.

An independent study project of a topic or problem selected by a student in consultation with the professor or group of professors in charge of the course. Extensive readings and experimental work will be required. The student will report periodically to the professor on the progress of their final written report will be required.

# **EDUC 6575 Intervention Programs**

Three credits. Three hours of lecture per week.

This course presents an overview of interventions programs in place in various parts of the world, from diverse points of view: nutrition, education, cognitive development, recreation, motor development and others. The programs will be critically analyzed taking into account their objectives, implantation and socio-cultural milieu in which they provide services. The course will emphasize evaluation modes aimed at judging the effectiveness of the program.

# **EDUC 6579 Education, Urbanization and Urban Ecology**

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree

This course is designed for teachers, school administrators, supervisors, advisers, social workers, and other school personnel who require a foundational understanding of the social structures and processes within urban-metropolitan settings. The course will examine the educational needs, challenges, and opportunities arising from the changing ecology of cities, with a particular focus on metropolitan development in Puerto Rico. Key topics of study include urban ecology, the process and impact of urbanization, personal adjustment in urban environments, and urban renewal and planning. Whenever possible, field observations and studies will be conducted in various urban and suburban areas, including participation in model city projects and initiatives from the urban renewal and housing corporation.

# **EDUC 6580 Introduction to Quantitative Techniques of Research in Education**

No credits. Fifteen hours of lecture per week.

This course will acquaint students with the essentials of the techniques that deal with quantitative data for research projects in education. It will cover basic statistical tools for research concepts and procedures, formulation of a problem and documentation. Students will be provided with practical exercises to familiarize them with computational procedures commonly used in educational research.

## **EDUC 6586 Evaluation Theory and Methodology**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6509 and 6390.

Study of evaluation as specialized type of research. Critical analysis of main theoretical models; their epistemological and value judgmental basis as well as their methodologies. Development of basic skills for planning and conducting evaluation.

# **EDUC 6587 The Psychology of the Young Adult**

One credit. Three hours of laboratory work per week.

This course explores the psycho-social and educational implications of personal issues such as problems, satisfactions, hopes, struggles, encounters, frustrations, conflicts, and attitudes. It focuses on the dynamics that emerge in the journey of becoming a well-adjusted adult within the context of a rapidly evolving social order. Students will analyze how these factors influence personal development and adjustment, as well as their impact on educational processes and outcomes.

# EDUC 6588 Research Writing: Style and Language Usage

Three credits. Three hours of lecture per week.

This course aims to enhance students' awareness of language usage and improve their efficiency in communication. It involves an analysis of the science and art of style, focusing on its appropriate application in various contexts, particularly in written language. Students will engage in activities that promote effective communication skills and an understanding of stylistic nuances.

# **EDUC 6589 Teaching and Systems Analysis**

Three credits. Three hours of lecture per week.

This course focuses on the knowledge, skills, and attitudes necessary to apply systems analysis for improving teaching practices. It emphasizes the preparation of learning packages, incorporating key components such as structuring operational objectives, selecting content, implementing evaluative procedures (both pre- and post-evaluation), and choosing and preparing instructional materials and methods. Students will have the opportunity to design and create curricular materials utilizing various individualized instruction techniques. Additionally, participants will engage in a systematic analysis of course offerings and plan for the most efficient use of modern technology in the learning process.

#### **EDUC 6597 Construction of Measurement Instruments**

Three credits. One hour of lecture and two hours of laboratory work.

Prerequisite: EDUC 6390

Study of the basic theory and main systematic methods for constructing different types of measurement instruments. The course includes practical experiences in their development.

# **EDUC 6609 Educational Philosophy of Eugenio Maria De Hostos**

Three credits. Three hours of lecture per week.

Prerequisite: Graduate student.

Research, analysis and interpretation of the educational philosophy of Eugenio Maria de Hostos with the goal of deriving recommendations that can be applied to the Puerto Rican educational endeavor.



# **EDUC 6615 Vocational and Technical Education: Principles and Practices**

Three credits. Three hours of lecture per week.

Analysis and development of vocational education with emphasis on its projections and implications for preparing persons for work.

# **EDUC 6616 Multicultural Counseling**

Three credits. One hour and a half of lecture and one hour and a half of discussion per week.

This course explores multicultural concerns pertinent to knowledge and research in counseling, focusing on the beliefs, attitudes, and skills required of effective counselors. It addresses issues related to social justice and advocacy, examining how these factors influence the counseling process and the importance of cultural competence in fostering inclusive and equitable practices.

# **EDUC 6617 Curriculum Development in Vocational Education**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Analysis and application of curriculum models for vocational education, emphasis in curriculum model based on teaching competencies.

## **EDUC 8005 Cognitive Processes**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the director of the doctoral program.

Empirical and theoretical bases for the cognitive process. Critical and detailed analysis of the conceptual frame of thought, knowledge, reasoning, problem solving and learning of concepts.

# **EDUC 8006 Society and Education**

Three credits. Three hours of lecture per week.

Prerequisite: Authorization.

Study of sociological theories of education. Analysis of controversies and discourses related to current educational issues from the philosophical, historical, social cultural and economic perspectives. Emphasis on contemporary macrosocial issues and their impact in education. Research on problems and challenges of contemporary education.

# **EDUC 8009 Theories of Learning**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

Critical analysis of the assumptions, principles and logic of the main learning theories and the scientific methodology used by theorists in education implications of these theories for the curriculum development and teaching.

# EDUC 8010 Society, Culture, and Education in the Caribbean

Three credits. Three hours of lecture per week.

Critical analysis of research regarding the Caribbean area, focusing on regional and specific countries. Analysis of cultural, socio-economic and political trends and realities is emphasized in their relationship with education.

# EDUC 8015 Seminar on Pragmatism, Existentialism, And Knowledge of Self

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6501 – 6502.

Examination of three mutually exclusive perspectives on "human reality". It analyzes each of them in its bearing on the unresolved issues in philosophy, the social sciences, and education. Each of these positions appears to be valid; they will be studied by reading material by scholars in their fields.

## **EDUC 8017 The Role of the Counselor in Behavior Modification**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 6360

Analysis and application of behavior modification intervention models. Emphasis upon the development and strengthening of behavior considered appropriate in group dynamics.

## **EDUC 8018 Correlational and Causal Comparative Research**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6509 – 6390.

Study and development of non-experimental quantitative research in education, specifically, correlational and causal comparative research, both cross-sectional and longitudinal. Emphasis on the study of essential characteristics and methods. Includes practical experiences, use of technology and report writing.

# **EDUC 8020 Experimental Research in Education**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6405

Theory and practice in the design, analysis and interpretation of experimental and quasi experimental research. Critical review of substantive and methodological issues in planning and conducting experimental research in educational settings.

# **EDUC 8025 Ethical Perspective of Childhood and Education**

Three credits. One hour and half of lecture and one hour and half of discussion per week.

Philosophical analysis of childhood from the constructivist and naturalist perspectives. Explores the themes of children's rights in modernity starting from J.J. Rousseau's naturalism and I. Kant's ethics. Analysis of the applicability of the concepts of liberty, democracy, authority, and

punishment from the view of the effectiveness of the Socratic ethical precepts which supposes that ethical knowledge is sufficient to ensure moral behavior.

# EDUC 8037 Counseling Techniques and Strategies in the Secondary and Post-

Secondary School Levels

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8035 and EDUC 8036.

Study and critical analysis of counseling strategies and techniques and their application to secondary and post-secondary level students. Emphasis will be given to individual and group counseling processes and to the techniques that facilitate these helping processes with clients that present problems of vocational, academic, personal nature and interpersonal relationships.

# **EDUC 8038 Introduction to Family Counseling**

Three credits. Three hours of lecture per week.

This course examines historical antecedents, philosophical assumptions, and various models of family counseling and therapy. Students will assess different theoretical approaches to determine their applicability within Puerto Rican culture. Special emphasis will be placed on utilizing the discussed models for intervening with families experiencing conflict or crisis

# **EDUC 8039** Counseling Techniques and Strategies in the Preschool, Elementary and Intermediate Levels

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8036, EDUC 8019 and EDUC 8025.

This course provides a critical analysis of the techniques and strategies involved in the interview processing and evaluation of individual, group, and community counseling. It focuses on applications for preschool, elementary, and intermediate levels, addressing various issues such as vocational, academic, personal, interpersonal, and family problems. Students will engage with diverse populations, including regular, special, and dysfunctional groups, while exploring different counseling approaches—preventive, extended, and remedial.

# **EDUC 8040 Community Counseling and Human Ecology**

Three credits. Three hours of lecture per week.

Prerequisite: EDUC 8035 and EDUC 8036.

Analysis of community psychology involvement. Community and social institutions dynamic, as well as controversial issues of the Puerto Rican lifestyle will be studied. The counselor's role as social change agent will be emphasized.

# **EDUC 8046 Guidance and Counseling for Career Development**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

An exhaustive analysis of the literature and scientific research development on career development theories and their implications on the process of guidance and counseling of individuals who are going through different stages of growth and who find themselves in different settings (school, at work, etc.) in Puerto Rico.

# **EDUC 8056 Cognitive Development**

Three credits. Three hours of lecture per week.

Analysis of the main theories and empirical evidence relating to cognitive development. Implications of this knowledge for curriculum development and teaching.

# EDUC 8058 Meta philosophy, Epistemology and Ethics in Education

Three credits. Three hours of lecture per week.

The course examines the relation between philosophy and philosophy of education. Inquiries and evaluates problems which are inherent to teaching from the perspective of epistemology and ethics. The course may be offered in face-to-face, hybrid, distance, and online modalities.

#### **EDUC 8068 Non-Parametric Statistics in Educational Research**

Three credits. Three hours lecture per week.

Prerequisite: EDUC 6390 statistics to apply in education.

Study of the statistical tests used when the dependent variables in educational research are categorical (nominal or ordinal), and the data is distribution free. The tests included deal with one, two or more dependent and independent samples. Practical experience using computers is required.

#### **EDUC 8069 Law and Education**

Three credits. Three hours of lecture per week.

The legal bases for public and private institutions at all educational levels in Puerto Rico, including applicable federal laws. The powers, duties, procedures related with financing, management of property, decision making, students, working conditions and other related topics; critical evaluation and future needs.

# EDUC 8075 Ethics and Education: From the Classical Era to Postmodernity

Three credits. Three hours of lecture per week.

A comparative study of antiquity to postmodernism and its implication for education. Examination of the ethical educational doctrines of Socrates, Plato and Aristotle. Analysis of the relation between ethics and religion that was formed in the medieval period. Exploration of the transition to the modern era with an emphasis on secularization and how it affects education. The philosophers from the modern period to be studied are Hume, Kant, Rousseau, Kant, Hostos and Dewey. Study of contemporary trends with an emphasis on postmodern education.

### **EDUC 8076 Survey Research**

Three credits. Three hours' discussion per week. Prerequisites: EDUC 6509 and EDUC 6390.

Study and development of survey research in education in which telephone, electronic, mail and in person surveys are considered. Emphasis on design of samples to represent populations, as well as instruments and procedures for data gathering and analysis, includes practical experiences, technology use and report writing.

# **EDUC 8085 Gerontological Counseling**

Three credits. Three hours of lecture per week.

Intensive study of literature and research findings in the field of human development, focusing on adulthood. Emphasis on the application of knowledge and skills to cases of citizens over 65 at home or in institutions.

# EDUC 8086 Knowledge's and Gender: Implications for Education

Three credits. Three hours per week

Study of the social construction of gender from different theoretical and methodological approaches. Historical background of gender and women's studies, debates surrounding these studies, and research approaches from different fields of knowledge as they relate to education. Emphasis on the impact of gender and women's studies in education, especially in Puerto Rico, as well as its impact on research and educational practice.

### **EDUC 8088 Mixed Methods Research**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 6400 - EDUC 6513.

Analysis and design of research that includes quantitative and qualitative aspects. The course starts with an epistemological analysis of mixed methods research. Special attention will be given to the conceptualization of research problems and the design. also, research will be analyzed to illustrate different designs and identify their strengths and challenges.

## **EDUC 8089 Critical Thinking and Education.**

Three credits. Three hours of discussion per week.

This course critically examines, analyzes, and evaluates key readings on the theme of critical thinking. The first phase focuses on defining what constitutes critical thinking. The second phase delves into the modern, objectivist doctrine, exploring whether it is possible to transcend cultural and historical contexts to achieve an impartial, neutral viewpoint. The final phase addresses the postmodern contextualized perspective, analyzing arguments that suggest thought, like language, is relative to culture and the contingent nature in which both have developed.

# **EDUC 8097 Counseling for Students with Special Needs**

Three credits. Three hours of lecture per week.

Analysis of existing counseling models and their application for students with special needs. Development of counseling models targeting this population. The course will be offered in face-to-face, hybrid, distance, and online modalities.

## **EDUC 8117** The Motivational Moment of Life Therapy (Temomvi)

Three credits. Three hours' lecture and three hours' discussion per week.

Prerequisites: EDUC 6310 - PSIC 6005.

Study of the motivational moment of life therapy (temomvi in Spanish) developed by Ramos-Melendez, (1990). The therapy procedural and conceptual aspects are thoroughly discussed in this course. Participants are exposed to the study of real or simulated cases. In addition, a critical and comparative analysis of this therapy is included.

# **EDUC 8127 Organization and Administration of the Guidance and Counseling Programs at Preschool, Elementary and Intermediate Level**

Three credits. Three hours of lecture per week.

Prerequisites: EDUC 8036 and EDUC 8037.

Critical study and analysis of the organization and administration designs and structure of the guidance and counseling programs at pre-school, elementary and secondary level which facilitate its effectiveness.

## **EDUC 8128 Group Design in Guidance and Counseling**

Four credits. Three hours of lecture per week and thirty-six hours of workshop. Prerequisites: EDUC 6360, EDUC 8035, and EDUC 8019 or authorization from the professor.

Critical analysis of the theory and technology of group design and its application to guidance and counseling on the analysis of group effectiveness criteria as pivotal in the development of appropriate designs for different kinds of groups. Application of group design in situations and problems associated to education general terms.

#### **EDUC 8265** Action Research in Education al Contexts

Three credits. Three hours of discussion per week.

Epistemologic, axiologic (valorative) and theoretical bases of action research, and its methods and techniques. Emphasis is given to the link between research and action to improve teaching-learning processes and solve problems in educational contexts. Includes practice in planning, implementing and divulgation of this kind of research.

# **EDUC 8266 Ethnographic Research**

Three credits. Three hours of lecture per week.

Prerequisites: One of the following courses: EDUC 6400 – 6513.

Consideration of the theories and paradigms that support ethnographic research. Study of the strategies and techniques of ethnographic research as well as managing and analyzing information.

# **EDUC 8267 Models of Qualitative Analysis**

Three credits. Two hours of lecture and one hour of laboratory per week.

Prerequisites: EDUC 6513 or EDUC 8266.

This course involves the study and application of qualitative research models such as dramaturgical analysis, grounded theory, and Wolcott's DAI model, with a focus on using computer software for qualitative data analysis and applying these models to educational research.

# **EDUC 8268 Seminar: Controversial Issues and Ethical Aspects in Qualitative Research**

Three credits. Three hours of seminar per week. Prerequisites: EDUC 6400 or EDUC 6513.

In-depth study of the most relevant historical events of the regulations and international codes currently in force that emerged to protect participants in research in general and in qualitative research in particular. Critical analysis of literature and development of competencies to work with controversial aspects and ethics in qualitative research.

# **EDUC 8340 Theory of Measurement II**

Three credits. Three hours' discussion per week.

Prerequisite: EDUC 6340

This course involves the study of item response theory, generalization theory, and other models for analyzing test results, with an emphasis on applying these theories to the development of measurement instruments and the interpretation of results. It also includes the use of computer programs for conducting item and test analysis.

# **EDUC 8995 Directed Specialized Study**

One to three credits. One to three contact hours. Prerequisite: Authorization from the department

Exploration of special topics or problems of particular interest to groups of graduate students under the direction of a faculty member or visiting professor. This course may be taken up to a maximum of nine credits.



# **College of Humanities**

Mailing Address: 13 University Ave, Ste 1301, San Juan, Puerto Rico 00925-2533

Director: Dr. Emilio Ricardo Báez Rivera

Phone extensions: (787) 764-0000, extensions 89495, 89504 E-mail address of the Graduate Program: pgeh.rrp@upr.edu Portal:http://humanidades.uprrp.edu/graduados/?page\_id=425

**DEGREE**:

# **Master of Arts in Hispanic Studies**

#### **Research Centers:**

Multidisciplinary Studies Seminar

Federico de Onís Seminar: This Seminar is one of the most important research centers in Puerto Rico and the Caribbean and is visited by researchers from all over the world. The Seminar publishes the *Journal of Hispanic Studies*. The Seminar's projects and researchalso include the preservation and conservation of rare books, first editions, and thecataloging of the archives of Federico de Onís, Concha Meléndez, and Antonio S.Pedreira. Conferences, discussions and thesis

defenses are some of the activities that takeplace in this Seminar.

#### **Publications**

Revista de Estudios Hispánicos – Journal of Hispanic language and literature

#### **FACULTY:**

**Emilio Ricardo Báez Rivera**, Ph.D., University of Seville, 2005. Professor. Colonial Spanish-American Literature, Spiritual Autobiography, Transatlantic Hispanic Mysticism (ss.XVI-XXI).

**Rafael Alberto Bernabe Riefkhol**, Ph.D., State University of New York, Binghamton, 1989. Professor. Sociology, Puerto Rican literature.

**Sunny Cabrera Salcedo**, Ph.D., University of Massachusetts, Amherst, 1999. Professor. Hispanic Linguistics.

**Sofía Irene Cardona Colom**, Ph.D., University of Massachusetts, 1988. Professor.Contemporary Spanish Literature.

María Inés Castro Ferrer, Ph.D., University of Puerto Rico, 2002. Professor. Hispanic Linguistics.

**Fernando Alfonso Feliú Matilla**, Ph.D., University of California, Davis, 1994. Professor.Puerto Rican Literature, 19th and 20th Centuries.

**Rosa Elisa Guzzardo Tamargo,** Ph.D., The Pennsylvania State University, 2012. Associate Professor. Hispanic linguistics, bilingualism, psycholinguistics.

**María Luisa Lugo Acevedo,** Ph.D., University of Puerto Rico, 1995. Professor. Spanishand Aljamiada Literature of the Golden Age.

**Doris Evelyn Martínez Vizcarrondo,** Ph.D., Autonomous University of Madrid, 1998, Hispanic Linguistics.

**Miguel Ángel Náter Maldonado,** Ph.D., University of Puerto Rico, 2002. Professor. Hispanic American and Puerto Rican Literature; Spanish-American Theatre and Modernism.

**María Teresa Narváez Córdova,** Ph.D., University of Puerto Rico, 1988. Professor. Spanish and Aljamiada Literature of the Golden Age.

**Luis Alfredo Ortiz López**, Ph.D., University of New Mexico, 1996. Professor. Hispanic Linguistics and Hispanic Dialectology.

**Juan Otero Garabís**, Ph.D., Harvard University, 1998. Professor. Puerto Rican and Caribbean Literatures and Cultures; Cultural Studies.

**Melanie Ann Perez Ortiz**, Ph.D., Stanford University, 1999. Professor. Latin American and Puerto Rican Literature.

Carmen Ivette Pérez Marín, Ph.D., Harvard University, 1990. Professor. Latin American Literature.

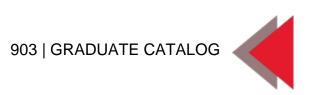
**Pamela F. Phillips**, Ph.D., Washington University, St. Louis, 1997. Professor. Spanishliterature of the eighteenth century.

**Zaira O. Rivera Casellas,** Ph.D., University of Massachusetts, Amherst, 2003. Professor. Editorial staff; Puerto Rican and Caribbean literature.

# **ADMISSION REQUIREMENTS:**

# General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/



# **Specific master's Program Requirements**

- 1. Bachelor's Degree in Hispanic Studies or related area.
- 2. Index of 3.00 or higher average
- 3. Two (2) letters of recommendation
- 4. Letter of Intent
- 5. If you are not a student of Hispanic Studies or a related area, you may be asked for a correquisite, depending on your academic record.

# **GRADUATION REQUIREMENTS:**

- 1. Successfully complete thirty credits of graduate courses.
- 2. Pass a degree exam.
- 3. Approve a thesis or project proposal.
- 4. Approve a thesis or project.
- 5. Take six credits of a modern or classical language in any modality (intensive or for researchers). If you have those language courses from your high school studies, youdon't have to take them in your master's degree.

#### **PROGRAM OF STUDY:**

Program Requirements	Credits
ESHI 6559-6560 Graduate Research	6
Supervised Courses	24
ESHI 6900 Comprehensive Exam	0
Thesis (oral presentation and written thesis)	0
ESHI 6895 Master's Thesis	0
ESHI 6896 Continuation of Master's Thesis	0
Total Credits	30

#### **OURSE DESCRIPTION:**

The course descriptions below are the most recent ones registered in the Student Information System of the Registrar's Office of the Río Piedras Campus as of June 30, 2023, and will be included in the 2023-2024 Graduate Catalog.

#### ESHI 6559 Graduate Research

Three credits. Two hours of lecture per week.

Prerequisite: Required for all candidates pursuing the Master of Arts degree in Hispanic Studies.

Prior authorization from the director of the department. Direction of the research work of the candidates in the preparation of the topic of their thesis.

#### **ESHI 6560 Graduate Research**

Three credits. Two hours of lecture per week.

Prerequisite: Required for all candidates pursuing the Master of Arts degree in Hispanic Studies.

Prior authorization from the director of the department. Direction of the research work of the candidates in the preparation of the topic of their thesis.

# ESHI 6900 General Degree Exam

Credits: 0

#### ESHI 6895 Master's Thesis.

No credit.

Preparation of the master's degree thesis.

#### ESHI 6896 Continuation of master's Thesis

No credit.

Continuation of the preparation of the master's thesis. Students may enroll for up to a maximum of 4 semesters according to communicationreceived from the Department of Graduate Studies of the College of Humanities.

#### OTHER COURSE DESCRIPTIONS:

#### ESHI 6010 The Romancero

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Commented reading of romances, their value, and their influence on literature. Analysis of content, style, metrics, and language.

# ESHI/LITE 6019 The European "Novella" and Legal Discourse

Three credits.

An hour and a half of lecture and an hour and a half of discussion per week.

Prerequisites: LITE 3011 (Modern Literature), LITE 3013 (Contemporary Literature) and LITE 3101 (Literary Theory).

The study of the relations between legal discourse and the European novella, and the analysis of the relations between *the novella and the* "fictitious case", paying attention to the way in which individual authors appropriate this discourse of classical antiquity for the purpose of validating and/or questioning their respective legal systems and the hierarchies that they support.

# ESHI 6039 Tragedy in Contemporary Spanish-American Theatre

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

Analysis of the links between contemporary Spanish-American drama and Greek myth andtragedy. The transformations of classic plays carried out by Latin American playwrights in the works of

Argentines, Chileans, Cubans, Dominicans, Puerto Ricans and Salvadorans, among others, will be studied.

# **ESHI 6046 Origins of New Puerto Rican Poetry**

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

The poetic productions of more than twentywriters born, most of them, between 1931 and 1938 are studied.

# ESHI 6048 The Caribbean Between Letter and Note: Literature, Musicand National Identity in the Hispanic Caribbean

Three credits. One hour of lecture and two hours of discussion per week.

Prerequisites: Be a graduate student of the campus or authorization from the professor.

Analysis and discussion of the construction of national and regional identities of the Hispanic Caribbeanas represented in literary texts and popular music during the second half of the twentieth century.

# ESHI 6049 Mystical-Feminine Literature in Spain and Latin America

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisites: Be a student of any Graduate Program of the College of Humanities, Education, Social Sciences, Communications or with the authorization from the professor.

This course examines the mystical-visionary discourse of religious women across the Hispanic Atlantic from the Renaissance to the Baroque, focusing on the theory of the mystical phenomenon and the conceptual framework for analyzing this unique literature in relation to religious texts, with a study of authors such as Saint Teresa of Jesus, Sister María Magdalena de Lorravaquio Muñoz (New Spain), Saint Rosa de Santa María (Peru), Sister Jerónima del Espíritu Santo, and Mother Francisca Josefa de la Concepción de Castillo (New Kingdom of Granada).

#### ESHI 6055 René Marqués Theatre

Three credits. Three hours of lecture a week.

Prerequisite: Authorization from the director.

This seminar is dedicated to the study of the dramatic art of René Marqués, with a focus on analyzing his ideological message and determining whether it fully integrates with his works.

#### ESHI 6056 The Poetry of Luis Lloréns

Three credits. Three hours of lecture a week.

Study of the poetic work of Luis Lloréns Torres and its values in Puerto Rican literature.Lectures, text analysis, reports, discussion.

#### ESHI 6057 Art and Problems of the Novel by Enrique A. Laguerre

Three credits. Three hours of lecture a week.



Prerequisite: Master's or doctoral students.

Analysis of Laguerre's novels to finally determine the balance between art and problematics.

#### ESHI 6058 The Narrative Work of Carlos Fuentes

Three credits. Three hours of lecture a week.

Introduction to the narrative work of the Mexican writer Carlos Fuentes (short story and novel) to examine the aspects that make up the personal narrative mode, as can be observed in some representative texts of his literary work.

#### ESHI 6065 Gender and Race in Puerto Rican Literature

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Be astudent of any graduate program in the College of Humanities, Education, or Social Sciences.

Study of various literary movements, authors, and texts of Puerto Rican literature from the critical frameworks of gender and race. The analysis of the texts will examine the role of sexual and racial representations in the processes of writing, as well as their relationship to the cultural, political, and social context of Puerto Rico.

# ESHI 6069 Recent Hispanic American Women's Narrative

Three credits. One hour of discussion, one hour of lecture and one hour of seminar per week.

Study of the canon of Latin American women's literature based on the analysis of the production of recent women writers. It will focus on the themes of literature and gender, conceptualization of the female character in narrative written by women, the relationship between the body and literature, and rewriting history from the female perspective.

# ESHI 6076 Hispanic American Existentialist Theatre

Three credits. Three hours of seminar per week.

The course revolves around the definition and history of avant-garde theatre in Latin America, based on theoretical readings and the analysis of primary texts of representative works of existentialist and absurd theatre.

# ESHI 6077 Walking and Seeing: Spain through Travel Literature from the Middle Ages to the Present

Three credits. Three hours of seminar per week.

This course examines Spanish travel literature from the Middle Ages to the present, highlighting the hybrid nature of the travel narrative and its intersections with genres such as geography, history, art, autobiography, letters, and fiction. The semester will focus on analyzing various forms of travel narratives (diaries, letters, newspaper articles, traditional narratives, etc.), the relationship between tourism and national identity, observation and description, socio-political critique, the traveler's perspective on landscape and space, and the connection between travel writing and the

novel in the creation of a literary textualized space.

#### ESHI 6085 Ortega y Gasset

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student at a seminar dedicated to the thought and literary work of Ortega y Gasset; its influence on twentieth-century literature and culture andits aesthetic values.

#### ESHI 6086 Peruvian Literature

Three credits. Three hours of lecture a week.

Prerequisite: ESPA 4221-4222 and Director's authorization.

Study of Peruvian literature from its origins to the present day through the study of fundamental authors and works.

#### ESHI 6087 Peruvian Literature

Three credits. Three hours of lecture a week.

Prerequisite: ESPA 4221-4222 and Director's authorization.

Study of Peruvian literature from its origins to the present day through the study of fundamental authors and works.

# ESHI 6089 Debates in Hispanic American Literature

Three credits. Two hours of lecture and one hour of discussion per week.

Panoramic discussion of the most important debates in Latin American literature from an interdisciplinary perspective.

# ESHI 6095 Spanish Mystical Literature

Three credits. Three hours of lecture a week.

Prerequisite: ESPA3211-3212, ESPA 4251-4252 and authorization.

Study of mystical literatureand its possible Semitic literary affiliation. Included are the works of St. John of the Cross, St. Teresa of Jesus, Fray Luis de León, Juan de los Angeles, etc.

#### ESHI 6101 Fundamentals of Hispanic Linguistics

Three credits. Three hours of lecture a week.

This course offers an overview of the evolution and characterization of the Spanishlanguage. A hand-held tour of the political, literary and cultural history of the Spanish-speaking world is carried out to identify the transformations that the Spanish language has undergone in its phonetics, morphosyntax and lexicon up to the present. In the process, the student will become familiar with the terminology of linguistics and the description of the Spanish language in each of its areas.

# **ESHI 6102 The Story in Puerto Rico**

Three credits. Three hours of seminar per week.

This course studies the short story of Puerto Rico, considering its historical development and its relationships with stylistic and regional currents. Based on the analysis of the theory, it will be applied to the most representative storytellers of the different literary periods, with special attention to recurring themes such as the representation of the countryside and thecity, the construction of the landscape, the influence of social circumstances and regional environments, among others.

# **ESHI 6105 Hispanic Linguistics**

Three credits. Two hours of lecture and one hour of discussion per week.

Study of the fundamentals of linguistic theory and analysis, applied to Spanish as a system, taking into account its phonetic and phonological, morphological, syntactic and semantic/pragmatic components, as well as its dialectal and sociolinguistic variants. Practical analysis exercises for the identification of linguistic units.

#### **ESHI 6125 Topics in Current Spanish Literature**

Three credits. One hour of lecture and one hour of discussion per week.

Analysis and discussion of topics in current Spanish literature from the political transition to democracy. Special attention is paid to the development of critical competence in the context of the production of contemporary literature in Spain. The literary corpus and theoretical foundation will vary depending on the topic. It can be repeated up to a maximum six credits, with different topics of study.

# ESHI 6206 Patriarchs and Melancholics: Normative Masculinity in the HispanicNarrative of the 21st Century

Three credits. Two hours of discussion and one hour of lecture per week.

Exploration of the ideas of identity, community and historical project that are raised and problematized in the most recent Hispanic narrative, linked to the myths of heteronormative masculinity in the Hispanic environment. Narratives by several contemporary authors from Spain and Latin America and films from the international environment related to the subjectare studied.

#### ESHI 6305 Seminar on Literary Research Methods

Three credits. One hour of discussion and two hours of seminar per week.

Study of texts related to literary research methods, aimed at delimiting, developing and reviewing a research topic. The steps or stages followed to investigate an object of literary study will be examined and discussed. It includes a stage of analysis, followed by the construction of a bibliography and a state of the art, and the formulation of hypotheses and the application of theoretical concepts that lead to a monograph of interestfor the field of study or novel interpretative writing of the literature.

# ESHI/LITE 6396 Literatura Aljamiada de los Moriscos Españoles

Three credits. One hour of lecture and two hours of discussion per week.



Study of the clandestine Aljamiado-Moorish literature, written by the Moors in Spain in the sixteenth century, written in a Romance language transcribed from the Arabic alphabet. This astonishing hybrid literature— Castilian and Arabic, written in the Golden Age— includespoems, religious treatises, legends, and historical testimonies of the tragic extinction of Spain's last Muslims. This hybrid literature receives both European and Oriental sources, both thematically and formally.

# ESHI 6405 The Spanish of America

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the Latin American linguistic modality andits regional varieties on a historical and cultural basis.

# ESHI 6406 The Language of Puerto Rico

Three credits. Three hours of lecture a week.

Prerequisite: Master's or PhD students.

Interpretation of the linguistic modality of Puerto Rico on a historical and cultural basis.

# ESHI 6409 Dominican Literature: 20th and 21st Century

Three credits. Two hours of lecture and one hour of discussion per week.

Study of Dominican literature, with special emphasis on the literature of the 20th and 21st centuries within a historical, social, and cultural context. Works, authors and main trends willbe analyzed, as well as the criticism around them. The relationships between Dominican and Puerto Rican literature will also be studied.

# ESHI 6422 Spanish Medieval Literature

Three credits. Three hours of lecture a week.

Lectures and readings of selected works.

#### ESHI 6429 Spanish Romanticism in the Nineteenth Century

Three credits. Three hours of lecture a week.

The expression of Spanish romanticism in the most outstanding works and authors, as an attitude towards life and as a literary phenomenon, encompassing the essential aspects of the culture of the time.

# ESHI 6430 Spanish Realism in the Nineteenth Century

Three credits. Three hours of lecture a week.

The Expression of Realism as a Nineteenth-Century Literary and Artistic Movement and a Reaction Against Romantic Subjectivism.



#### ESHI 6431 Galician Literature I

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student with an overview of Galician culture and literature from the 13th to the 20th century.

#### ESHI 6432 Galician Literature II

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student with an overview of Galician culture and literature from the 13th to the 20th century.

# ESHI 6435 Spanish Literature of the Post-Civil War I

Three credits.

Two hours of lecture and one hour of discussion per week.

Prerequisite: Be a master's or doctoral student.

Panoramic study of Spanish literature between 1940 and 1970. Analysis of authors and representative works.

# ESHI 6436 Spanish Literature of the Post-Civil War II

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Master's or doctoral students.

Panoramic study of post-modern Spanish literature from 1970 to the end of the 20th century. Analysis of the most representative authors and texts.

# ESHI 6437 Underdevelopment, Ideology and Literature in Latin America

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Undergraduate students with authorization from the director, professor or master's degree program.

Study of the Foundations and Sociological Problems of Latin American Literature, and their relationship to ideologies and underdevelopment. It also includes the relationships between literary production, structure and social production.

# ESHI 6438 Underdevelopment, Ideology and Literature in Latin America

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Undergraduate students with authorization from the director, professor or master's degree program.

Study of the Foundations and Sociological Problems of Latin American Literature, and their relationship to ideologies and underdevelopment. It also understands the relationships between literary production, structure and social production.

# **ESHI 6439 Colonial Literature**

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student in the Department of Hispanic Studies..

A broad overview of the rich discursive range of Spanish-American colonial literature will be presented in order to address —from the texts themselves —the notions that articulate the "journey to the seed" or the theory of the return of our twentieth-century writing.

#### ESHI 6451 Puerto Rican Dramatic Works

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student.

Study and analyze the works of the main authors of Puerto Rican theater in their historical trajectory and evaluate these works in thelight of contemporary criticism.

#### **ESHI 6452 Puerto Rican Dramatic Works**

Three credits. Three hours of lecture a week.

To study and analyze the works of the main authors of Puerto Rican theater in their historical trajectory, and to evaluate these works in the light of contemporary criticism.

# ESHI 6455 Contemporary Spanish Dramatic Works

Three credits. Three hours of lecture a week.

Prerequisite: Be a student of the master's or doctoral program.

Study of the main authors and works in contemporary Spain.

# ESHI 6456 El Contemporary Spanish Dramatic Works

Three credits. Three hours of lecture a week.

Prerequisite: Be a student of the master's or doctoral program.

Study of the main authors and works in contemporary Spain.

#### ESHI 6465 Central American Literature

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student at the College of Humanities.

Overview course on theliterature of Guatemala, El Salvador, Nicaragua, Costa Rica and Panama, from their mostremote pre-Columbian antecedents to the present day.

#### ESHI 6466 Central American Literature

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student at the College of Humanities.

Overview course on theliterature of Guatemala, El Salvador, Nicaragua, Costa Rica and Panama, from their mostremote pre-Columbian antecedents to the present day.

#### ESHI 6467 Guatemalan Literature of the Twentieth Century

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student studying the development of twentieth century.

Guatemalan literature, with special emphasis on the analysis of representative texts by major authors such as Arévalo Martínez, Asturias, Cardoza and Aragón, etc.

# **ESHI 6469 Argentine Literature**

Three credits. Three hours of lecture per week.

Prerequisite: Spanish 4221-4222 or its equivalent.

Panoramic view of Argentine literature from colonial times to contemporarytimes.

# **ESHI 6470 Argentine Literature**

Three credits. Three hours of lecture per week.

Prerequisite: Spanish 4221-4222 or its equivalent..

Panoramic view of Argentine literature from colonial times to contemporarytimes.

# **ESHI 6471 Gaucho Literature**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or undergraduate students with the Director's authorization.

Themanifestations of gaucho art in the works of representative authors will be examined:poetry, theater, novel, short story, folklore.

#### ESHI 6472 Gaucho Literature

Three credits. Three hours of lecture a week.

Prerequisite: Master's or undergraduate students with the Director's authorization.

The manifestations of gaucho art in the works of representative authors will be examined:poetry, theater, novel, short story, folklore.

#### **ESHI 6473 Antillean Literature**

Three credits. Three hours of lecture a week.

Prerequisite: Be a student of the master's or doctoral program.

The Literary Currents of Cuba, Santo Domingo and Puerto Rico, and their Relationship with the Rest of Latin America.

#### ESHI 6474 Antillean Literature

Three credits. Three hours of lecture a week.

Prerequisite: Be a student of the master's or doctoral program.

The Literary Currents of Cuba, Santo Domingo and Puerto Rico. Common characteristics and their relationship withthe rest of Latin America.

# ESHI 6476 Introduction to Twentieth Century Mexican Theatre

Three credits. Three hours of lecture a week.

Prerequisite: For master's or doctoral students.

Study of the main figures and movements of twentieth-century Mexican theater.

#### ESHI 6477 Introduction to Brazilian Literature

Three credits. Three hours of lecture a week.

A panoramic view of Brazilian literature from the sixteenth century to the contemporary era. Examination of the most important writers and works. Lectures, readings and commentaries on texts.

# **ESHI 6478 Introduction to Brazilian Literature**

Three credits. Three hours of lecture a week.

A panoramic view of Brazilian literature from the sixteenth century to the contemporary era. Examination of the most important writers and works. Lectures, readings and commentaries on texts.

#### **ESHI 6481 Mexican Literature**

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

An overall study of Mexican literature from its originsto the present day.

#### ESHI 6482 Mexican Literature

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

An overall study of Mexican literature from its originsto the present day.

# ESHI 6486 St. John of the Cross: The Western Tradition and the Semitic Tradition

Three credits. Two hours of discussion and one hour of lecture per week.

Study of the mystical work of St. John of the Cross, including his poetry and prose, in the light of the intertextual dialogue that the poet maintains with both Western and Semitic traditions (Hebrew and Arabic).

#### ESHI 6487 Folkloric Literature of Puerto Rico

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student.Lectures, readings, research, and analysis of Puerto Rican folklore reflected in poetry and prose.

#### ESHI 6488 Folkloric Literature of Puerto Rico

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Lectures, readings, research, and analysis of Puerto Rican folklore reflected in poetry and prose.

# ESHI 6489 Literature and Society in Puerto Rico: Nineteenth and Twentieth Centuries

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Application of the various currents of the sociology of literature to Puerto Rican literary production of the nineteenth and twentieth centuries.

# ESHI 6490 Literature and Society in Puerto Rico: Nineteenth and Twentieth Centuries

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Application of the various currents of the sociology of literature to Puerto Rican literary production of the nineteenth and twentieth centuries.

#### ESHI 6495 Illustration in the Chronicles of the Indies

Three credits. Three hours of lecture a week.

Prerequisite: Authorization from the director.

Examination of one of the most important sub-categories of the genre of the Indian chronicle, the illustrated chronicle, both in its European expression and in its Americanversions.

# ESHI 6496 Chronicles of the Indies: From the Fourteenth to the Twentieth Century

Three credits. Three hours of seminar per week.

Examination of the Dialogue between Colonial Literature and Contemporary Literature in Latin America (16th-20th Century).

#### ESHI 6515 Linguistics: Historical-Critical Study

Three credits. Three hours of lecture a week.

Prerequisite: ESPA 4011-4012 and 4205 or their equivalents.

Historical-critical study of ideas about language and linguistics as a science, from antiquity to the present day withspecial attention to the relationships between the various conceptions and schools.

#### **ESHI 6516 Linguistics: Historical-Critical Study**

Three credits. Three hours of lecture a week.

Prerequisite: ESPA 4011-4012 and 4205 or their equivalents.

Historical-critical study of ideas about language and linguistics as a science, from antiquity to the present day withspecial attention to the relationships between the various conceptions and schools.

# ESHI 6530 From the Jarchas to Góngora: Western Tradition and Semitic Tradition

Credits: Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of Semitic influences (Hebrew and Arabic) on Spanish literature from its origins to the seventeenth century.

# ESHI 6531 From the Jarchas to Góngora: Western Tradition and Semitic Tradition

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of Semitic influences (Hebrew and Arabic) on Spanish literature from its origins to the seventeenth century.

# **ESHI 6539 The Picaresque Novel**

Three credits. Three hours of lecture a week.

Study of the development of this genre, through the critical analysis of the most importantworks.

#### **ESHI 6540 The Picaresque Novel**

Three credits. Three hours of lecture a week.

Study of the development of this genre, through the critical analysis of the most importantworks.

# ESHI/LING 6541 Spanish Morphosyntax

Three credits. Three hours of lecture a week.

Presentation and study of the morphosyntactic level of language, in its application to the Spanish language, and its relations with the phonological, semantic and pragmatic levels, according to the most current models.

# ESHI 6545 The Spanish Essay in the Sixteenth and Seventeenth Centuries

Three credits. Three hours of lecture a week.

This course will examine the humanistic thought of Spain during the Golden Age, focusing on various non-fictional prose texts from different genres and themes, which represent the beginnings of the Spanish essay. The study will include historical, religious, philosophical, Erasmus-inspired, ascetic, and scientific works, written in genres such as epistles, miscellanies, dialogues, annotations, and speeches, some of which were published or circulated clandestinely. Through these texts, students will explore the humanistic ideas of inquisitorial Spain as expressed by authors like Fray Antonio de Guevara, the Molinos brothers, anonymous figures, and Moorish writers, who influenced major Golden Age authors.

# ESHI 6546 The Spanish Essay to the Generation of '98

Three credits. Three hours of lecture a week.

Exposition and analysis of the main ideas of the most representative essayists of nineteenth-century Spain with a succinct exposition of the precursors of the seventeenth and seventeenth centuries (XVII).

# **ESHI 6547 The Spanish Short Story**

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's and doctoral student in Hispanic Studies.

Historical-critical panorama of the short story in Spain from its medieval origins to its current manifestations. Analysis of texts that illustrate the development of the genre.

# ESHI 6548 Spanish Literature and Journalism in the Nineteenth Century

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Analysis of Spanish Literature and Journalism of the Nineteenth Century with an emphasis on the study of Mesonero, Alarcón and Bécquer.

#### ESHI 6551 The Contemporary Poetry of Puerto Rico

Three credits. Three hours of lecture a week.

Prerequisite: Bachelor's degree in Hispanic studies.

Graduate seminar to discover new truths about our poetry and critically examine its traditional conceptions. Thework of all our leading poets of the twentieth century will be analyzed.

# ESHI 6552 The Contemporary Poetry of Puerto Rico

Three credits. Three hours of lecture a week.

Prerequisite: Bachelor's degree in Hispanic studies.

Graduate seminar to discover new truths about our poetry and critically examine its traditional conceptions. Thework of all our leading poets of the twentieth century will be analyzed.

#### ESHI 6554 Sociology of Latin American Literature

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study and explanation of the basic concepts elaborated by the sociology of literature. The application of these concepts to Latin American literature constitutes the second phase of this course.

#### ESHI 6555 Nicaraguan Poetry of the Twentieth Century

Three credits. Three hours of lecture a week.

Prerequisite: Three hours of lecture per week.

Study of Nicaraguan poetry from Rubén Darío to the present with special emphasis on themost outstanding figures such as Salomón de la Selva, Alfonso Cortés, José Coronel Urtecho, Pablo Antonio Cuadra, Carlos Martínez Rivas and Ernesto Cardenal.

#### ESHI 6556 Lyric Poetry of the Golden Age and Literary Tradition

Three credits. Three hours of lecture a week.

Prerequisite: ESPA 4251-4252, ESPA 3211-3212.

In-depth studies of the great lyrical figuresof the Golden Age: Garcilaso, Fray Luis de León, San Juan de la Cruz, Herrera, Lope, Góngora and Quevedo, among others. We will work with the analysis of texts in class and with an extensive critical bibliography.

# ESHI 6557: Contemporary Hispanic American Poetry

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student in the department.

Poetic Avant-Garde in Latin America, which examines the antecedents of this literary phenomenon in modernism and postmodernism, the avant-garde movements themselves, and their poetic repercussions up to the present day. This course is offered in face-to-face, hybrid, and online modalities.

# ESHI 6558 Poetry in Puerto Rico: 2000s

Three credits. One hour of lecture and two hours of discussion per week.

Study of Puerto Rican poetics and poetry of the 2000s. Theoretical texts on the poetic factwill be discussed.

#### ESHI 6561 The Novel in Latin America

Three credits. Three hours of lecture a week.

Study of the directions of the Spanish-American novel from its origins to the present day. Critical analysis of the main novels.

#### ESHI 6562 The Novel in Latin America

Three credits. Three hours of lecture a week.

Study of the directions of the Spanish-American novel from its origins to the present day. Critical analysis of the main novels.

#### ESHI 6563 The Picaresque Novel in Latin America

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

This course examines the Spanish-American picaresquenovel through a comparative analysis of the genre and the study of the most representative works.

# ESHI 6565 The Essay in Latin America

Three credits. Three hours of lecture a week.

Study of this genre through the annotated reading of the most important works.

#### ESHI 6566 The Essay in Latin America

Three credits. Three hours of lecture a week.

Study of this genre through the annotated reading of the most important works.

# ESHI 6567 The Art of the Short Story in Latin America

Three credits. Three hours of lecture per week.

Study of the theory behind the creation of the short story, focusing on its most important theorists. Critical examination of twentieth-century Spanish-American short stories and their authors.

# **ESHI 6572 The Mexican Essay**

Three credits. Three hours of lecture a week.

Study of the Mexican essay from its origins in the nineteenth century to the present day, based on representative authors.

# **ESHI 6573 Narrative Techniques in the Novel**

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student.

Studying traditional and experimentalnarrative techniques in the contemporary Spanish-American novel.

# ESHI 6575 Theoretical-Analytical Reading of Latin American Texts

Three credits. Two hours of lecture and one hour of laboratory or workshop per week.

Prerequisite: Bachelor's degree in Hispanic Studies or Comparative Literature or graduate student.

Establish critical models based on theoretical systems applied to the analytical reading of Latin American texts.

#### **ESHI 6580 Narrative Literature in Puerto Rico**

Three credits. Three hours of lecture a week.

History of the novel and short story in Puerto Rico, mostly from 1843 to the present day. The course will be mainly done with the study and explanation of texts.

#### ESHI 6585 The Trial in Puerto Rico

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Studying the development of the essay inPuerto Rico through representative authors and texts.

# ESHI 6586 Literature and the Public Sphere in Puerto Rico

Three hours. An hour and a half of lecture and an hour and a half of discussion per week.

This course offers a study of specific Puerto Rican publications from the 19th and 20th centuries, with a focus on the kind of public sphere they propose or project. It explores how Puerto Rican writers have used their writings as tools for democratization, particularly in the face of heavy censorship during the 19th century. Special attention will be given to the discursive strategies employed by local writers to initiate the creation of this public sphere, with an emphasis on the modernizing consequences intended through their literature. The course will also examine the impact of imposed changes by the U.S. invasion on public discourse in the 20th century, and the effects of Puerto Rico's entry into industrial modernity.

# ESHI 6587 Costumbrismo y Criollismo en la Literatura Puertorriqueña

Three credits. Three hours of lecture a week.

Discussion and examination of this topic as an aesthetic and cultural manifestation within the Latin American sphere, through the study of works by various Puerto Rican authors; types, customs, traditions and folklore. Reading and commenting on texts, reports and conferences.

# ESHI 6588 Costumbrismo y Criollismo en la Literatura Puertorriqueña

Three credits. Three hours of lecture a week.

Discussion and examination of this topic as an aesthetic and cultural manifestation within the Latin American sphere, through the study of works by various Puerto Rican authors; types, customs, traditions and folklore. Reading and commenting on texts, reports and conferences.

# ESHI 6597 Spanish Meter and Rhythm

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Theoretical and practical analysis of the various Spanish metrification and rhythmic systems from the Middle Ages to the present.Lectures, readings and constant laboratory practices.

#### ESHI 6598 Spanish Metric & Rhythmic

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Theoretical and practical analysis of the various Spanish metrification and rhythmic systems from the Middle Ages to the present. Lectures, readings and constant laboratory practices.

#### ESHI 6627 Don Quixote de la Mancha

Three credits. Three hours of lecture a week.

An annotated reading of Don Quixote aimed at showing its aesthetic value.

# ESHI 6628 Don Quixote de la Mancha

Three credits. Three hours of lecture a week.

An annotated reading of Don Quixote aimed at showing its aesthetic value.

# ESHI 6631 The Spanish Novel of the Twentieth Century

Three credits. Three hours of lecture a week.

Examination of the panorama of the Spanish novel of the current century from thegeneration of '98 to contemporary production.

# ESHI 6632 The Spanish Novel of the Twentieth Century

Three credits. Three hours of lecture a week.

Examination of the panorama of the Spanish novel of the current century from thegeneration of '98 to contemporary production.

#### ESHI 6633 The Novels of Galdós

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

A seminar on the problems presented by thenovels of Benito Pérez Galdós. Reading, analysis of texts and monographs on the various aspects of his work.

#### ESHI 6634 The Novels of Galdós

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

A seminar on the problems presented by thenovels of Benito Pérez Galdós. Reading, analysis of texts and monographs on the various aspects of his work.

#### ESHI 6636 Azorín

Three credits.

Prerequisite: Be a master's or doctoral student in the Department of Hispanic Studies.

A seminar in which Azorín's literary work will be examined in the light of the Spanish problemsof his time, its aesthetic values and contributions to contemporary peninsular literature.

# ESHI 6637 The Novella in the Golden Age

Three credits. An hour and a half of lecture and an hour and a half of discussion per week. Prerequisite: ESPA 3211-3212, 4251-4252; be a graduate student; Professor's authorization for undergraduate students.

Analysis of the development of the novel in the Golden Age considering the Italian precedents of the genre (specifically Boccaccio, Cintio and Bandello) and its literary manifestation in three Spanish authors: Migues de Cervantes, Lope de Vega, María Zayas and Sotomayor.

# ESHI / LITE 6665 Jorge Luis Borges and the Theory of Literature

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

Examination of Borges' work and his theory of language and literary phenomenon.

# ESHI / LITE 6666 Modernism and Modernity

Three credits. Three hours of lecture a week. Prerequisite: Authorization from the director.

The presence of urban sensibility in the poetics of three representative authors of Modernism: Martí, Darío and Lugones.

#### ESHI 6683 The Generation of '30 in Puerto Rican Literature I-II

Three credits. Three hours of lecture a week.

Prerequisite. Be a master's or doctoral student.

The course involves a critical study of the authors from the Generation of the 30s in Puerto Rican literature. It focuses on their aesthetic values and contributions to the literary landscape. The significance of this group as a renewal movement in 20th-century Puerto Rican literature will be emphasized. Key texts and themes will be analyzed within their historical and cultural contexts. The course will also explore their influence on subsequent generations of writers in Puerto Rico.

#### ESHI 6684 The Generation of '30 in Puerto Rican Literature I-II

Three credits. Three hours of lecture a week.

Prerequisite. Be a master's or doctoral student.

The course entails a critical study of the authors from the Generation of the 30s, focusing on their aesthetic values. It emphasizes the group's importance as a renewal movement in 20th-century Puerto Rican literature. The course will analyze key texts and themes, exploring their historical and cultural contexts. Additionally, the impact of this generation on later writers will be examined.

#### **ESHI 6695 Theatrical Semiotics**

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Analysis and interpretation of theatre based on the theory of language, the semiotics of culture, literature and drama. The practical application of the theory is based on texts from the Golden Age and Latin America.

#### ESHI 6705 Problems of Puerto Rican Literature

Three credits. Three hours of lecture a week.

Study of the main problems presented by Puerto Rican literature to those who dedicate themselves to its study and research. Lectures, discussion, analysis of problems and commentary of theoretical texts on the problems studied.

#### ESHI 6811 The Hispano-American Theatre

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student in the Department of Hispanic Studies.

Study of the development of Latin American theater, the authors and main works and thecriticism around this genre.

# ESHI 6812 El Teatro Hispanoamericano

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student in the Department of Hispanic Studies.

Study of the development of Latin American theater, the authors and main works and thecriticism around this genre.

# **ESHI 6997 Seminar on Hispanic Literatures**

One to six credits. One hour of discussion and two hours of seminar per week.

Seminar in which current approaches are made to various topics of Hispanic literature. The course canbe repeated up to a maximum of six credits with topics of study each time the student enrolls. From January 2019 onwards, it can be repeated up to a maximum of 15 credits.



Mailing address: 13 University Ave, Ste 1301, San Juan, Puerto Rico 00925-2533

Director: Dr. Emilio Ricardo Báez Rivera

Phone number: (787) 764-0000, extensiones 89495, 89504 Graduate Program email address: pgeh.rrp@upr.edu

Website: https://humanidades.uprrp.edu/graduados/?page\_id=566

#### **DEGREE:**

# **Doctor of Philosophy in Hispanic Studies**

#### **Research Centers:**

Multidisciplinary Studies Seminar

Federico de Onís Seminar: This Seminar is one of the most important research centers in Puerto Rico and the Caribbean and is visited by researchers from all over the world. The Seminar publishes the Journal of Hispanic Studies. The Seminar's projects and researchalso include the preservation and conservation of rare books, first editions, and thecataloging of the archives of Federico de Onís, Concha Meléndez, and Antonio S.Pedreira. Conferences, discussions and thesis defenses are some of the activities that takeplace in this Seminar.

#### **Publications**

Revista de Estudios Hispánicos – J ournal of Hispanic language and literature

#### **FACULTY:**

**Emilio Ricardo Báez Rivera**, Ph.D., University of Seville, 2005. Professor. Colonial Spanish-American Literature, Spiritual Autobiography, Transatlantic Hispanic Mysticism (ss. XVI-XXI).

**Rafael Alberto Bernabe Riefkhol**, Ph.D., State University of New York, Binghamton, 1989. Professor. Sociology, Puerto Rican literature.

**Sunny Cabrera Salcedo**, Ph.D., University of Massachusetts, Amherst, 1999. Professor. Hispanic Linguistics.

**Sofía Irene Cardona Colom**, Ph.D., University of Massachusetts, 1988. Professor.Contemporary Spanish Literature.

María Inés Castro Ferrer, Ph.D., University of Puerto Rico, 2002. Professor. Hispanic Linguistics.



**Fernando Alfonso Feliú Matilla**, Ph.D., University of California, Davis, 1994. Professor.Puerto Rican Literature, 19th and 20th Centuries.

**Rosa Elisa Guzzardo Tamargo,** Ph.D., The Pennsylvania State University, 2012. Associate Professor. Hispanic linguistics, bilingualism, psycholinguistics.

**María Luisa Lugo Acevedo,** Ph.D., University of Puerto Rico, 1995. Professor. Spanishand Aljamiada Literature of the Golden Age.

**Doris Evelyn Martínez Vizcarrondo,** Ph.D., Autonomous University of Madrid, 1998, Hispanic Linguistics.

**Miguel Ángel Náter Maldonado,** Ph.D., University of Puerto Rico, 2002. Professor. Hispanic American and Puerto Rican Literature; Spanish-American Theatre and Modernism.

María Teresa Narváez Córdova, Ph.D., University of Puerto Rico, 1988. Professor. Spanish and Aljamiada Literature of the Golden Age.

**Luis Alfredo Ortiz López**, Ph.D., University of New Mexico, 1996. Professor. Hispanic Linguistics and Hispanic Dialectology.

**Juan Otero Garabís**, Ph.D., Harvard University, 1998. Professor. Puerto Rican and Caribbean Literatures and Cultures; Cultural Studies.

Melanie Ann Perez Ortiz, Ph.D., Stanford University, 1999. Professor. Latin American and Puerto Rican Literature.

**Carmen Ivette Pérez Marín**, Ph.D., Harvard University, 1990. Professor. Latin American Literature.

**Pamela F. Phillips**, Ph.D., Washington University, St. Louis, 1997. Professor. Spanishliterature of the eighteenth century.

**Zaira O. Rivera Casellas,** Ph.D., University of Massachusetts, Amherst, 2003. Professor. Editorial staff; Puerto Rican and Caribbean literature.

#### **ADMISSION REQUIREMENTS:**

General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific Requirements of the Doctoral Program:**

- 1. Master's degree in Hispanic Studies or a related area.
- 2. Have a 3.00 or higher average.
- 3. Two Letters of Recommendation.
- 4. Submit a Letter of Intent.
- 5. Students who have not completed a Master's Degree in Hispanic Studies or relatedarea may be required to have some co-requisites based on their academic record.

# **GRADUATION REQUIREMENTS:**

- 1. Successfully complete 30 credits of graduate courses.
- 2. Successfully complete a degree exam.
- 3. Approve a thesis or project proposal.
- 4. Approve a thesis or project.
- 5. Take six credits in the same modern language in any modality (intensive or for researchers).
- 6. Take six credits in Latin.

#### **PROGRAM OF STUDY:**

The PhD is offered with a major in Hispanic Studies. Through the selection of courses and,through the degree exam and the thesis project carried out by the student, they will be able to focus their studies towards Spanish Literature, Hispanic American Literature, Puerto Rican Literature or Hispanic Linguistics.

Programs	Credits
ESHI 8701-8702 Advanced Research	6
Supervised Courses	24
ESHI 8890 Degree Examination or ESHI 8900 Candidacy Examination	0
Oral defense of the thesis and delivery of the doctoral thesis in printed format and in UMI	0
ESHI 8891 PhD Thesis	0
ESHI 8892 Doctoral Thesis Continuation	0
Total Credits	30

#### **COURSE DESCRIPTION:**

The course descriptions below are the latest recorded in the Student Information System of the Río Piedras Campus Registrar's Office as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### ESHI 8701 Advanced Research

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

This course is limited to students who possess a Master of Arts degree or equivalent preparation and wish to conduct original research on a department-approved topic. Enrollment requires prior authorization from the director of the department.

#### ESHI 8702 Advanced Research

Three credits. Three hours of lecture a week.

This course is limited to students who possess a Master of Arts degree or equivalent preparation and wish to conduct original research on a department-approved topic. Enrollment requires prior authorization from the director of the department.

# ESHI 8890 Degree Exam

No credit.

This course is for students who are preparing to take the undergraduate exam before enrolling in a thesis. The student may enroll in this course for a maximum of two semesters. The student may withdraw only once.

#### ESHI 8900 Candidacy Exam

No credit.

Exercise equivalent to the doctoral degree exam (ESHI 8890). The student must demonstrate solvent knowledge in the selected area of specialization within Hispanic studies and capacity for research and writing in the doctoral program, through the exercise of three publishable monographs. It carries zero credits and a full academic load.

#### ESHI 8891 PhD Thesis

No credits.

Prerequisite: Total credits for the degree.

Preparation of the doctoral thesis.

#### **ESHI 8892 Doctoral Thesis Continuation**

No credit.

Prerequisite: Total credits required for the degree; ESHI 8891. Continuation of the preparation of the doctoral thesis.

The student may enroll in the course for up to a maximum of 8 semesters according to communication received from the Graduate Program of the College of Humanities.

#### OTHER COURSE DESCRIPTIONS:

#### ESHI 8005 Two Galician Writers: Rosalía de Castro and Emilia Pardo Bazán

Three credits. Three hours of lecture a week.

Study of the most representative works in prose and verse of Galician women writers.

# ESHI 8006 Alfonso Reyes

Three credits. Three hours of lecture a week.

Prerequisite: ESPA 3211-3212; ESPA 4221-4222 or Director's authorization.

Integralstudy of the literary personality of the Mexican humanist, with special emphasis on his considerations regarding Hispanic letters. It approaches Alfonso Reyes as an essayist,narrator, poet, researcher, literary theorist and critic.

# ESHI 8007 Garcilaso de la Vega and San Juan de la Cruz

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

The course explores in depth the works of two famouspoets of the Golden Age: Garcilaso de la Vega and San Juan de la Cruz and the critical studies to which they have been subjected. The two poets will be confronted in view of thevery different literary works they produce: Garcilaso de la Vega starts mainly from Greco-Latin and Italian sources, and San Juan, who incorporates these sources, alsoreflects, however, important Semitic poetic influences (Hebrew and Arabic).

#### ESHI 8008 The Baroque in the Current Cuban Novel

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

The Role of the Baroque Style in the Literary Production of Five Contemporary Cuban Novelists.

#### ESHI 8002 The Literary Work of José Asunción Silva

Three credits. Three hours of seminar per week.

Study of the literary work of the Colombian writer José Asunción Silva. The importance ofhis poetry and narrative for the development of modernism in Latin America will be highlighted.

#### ESHI 8009 Current Spanish Literature: Novel, Theatre

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student in the Department of Hispanic Studies.

A seminar on the Spanish novel and theatre from 1940 to the present. Readings, short lectures, oral and written reports on authors and representative works of the post-war period. Hybrid and online face-to-face course.

#### ESHI 8010 Juan Ramón Jiménez, Poetry and Poetics

Three credits. Three hours of seminar per week.

Study of the poetry and poetics of Juan Ramón Jiménez, Nobel Prize in Literature, in the light of the published work or through the consultation of the documentary legacy at the UPR- manuscripts with variants of his poems, notes of reflection or correspondence.

# ESHI 8015 Argentine Poetry of the Twentieth Century

Three credits. Three hours of lecture a week.

Study of twentieth-century Argentine poetry, studying its different orientations, styles, figures and most representative works.

#### ESHI 8016 Current Spanish Literature: Poetry

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate master's and doctoral student of the Department of HispanicStudies.

A seminar on Spanish lyric poetry from the generation of 1936 to the present. Readings, conferences, oral and written reports on the most representative movements, authors and works of this period.

# ESHI 8017 The Poetry of Julia de Burgos

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Studying the poetic work of Julia de Burgos and its values in Puerto Rican literature. Lectures, text analysis, reports, discussion.

#### ESHI 8018 The Poetry of Evaristo Ribera Chevremont

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Essential insight into your poetry with its stages, themes, and forms.

# ESHI 8019 The Poetry of Luis Palés Matos

Three credits. Three hours of lecture a week.

Study of the poetry of Luis Palés Matos in its various literary contexts: modernism, postmodernism, avant-gardism and Afro-Antillean poetry.

# ESHI 8020 Language Problems of Contemporary Spanish in Puerto Rico

Three credits. Three hours of seminar per week.

Prerequisite: ESHI 6406 Puerto Rican Spanish or its equivalent.

Requirements: Basic knowledge of the history of Puerto Rico, the history of the U.S., and the history of Latin America.

Analysis of contemporary Spanish in Puerto Rico considering its formation and evolution during

the twentieth century. Special attention will be given to the problems arising from their contact with English. Topics such as language policy, legislation generated in this regard, the acquisition and teaching of the vernacular, as well as the teaching of English as a second language, among others, will be discussed.

# ESHI 8025 The Poetry of Rubén Darío

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student studying the poetic work of Rubén Darío, highlighting its importance in the history of Hispanic poetry.

# **ESHI 8026 Emigration Literature in Puerto Rico**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the literature of PuertoRican emigration to the United States.

# **ESHI 8027 Field Linguistic Research**

Three credits. One hour of lecture and two hours of research per week. Doctoralcourse of field research on Spanish.

This course studies different theoretical models of description, including linguistic, introspective, analytical, and experimental approaches, highlighting their relevance in the study of Spanish. It covers methodological principles and strategies for field research, with data collection conducted in a real-speaking community in the Latin American-Caribbean environment. The linguistic analysis will focus on phonological, lexical, morphological, syntactic, and pragmatic aspects of the corpus, allowing students to examine the features of orality and the social and cultural roles of semantics and pragmatics. Students will also develop the skills and competencies necessary to conduct field research and test theoretical approaches and hypotheses about Spanish.

# **ESHI 8028 Pragmatics for Hispanists**

Three credits. An hour and a half of lecture, an hour of discussion and half an hour of research per week.

Doctoral level course in Hispanic Pragmatics.

This course explores the theoretical postulates of scholars such as Morris-Carnap, Wittgenstein, Austin, Searle, Grice, Anscombre, Ducrot, Halliday, Van Dijk, and Blakemore, focusing on the relationship between language as an abstract system and its practical use. It aims to establish the relevance of these theories in the study of Spanish. Key aspects of pragmatics will be examined, including deixis, implicature, involvement, presupposition, and intentionality. Additionally, the course will analyze courtesy, power structures, and conversational dynamics through the examination of colloquial conversation samples.

# ESHI 8029 Latin American Literary Theory and Criticism

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

Study of the historical development of literary theory and criticism in Latin America during the



twentieth century, through its fundamental texts. They highlight both the specificity of Latin American literatures and their historical valuation and development. The rhetorical dimension and the historical context in which the texts under study emerge are carefully considered. Critical and theoretical essays by Pedro Henríquez Ureña, Alfonso Reyes, Octavio Paz, Noe Jitrik, Ángel Rama, Josefina Ludmer, and Antonio Cornejo Polar will be included.

#### ESHI 8031 Castilian Medieval Prose I

Three credits.

Study of medieval Castilian prose in its historical, didactic and legal texts, Los"exiemplos" and the literature of preaching.

#### ESHI 8032 Castilian Medieval Prose II

A study of medieval Castilian prose through the novel of chivalry and sentimental andchivalric stories, travel and cosmographic books, poetics, exegesis and grammar.

# ESHI 8035 The Narrative Works of José Donoso

Three credits. Two hours of lectures and one hour of discussion per week.

Prerequisite: Bea student of any graduate program of the College of Humanities, Education, Social Sciences, Communication or Professor's authorization.

Analysis of José Donoso's most importantnarrative works and their relevance to the Spanish-American novel. Critics will discuss the development of the new novel and the boom, and specifically about Donoso's work.

# ESHI 8036 Seminar on Current Issues in Hispanic Linguistics

One to three credits. Three hours of seminar per week.

This seminar addresses current approaches to various or emerging topics in Hispanic linguistics. The course can be repeated for a maximum of 15 credits, allowing students to explore different topics of study each time they enroll.

# **ESHI 8037 Hispanic Sociolinguistics**

Three credits. Three hours of seminar per week.

Prerequisite: Hispanic linguistics or equivalent course.

Study of the theoretical and methodological postulates of sociolinguistics and their application to the various varieties of Spanish. Synchronic analysis of the links between phonetic, morphosyntactic and lexical-semantic variants of Spanish and the linguistic, sociolinguistic and pragmatic factorsthat condition them. Students will design and develop a sociolinguistic variation project in Spanish.

# **ESHI 8415 Spanish Historical Grammar**

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

A diachronic and synchronic study of the phonetics, morphosyntax, and grammatical categories of Spanish from Vulgar Latin.

# ESHI 8416 Spanish Historical Grammar

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the origins, development and current statusof the phonetic, morphological and syntactic aspects of the Spanish language.

# **ESHI 8431 Castilian Medieval Theatre**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of medieval Castilian theatre from its origins to Juan del Encina and Lucas Fernández, considering its liturgical and Latin antecedents and its prolongation in the Codex of its old cars. Lectures and text analysis.

#### ESHI 8434 The Generation of '98

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student.

Critical study of the authors who make up the generation of '98 and their aesthetic values considering its importance as a renewal movement group in twentieth-century Hispanic literature.

#### ESHI 8435 The Generation of '98

Three credits. Three hours of lecture a week.

Prerequisite: Be a master's or doctoral student.

Critical study of the authors who make up the generation of '98 and their aesthetic values considering its importance as a renewal movement group in twentieth-century Hispanic literature.

# ESHI 8436 The Generation of the Seventies in Puerto Rican Literature

Three credits. One hour of lecture and two hours of discussion.

This course focuses on reading and analyzing texts produced by Puerto Rican writers from the Generation of the Seventies, emphasizing both content and form. Additionally, it examines how academics have commented on and analyzed these works in relation to the preceding Generations of the Forties and Fifties and the writing that followed.

# ESHI 8447 Introduction to the Poetry of Góngora

Three credits. Three hours of lecture a week.

Reading and comprehension of Góngora's poetic work. Examination of texts, lectures, reports, examination of the critics of Góngora and final evaluation of his poetry as a literaryart.



# ESHI 8448 Introduction to the Poetry of Góngora

Three credits. Three hours of lecture a week.

Reading and comprehension of Góngora's poetic work. Examination of texts, lectures, reports, examination of the critics of Góngora and final evaluation of his poetry as a literaryart.

#### ESHI 8453 The Poetic Generation of 1927

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

Analytical study of this poetic generation (1927-1936) in the light of avant-garde poetry. Lectures, reports, analysis and explanation oftexts.

#### ESHI 8463 The Narrative of Alejo Carpentier

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

In this course, the themes, structures, and styles of the author's novels are studied.

# ESHI 8465 Seminar: Orientalism and Identity in Spanish Literature

Three credits. Three hours of seminar per week.

This course explores the themes of Orientalism and identity in the origins of Spanish literature, as well as its resurgence in the twentieth and twenty-first centuries. It involves the study of various works and authors from these periods to analyze the evolution and perspectives of Spanish identity in relation to Orientalism.

# ESHI 8466 Advanced Literary and Cultural Theory Seminar

Three credits. Three hours of seminar per week.

Prerequisite: Be a student of any graduate program at the Río Piedras Campus.

This course offers a detailed study of representative texts from various literary and cultural theories of the twentieth and twenty-first centuries. It begins with an examination of the fundamental elements that constitute literary or cultural theory, aiming to enhance the theoretical training of graduate students. Each semester focuses on a specific current of theoretical thought, allowing for in-depth exploration. The course can be repeated for up to 6 credits, with different topics covered each time a student enrolls.

# **ESHI 8479 Contemporary Antillean Literature**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of contemporary Antillean literature through the reading, analysis and explanation of the most representative texts and authors.



#### ESHI 8509 Advanced Styling

Three credits. Three hours of lecture a week.

Spoken language and literary language in its affective and imaginative aspects.

# ESHI 8510 Advanced Styling

Three credits. Three hours of lecture a week.

Spoken language and literary language in its affective and imaginative aspects.

# ESHI 8513 Literary Criticism: Theory and Practice

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Study of Literary Criticism: Concept, History and Major Contemporary Currents.

# **ESHI 8519 Hispanic Dialectology**

Three credits. Seven and a half hours of lecture per week.

Specialized courses in Spanish Historical description of the origin, formation, and evolution of archaizing dialects. Analysis of the current state and functioning of innovative dialect systems.

# ESHI 8525 The Spanish Medieval Songs of Deeds

Three credits. Three hours of lectures, discussions, and readings

Prerequisite: Master's or doctoral students.

Diachronic and synchronic study of the songs and fragments of the medieval Spanish epic that, in addition to El Cantar del Mío Cid, have been preserved. Learning philological and paleographic techniques. Its aesthetic and historical values are also considered.

# ESHI 8527 Four Lyricists of the Twentieth Century: Unamuno, Machado, Juan Ramón Jiménez and León Felipe

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of four great Spanishpoets, representative of our century.

#### ESHI 8537 Court Contempt in the Sixteenth and Seventeenth Centuries

Three credits. Three hours of lecture a week.

The course aims to examine a large part of the poems dedicated in the Golden Age to the cultivation of this feeling. In the first part, we will highlight those authors and works of classical antiquity that have influenced the formation and development of anti-court sentiment. The historical trajectory of the theme will be traced until its culmination in the Golden Age.

**ESHI 8539 Seminar: Picaresque Genre Theory** 

Three credits.

Seminar on the theory of the picaresque genre from the historical-social model to the structural model (Maravall, Lázaro Carreter, Claudio Guillén, Wicks, Cabo Aseguinolasa, Bataillon, Parker, Moreno Báez, among others) based on the examination offundamental works that present the beginning, culmination and decline of this genre in Spain.

# ESHI 8540 Seminar: Modalities of the Spanish Picaresque: Continuations, Sequelsand the Female Picaresque

Three credits. Three hours of seminar per week.

Seminar on the continuations and sequels of the picaresque novel in Spain, its influence onother Spanish authors and the breaking of genre barriers with the birth of the picaresque.

#### ESHI 8542 The Primitive Iberian Lyric and the Traditional Songbooks

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Studying primitive Iberian lyrics and poetry from traditional songbooks.

# ESHI 8543 Spanish Poetry of the Eighteenth Century

Three credits. Three hours of lecture a week.

Study and analysis of eighteenth-century Spanish poetry, in the light of the historical, cultural and aesthetic background of the works of the respective authors of the time.

# ESHI 8544 Spanish Prose and Theatre in the Eighteenth Century

Three credits. Three hours of lecture a week.

A critical examination of the thought and sentiment of eighth-century Spain based on readings of works and prose selections and a study of the tendencies and trajectory of theatre through the analysis of the most outstanding productions in this genre.

#### ESHI 8549 The Theme of the Tongue in Unamuno

Three credits. Three hours of lecture a week.

Prerequisite: Be a graduate student or fourth-year undergraduate student.

This course offers a study of a crucial aspect of Unamuno's intellectual life: his enduring preoccupation with language, including its nature, mission, and meaning in human development, as well as its cultural implications. The theme of language in Unamuno will be explored through its three fundamental facets: language as communication, as a means of expression, and as an instrument of artistic creation.

#### ESHI 8557 The Theatre of Lope de Vega

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral student.

An introduction to the main themes and problems of Lope de Vega's theatre through the systematic analysis of representative works by the author.

#### ESHI 8559 El Teatro de Calderón de la Barca

Three credits.

Prerequisite: Master's or doctoral students.

A study of Calderonian theatre as a manifestation of the Spanish Baroque. Lectures, readings, reports on the writer's work.

#### ESHI 8564 El Teatro de Florencio Sánchez

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of Florencio Sánchez's theatre andits socio-cultural environment.

# ESHI 8568 The Spanish-American Modernist Novel

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Analysis and interpretation of novels by various authors representative of Latin American modernism.

#### ESHI 8570 The Contemporary Peruvian Novel

Three credits. Three hours of lecture a week.

Prerequisite: Two previous courses in Latin American literature on traditional elements in Peruvian narrative.

Oral history; pre-Hispanic traits; the vision of the chronicles; the processfrom Garcilaso to Palma; our modernist tale; Inca legend, fantasy, providence. Indigenism and its derivations. Study of the works of Martín Adán, Ciro Alegría, José María Arguedas, Julio Ribeiro and Mario Vargas Llosa.

# ESHI 8575 The Poetry of Gabriela Mistral

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

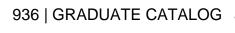
An analytical study of the poetic work of this Chilean writer. Readings, lectures and reports.

#### ESHI 8576 The Prose of Gabriela Mistral

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Annotated reading of Gabriela Mistral'sprose to highlight the human values of this little-known aspect of Chilean writing.



## ESHI 8577 The Contemporary Spanish Essay

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the essay genre within twentieth-century Spanish literature through the main authors and the most representativeessays.

#### **ESHI 8586 The Naturalist Novel in Puerto Rico**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of Naturalism in Puerto Rico: French and Spanish Influences, Historical-Literary Development, and analysis and interpretation of the major Puerto Rican naturalist novels.

## ESHI 8589 Magical Realism in Contemporary Hispanic American Literature and Criticism

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Studies of the concept of magical realism, itsabstract conceptions and realization as a literary structure. Definition of concepts and application to Latin American literary criticism through the analysis of literary and critical texts.

#### ESHI 8591-8592 Modernism in Puerto Rican Literature

Three credits. Three hours of lecture a week.

Introduction, Development and Function of Modernism and Literary Isms (1913-1941). Based on lectures and discussion of texts in verse and prose by representative authors.

#### **ESHI 8593 Contemporary Puerto Rican Literature**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of contemporary Puerto Rican literature through the reading and analysis of its most representative authors and works.

## ESHI 8595 Structure and Society in the Contemporary Hispanic American Novel

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of current sociological and structural currents according to the new criticism and applied to the analysis of current Latin Americannovels.

## ESHI 8597 José María Arguedas and Indigenism

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

A study of the literary works, techniques, and their relationship to the Spanish-American indigenist novel.

### **ESHI 8603 Linguistics and Literary Theory**

Three credits. Seven and a half hours of lectures per week.

This seminar-type course applies linguistic principles to the study and analysis of literary texts. It includes a historical perspective and explores modern schools such as idealism, structuralism, and stylistics, addressing various literary problems.

## ESHI 8615 Mystique and Poetry of Saint Rose of Lima

Three credits. Three hours of seminar per week.

Prerequisite: Graduate student at the Schools of Humanities, Education or SocialSciences.

This course involves a study of the mysticism and poetry of Saint Rose of Lima, focusing on her confessional declarations and the iconic-lexical literary discourse found in her two holographs. It will discuss the nature of her extraordinary experiences in the context of Renaissance mystical theology, along with the cultural currents that influenced her artistic expression. Special attention will be given to the inquisitorial processes of beatification and the two preserved holographs, which remain largely unknown to literary critics and serve as primary sources of her thought.

## **ESHI 8619 The Poetry of Miguel Hernandez**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Presentation and examination of the poetry of Miguel Hernández, as one of the members of the socalled Spanish generation of 1936. And a study of the different contemporary tendencies of Spanish poetry, as reflected in hiswork.

#### ESHI 8621 El Cantar del Mío Cid

Three credits. Three hours of lecture a week.

This course involves a commented reading and study of the value and influence of this work on later literature.

#### ESHI 8622 The Book of Good Love

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Cultural outline of The Book of Good Love. The problem of manuscripts, sources, structure, poetic form, and style.

#### ESHI 8623 La Celestina

Three credits. Three hours of lecture a week.

This course involves a commented reading and study of the value and influence of this work on later literature.

## ESHI 8635 Horacio Quiroga

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

Study and analysis of Quiroga's storyteller: its content, form and narrative world.

## ESHI 8641 The Literary Work of Juan Goytisolo

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

This course examines the work of Juan Goytisolo from two perspectives: a panoramic view that covers his entire oeuvre and a representative view that focuses on his most significant novels and key themes. This approach provides students with a comprehensive critical understanding of Goytisolo's contributions to literature.

#### ESHI 8647 One Hundred Years of Solitude

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

Detailed study of the novel One Hundred Years of Solitude by Gabriel García Márquez as a culminating work in the production of its author and as an example of current trends in Hispanic American narrative.

#### ESHI 8651 Poetry by Federico García Lorca

Three credits. Three hours of lecture a week.

Analysis of the poetic work of Federico García Lorca and its situation within the framework of Spanish poetry and modern art. Sources of poetry, characteristics of substance, form and anguage. Lectures, text analysis and reports.

## ESHI 8652 The Theatre of Federico García Lorca

Three credits. Three hours of lecture a week.

Analysis of the dramatic work of Federico García Lorca and its situation within the framework of Spanish theatre and modern dramatic art. Sources of this theatre, characteristics, text analysis and reports.

#### ESHI 8653 The Mexican Novel

Three credits. Three hours of lecture a week. Prerequisite: Master's or doctoral students.

Study of the most significant trends, authors, andworks of the Mexican novel from 1816 to 1910. The study will be preceded by a historical-cultural introduction to Mexico.



#### ESHI 8654 The Mexican Novel

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the most significant trends, authors, andworks of the Mexican novel from 1816 to 1910. The study will be preceded by a historical-cultural introduction to Mexico.

#### ESHI 8655 The Work of Valle Inclán

Three credits. Three hours of lecture a week.

Prerequisite: Graduate studies.

Study of the literary work of Valle Inclán. Proseand poetry.

#### ESHI 8656 The Literary Work of Valle Inclán

Three credits. Three hours of lecture a week.

Prerequisite: Graduate studies.

Study of the literarywork of Valle Inclán. The theatre.

## ESHI 8657 The Literary Work of Baltasar Gracián

Three credits. Three lecture hours a week.

A seminar on the literary work of Baltasar Gracián. Analytical study of the structure, technique, and style of his major literary works.

#### ESHI 8661 The Poetry of Leopoldo Lugones

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Analysis of Lugones' poems in the light of their sensory, affective and logical content.

#### ESHI 8663 José Martí

Three credits. Three hours of lecture a week.

Study of the personality and work of José Martí with special attention to his thoughta its literary expression. Lectures and text commentaries.

#### ESHI 8664 José Martí

Three credits. Three hours of lecture a week.

Study of the personality and work of José Martí with special attention to his thoughta its literary expression. Lectures and text commentaries.

#### ESHI 8667 Martín Fierro

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

This course provides essential information about the historical and social context in which *Martín Fierro* emerged, exploring the trajectory that led to its creation. It specifically examines the poem's key elements to achieve a comprehensive understanding of its literary values and significance in Hispanic literature.

#### ESHI 8670 Literature and Urban Culture in Mexico

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

This course studies the representation of urban culture in various forms, including novels, testimonies, urban chronicles, and cultural essays, alongside other artistic practices such as popular song, photography, and architecture during Mexico's modernization process from 1940 to 1970. It alternates analysis of texts by Ramos, Novo, Paz, Monsivais, Fuentes, Poniatowska, and Blanco with the examination of Mexican boleros, the photography of Álvarez Bravo, and the architecture of Pani. Theoretical frameworks will be drawn from essays on urban culture and cultural studies by Benjamin, Certeau, Easthope, and García Canclini.

#### ESHI 8671 The Chilean Novel

Three credits. Three hours of lecture a week.

A panoramic examination of the development of the Chilean novel from its beginnings to the present day. Study and evaluation of this novel through the analysis of the works of the mostrepresentative authors: Mariano Latorre, Eduardo Barrios, Pedro Prado and others.

#### **ESHI 8672 The Chilean Novel**

Three credits. Three hours of lecture a week.

A panoramic examination of the development of the Chilean novel from its beginnings to the present day. Study and evaluation of this novel through the analysis of the works of the mostrepresentative authors: Mariano Latorre, Eduardo Barrios, Pedro Prado and others.

#### ESHI 8673 The Novel of the River Plate

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the historical development and analysis of the problems of the narrative of the Río de la Plata from its beginnings to the present.

#### ESHI 8674 The Novel of the River Plate

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

Study of the historical development and analysis of the problems of the narrative of the Río de la Plata from its beginnings to the present.

## **ESHI 8675 The Contemporary Chilean Novel**

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral student.

An analytical study of the mostrepresentative authors and works of the contemporary Chilean novel.

## ESHI 8677 The Literary Work of Sor Juana Inés de la Cruz

Three credits. Two hours of lecture and one hour of discussion per week.

Prerequisite: Be a student of any graduate program in the College of Humanities, Education, or Social Sciences.

This course involves the study of the literary discourse of Sor Juana Inés de la Cruz, examining her thought through the lens of the patriarchal ideology of her time. It focuses on the two key spaces where she excelled as an intellectual woman: the Viceregal court and the convent cloister. A selection of texts representative of the various genres that Sor Juana cultivated will serve as the corpus for analysis, reflecting the circumstances and audiences she addressed.

## ESHI 8682 Juan Antonio Corretjer

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

The course considers the author's participation in the history of Puerto Rico as a source for understanding and interpreting the ideological bases of his works. It takes into consideration his literary production within the development of Puerto Rican literature and studies the aspects of his style while analyzing itin a comprehensive way.

#### ESHI 8688 Manuel Zeno Gandía

Three credits. Three hours of lecture a week.

Study and commentary of the work of this Puerto Rican novelist within the framework of itsliterary atmosphere. Lectures, reading of texts and reports.

#### ESHI 8689 Eugenio María de Hostos

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students with authorization from the director.

The course studies Eugenio María de Hostos' life and work.

## ESHI 8694 The Poetry of César Vallejo

Three credits. Three hours of lecture a week.

Prerequisite: Master's or doctoral students.

A study of César Vallejo's poetic works, theirplace in Latin American literature, sources, content, form, and language.



## ESHI 8991 Spanish Discourse Analysis

From one to six credits. Three hours of seminar per week.

Seminar on a variety of topics aimed at the discourse of the Spanish language. It can be repeated with different topics up to a maximum of six credits.



**Graduate Program Director/Coordinator:** Dra. Dialitza Colón Pérez **Mailing Address**: 13 Ave University Ste 1301 San Juan, PR 00925-2533

**Telephone:** 787-764-0000 Ext. 89535, 89549 **Email:** pgf.rrp@upr.edu, dialitza.colon@upr.edu

**DEGREE:** 

## Master of Arts in Philosophy

#### **FACULTY:**

**Dialitza Colón Pérez,** Ph.D., Assistant Professor. Autonomous University of Barcelona, 2012. Aesthetics, Philosophy of Art, Philosophy and Film.

**Raúl de Pablos Escalante,** Ph.D., Professor. University Complutense, Madrid, 2012. Modern Philosophy and Contemporary Philosophy, especially Spinoza and Nietzsche.

**Etienne Helmer,** Ph.D., Professor. Université de Paris I Panthéon Sorbonne, 2004. Ancient Philosophy, Ancient Ethics and Politics, especially Plato. Philosophy of Photography.

**Anayra Santory**, Ph.D., Professor. Indiana University, Bloomington, 1994. Political and Social Philosophy, Social Philosophy, Cultural History of Philosophy.

**Rocío Zambrana,** Ph.D., Assistant Professor. New School for Social Research, New York, 2010. German Idealism (especially Hegel); Marx and Critical Theory (especially Frankfurt School), Epistemology and Decolonial Thought.

#### **COLLABORATORS:**

**Carlos Rojas Osorio,** Ph.D., Javeriana University, Bogotá, Colombia, 1981. Professor *Emeritus*. Epistemology, Ontology, Latin American Philosophy.

**Dennis Alicea,** Ph.D., Brown University, 1987. Pragmatism, John Dewey, Contemporary Philosophy.

**Francisco José Ramos,** Ph.D., University Complutense, Madrid, 1982. Philosophy and Buddhism, Aesthetics.

#### **ADMISSION REQUIREMENTS**

#### **General Campus Requirements**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/SPECIFIC MASTER'S PROGRAM REQUIREMENTS

- 1. Some undergraduate degrees in philosophy and some knowledge of the following areas: logic, ancient philosophy and modern philosophy.
- 2. Successfully complete theoretical courses in other areas of knowledge.
- 3. If necessary, the Department of Philosophy will provide the resources to remedy deficiencies in basic knowledge of the History of Philosophy.
- 4. Bachelor's degree or its equivalent. Students must submit certified proof of their degree; if they hold an equivalent foreign degree, the admissions office must validate it.
- 5. A minimum academic index of 3.00 points, both general and specialty. In exceptional cases, we may admit students with a lower index.
- 6. Spanish proficiencyn (the language in which the courses will be taught). Sufficient knowledge of English as a research instrument. The College of Humanities provides the necessary courses to improve the language skills of admitted students.
- 7. Two letters of recommendation.

## **GRADUATION REQUIREMENTS:**

- 1. Completion of 30 credits. These include the courses: *Research Project in Philosophy*, *Research Project in Philosophy*, and three (3) credits in each of the following areas:
- 2. Logic or Philosophy of Language.
- 3. Epistemology and Metaphysics.
- 4. Practical Philosophy or Aesthetics.
- 5. Demonstrate knowledge of a third language that will be useful for further studies, research projects or broaden their academic possibilities.

## **STUDY PROGRAM**

PROGRAM REQUIREMENTS:	CREDITS:
Core Courses	
Logic or Philosophy of Language	3
Epistemology or Metaphysics	3
Practical or Aesthetic Philosophy	3
FILO 6060: Research and Writing in Philosophy	3
FILO 6795: Research Project in Philosophy	3
Directed selection courses in Philosophy	
6000-level elective courses in Philosophy	9
Free Electives	
Elective or FILO 6002: What is Philosophy?	3
Free Elective	3
Total:	30

#### **COURSE DESCRIPTIONS:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## FILO 6002: What is Philosophy?

3 credits.

This course is designed for graduate students who have not studied philosophy or who wish to enhance their discipline-specific skills, such as critical thinking, independent study, and research. Methodological topics will include identifying and addressing problems, arguments, and concepts in philosophical readings. Additionally, guiding debates on the history of philosophy and its relationship with other disciplines and its broader context will be explored. The course will be offered in face-to-face, hybrid, and online modalities.

## FILO 6060: Research and Writing in Philosophy

3 credits.

The course is aimed at learning and getting familiar with various aspects of research and writing in philosophy, according to the needs of the students in their own research. General aspects regarding content and formal structure of research in philosophy will be studied, such as: approach to a philosophical problem, organization and schematization of ideas, selection of bibliography, elaboration of arguments, among others. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6795: Research in Philosophy

3 credits.

Prerequisites: Completion of 100% of the core course credits and 50% of the elective courses' credits.

In this course the student will be able to explore a philosophical topic of interest in the company of a director, develop a proposal, write and complete a project to be defended as the final research project, leading to a master's degree. The final product of this directed research can be: 1) the writing of a philosophical essay like an article of scientific quality, or 2) the design and execution of a philosophical intervention project in a specific area of intertest. Intervention projects must include an essay explaining their philosophical relevance. The student will finish the course when they defend their final research project in front of their committee. This course will be offered face-to-face, hybrid and online modalities.

#### FILO 6796: Continuation Research Project in Philosophy

Credits: 0Research.
Prerequisites: FILO 6795

Continuation of the research project leading to the master's degree. The student will finish the course when they defend their final research project in front of their committee. This course will be offered face-to-face, hybrid, distance and online modalities.

## Thematic area depends on the record

## FILO 5006: Latin American Philosophy

3 credits.

This course approaches the problem of Latin American philosophy identity, its characteristics, and European and North American influences. It also explores the reappropriations that Latin American philosophy has done of diverse currents of thought, resulting in original cultural contributions to philosophy and beyond. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6005: Philosophy of Nietzche

3 credits.

This course involves an intensive study of one or more works of the philosopher, focusing on the key issues in his thought, such as the critique of metaphysics and ethics, willpower, and other central concepts. Additionally, the course will examine his methodological approaches, including genealogy and perspectivism. It will be offered in face-to-face, hybrid, and online modalities.

## FILO 6017: Platonic Philosophy

1 to 3 credits.

Study of themes, concepts and texts of Plato's philosophy and Platonism. The course can be organized in sequences of topics and themes, or it can consist of the running commentary of one or several dialogues. The student would be able to take the course more than once up to a maximum of three credits, if it is offered on different topics. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6047: The Philosophy of Kant

3 credits.

A study of some of Kant's works as well as those of some of his commentators and critics.

## FILO 6061: Classic Works of Modern Philosophy

3 credits.

In this course, one or more representative works of modern philosophy will be systematically studied, such as: R. Descartes' *Meditation of First Philosophy*, J. Locke's *Essay Concerning Human Understanding*, D. Hume's *A Treatise of Human Nature*, I. Kant's *Critique of Pure Reason* or Schopenhaur's *The World as Will and Representation*, among others. The course may be repeated up to a maximum of six credits when different contents are addressed. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6155: Philosophical studies on metaphor

3 credits.

Paul Ricoeur's *The Rule of Metaphor*, one of most important and systematical studies on metaphor to emerge in recent years, will be critically examined and considered in detail. This course links analytical and continental philosophical traditions of studies on metaphor. The different levels of metaphor's functioning - word, phrase and discourse - will be examined as segments of a unique itinerary whose stations are correspondingly classic rhetoric, semiotics and semantics, and hermeneutics. The referential problem of metaphor and its relations to reality will be examined as a very special problem.

# **FILO 6205: Presocratic Philosophy** 3 credits.

This course is dedicated to the study of significant pre-Socratic philosophers, including figures such as Xenophanes of Colophon, Pythagoras, Anaxagoras, Empedocles, the atomists (Leucippus and Democritus), and the sophists. It will be grounded in the examination of texts, emphasizing a variety of issues, including metaphysical, epistemological, political, and ethical questions. These topics will be explored in relation to their contributions to the understanding of ancient Western philosophical thought as well as their impact on later periods in Western philosophy. The course may also focus on a specific subject or problem in depth.

# FILO 6206: Classic works of Ancient Philosophy 3 credits.

This course focuses on the study of one or more works from the Western classical philosophy, encompassing texts from the pre-Socratic philosophers to St. Augustine. It will examine a range of issues, including metaphysical, physical, epistemological, political, and ethical problems through the selected works. Special emphasis will be placed on the general structure, main themes, and concepts of these texts, along with a detailed analysis of specific excerpts. These themes, problems, and concepts will be explored in relation to their contributions to the overall thought of the authors and their significance within the broader context of Western philosophy.

# **FILO 6415: Topics and problems in Modern Philosophy** 3 credits.

This course involves a study of key issues in modern philosophy, including the notion of an idea, the concept of nature, the mind-body problem, theories of the state and law, and the distinction between reason and passion. A particular focus will be placed on the rejection of the mediation of images or signs in perception, exploring how this perspective influences various philosophical debates and frameworks.

## FILO 6455: Lecture of Aristotle

3 credits.

Study of Aristotle's thought as appears in his remaining documents. Lecture and analysis of one of his writings of greater philosophical significance, such as the central books of *Metaphysics*, or the first four books of *Physics*, book ii and iii of *De Anima*, the *Posterior analytics* or the *Nicomachean Ethics*. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6507: The Philosophy of Heidegger

3 credits

A study of some of Heidegger's works, as well as those of some of his commentators and critics.

## FILO 6605: Directed Research in Philosophy I

1 to 3 credits.

The number of credits and contact hours for this course will be determined by the faculty, with the number of contact hours based on the credit allocation. This course focuses on researching a specific topic of philosophical interest, which must be agreed upon in writing by the professor and students before enrollment. This agreement will outline the research topic, methodology, texts, materials, and evaluation methods. A copy of this agreement will be filed in the Philosophy Department. The course FILO6605 is typically taken alongside some or all the following courses: FILO6615, FILO6616, and FILO6606, with a maximum of 9 credits available toward the degree among these four courses.

## FILO 6606: Directed Research in Philosophy II

1 to 3 credits.

The number of contact hours for this course will depend on the number of credits assigned. This course focuses on researching a specific topic of philosophical interest, with the professor and students agreeing in writing on the research topic, methodology, texts, materials, and evaluation methods before enrollment. A copy of this written agreement will be deposited in the Philosophy Department. The course FILO6606 is typically taken alongside some or all the following courses: FILO6615, FILO6616, and FILO6605. A maximum of 9 credits may be earned toward the degree among these four courses. Topics include the political dimension of sexuality and the economy in cities. This course will be offered in face-to-face, hybrid, and online modalities.

## FILO 6615: Directed Reading in Philosophy I

1 to 3 credits.

The number of credits and contact hours for this course will be determined by the faculty, with contact hours varying based on the assigned credits. This course is dedicated to researching a specific philosophical topic, which the professor and students will agree upon in writing prior to enrollment. This agreement will outline the research topic, methodology, texts and materials to be used, and evaluation methods. A copy of this written agreement will be deposited in the Philosophy Department. The course FILO6615 is typically taken alongside some or all the following courses: FILO6605, FILO6606, and FILO6616. A maximum of 9 credits may be earned toward the degree across these four courses.

#### FILO 6616: Directed Reading in Philosophy I

1 to 3 credits.

The number of credits for this course will be determined by the faculty, while the number of contact hours will depend on the assigned credits. This course is dedicated to researching a specific philosophical topic, which the professor and students will agree upon in writing prior to

enrollment. This agreement will specify the research topic, methodology, texts and materials to be used, and evaluation methods. A copy of this written agreement will be deposited in the Philosophy Department. The course FILO6616 is typically taken alongside some or all the following courses: FILO6605, FILO6606, and FILO6615. A maximum of 9 credits may be earned toward the degree across these four courses. Topics may include "the death of God" as a philosophical-literary problem. This course will be offered in face-to-face, hybrid, and online modalities.

# FILO 6923: Great Contemporary Philosophical Works III 3 credits.

Representative works of contemporary philosophy will be studied systematically, such as: Principles of Mathematics, Russell-Whitehead, Logical-philosophical Treatise, Wittgenstein; Scientific Research, Popper; Logical investigations, Husserl; Being and Time, Heidegger; Being and Nothingness, Sartre; History and Class Consciousness, Lukács; The Search for Certainty, Dewey; Structural Anthropology, and Levi Strauss.

## FILO 6931: Classical Problems of Philosophy I

3 credits

Discussion of classical problems such as: the metaphysical question; being and thought; knowledge; substance; ontology; the foundations of science, universals; science and philosophy; knowledge and belief; God, the soul and the world, and truth.

## FILO 6941: Current Philosophical Problems I

3 credits.

Discussion of such problems as: scientific method and explanation; truth; scientific revolution; empirical knowledge; probability and induction; analytical philosophy of language; symbolic logic; psychologism and logic; logic and mathematics; freedom and cybernetics. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6991: Issues in Current Philosophy

1 to 3 credits.

This course provides an opportunity for historical or thematic approaches to some of the problems of philosophy in the twentieth and twenty-first centuries through the study of recent and original thinkers. Topics; productive ethics. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6992: Topics in Ancient Philosophy

1 to 3 credits.

This course is devoted to the study of key topics, problems, and concepts common to several thinkers of Western antiquity or various ancient Western schools of philosophy. It will focus on source texts from the period, ranging from the pre-Socratic philosophers to St. Augustine. The course will cover a range of issues, including metaphysical, epistemological, political, and ethical

problems, and will examine these topics in terms of their contribution to the understanding of ancient Western philosophical thought and its relevance to other periods in Western philosophy. Students may also choose to focus on a single topic or problem. The course may be taken multiple times for credit, up to a maximum of six credits, provided the topics studied vary.

## FILO 6994: Critical Theory and the Frankfurt School

1 to 3 credits.

This course will study the history of the Frankfurt school; the development of its most important contribution. Critical theory and its diverse cultural and intellectual influences. It could also aim to understand the contribution of one of its members or heirs or a key common theme among them. Theodor W. Adorno, Max Horkheimer, Walter Benjamin, and Jürgen Habermas are among its most important members. The course could be taken more than once for up to six credits if its topics vary.

### FILO 6996: Hellenistic Philosophy

1 to 3 credits.

This course focuses on texts, themes and concepts of Hellenistic philosophy with emphasis on metaphysics, epistemology, ethics and politics. Attention will be given to the following schools: Epicurean, Stoics, Cynics and Skeptics. This course can be repeated for up to 6 credits if the topics of study vary. This course will be offered face-to-face, hybrid and online modalities.

# FILO 6997: Changes and ruptures in the history of Philosophy: Historic examples and Theoretical debates

1 to 3 credits.

This course examines various explanations of how conceptual changes and appropriations in the history of philosophy occur. Both historical approaches and theoretical considerations that explain the change in the history of philosophy can be considered. This course can be taken more than once if it focuses on different topics. Maximum 6 credits. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6998: Contemporary philosophical works

1 to 3 credits.

Systematic study of some representative works of contemporary philosophy, such as: Saul Kripke's *Naming and Necessity*: Alain Badiou's *Being and Event* or Antonio Negri's *Empire*.

### **Epistemology and Metaphysics**

## FILO 6015: Philosophy of History

3 credits.

A study of the evolution of the concept of history in the history of philosophy and the theoretical debates of historians.



## FILO 6025: Philosophy of Science

3 credits.

Topics to be covered include: the criteria for and scope of scientific knowledge, the processes of theory and concept and change in science, causation and explanation, other philosophical issues that may arise in the various sciences.

## FILO 6045: The philosophy of Leibniz

3 credits.

A study of Leibniz's mature philosophy, emphasizing the relationship between logic and ontology, philosophy of nature and philosophy of mind.

#### FILO 6110: Social Epistemology

3 credits.

Introduction to the sociopolitical and historical bases of knowledge, examining new currents in epistemology. The course entails a research component and can be repeated up to two times as long as the topic is different. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6301: Buddhism and Philosophy I

3 credits.

The purpose of this course is to offer a general yet rigorous idea of essential Buddhist concepts and Buddha's thoughts. This first part of the course focus in ancient Buddhism, whose tradition comes to our days through Theravada Buddhism.

## FILO 6302: Buddhism and Philosophy II

3 credits.

The purpose of this course is to offer a general idea of the Buddhist concepts and Buddha's thoughts. Second part of the course focus on the Mahayana tradition to which both Zen and Buddhism and Tibetan Buddhism belong.

## FILO 6305: Reading of Saint Augustine (Theology of History)

3 credits.

Close reading of several books/chapters of "The City of God" by Saint Augustine to reconstruct the Christian theology contained in this work.

## FILO 6395: Philosophy and Deconstruction

3 credits.

Study of the strategies of writing and reading developed by J. Derrida, through an analysis of his texts, which contribute, in theory and practice, to an understanding of the method of deconstruction and its application in the interpretation of philosophical texts.

## FILO 6405: Philosophy of Religion

3 credits.

Based on the classification of religious as prophetical, sacramental and mystical, by the eminent philosopher of religion William P. Alston, a comparative study of some paradigmatic philosophical theories on the nature of the religious phenomenon. Critical discussion of the writings of authors such as Kant, Schleiermacher, Feuerbach, Otto, Bergson, and James.

## FILO 6406: The problem of God

3 credits.

This course offers a historical study of traditional arguments aimed at proving God's nature and establishing the primary attributes of His existence. It includes an analysis of significant critiques directed against these "proofs" and examines how these issues resurface in discussions of religious language within the framework of analytical philosophy.

## FILO 6407: Philosophy of Time

3 credits.

This course focuses on one specific approach to the philosophical problem of time, known as Kairology (Theory of Timing). It involves the interpretation of classical texts that explore this concept from a diachronic perspective and addresses systematic problems of Kairology from a synchronic and interdisciplinary approach.

## FILO 6409: Hume's Philosophy of Religion

3 credits.

Critical analysis of Hume's theories in the origin, nature, and historical effect of religion presented in the natural history of religion and his critique of rational theology sketched primarily in *Inquiry Concerning Human Understanding* and in *Dialogues Concerning Natural Religion*.

## FILO 6417: Explanation and Understanding in History

3 credits.

Examination to the twentieth century discussion about the nature of historical knowledge. The main concern will be the contributions to this theme by philosophical currents, such as: Neokantianism, Positivism, Analytical Philosophy, Hermeneutic, and others.

#### FILO 6419: French Existentialism

3 credits.

After a brief study of the principal representatives of French existentialism and its relations with the philosophy of Hegel, Kierkegaard, phenomenology and Heidegger, the course will examine systematically Sartre's *Being and Nothingness*.

### FILO 6425: Epistemology

3 credits.

Topics to be covered include: the definition of knowledge as justified true belief, skepticism, induction, theories of perception, evidentiary categories knowledge of necessary truths, among others. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6447: Hegel's Phenomenology of Spirit

3 credits.

This course entails a systematic reading of Hegel's *Phenomenology of the Spirit*. To comprehend and contextualize his philosophical project, fundamental Hegelian concepts such as dialectics, negativity, the concept, experience, spirit, and absolute knowledge will be discussed. Divergent themes, problems, and perspectives on the text will also be examined, including the relation between logic and phenomenology, as well as its epistemological, metaphysical, historicist, ethical, and political interpretations. The course will be offered in face-to-face, hybrid, and online modalities.

#### FILO 6465: Herder and Vico

3 credits.

This course introduces the fundamental problems encountered by historical knowledge in the 18th century, particularly concerning ideology and the Enlightenment. It then explores the innovative contributions of Herder's philosophy, especially in *Auch eine Philosophie der Geschichte* and *Ideen*. G.B. Vico's *New Science* will serve as the core text for the study.

# FILO 6467: Hume's Metaphysics and Theory of Know Knowledge 3 credits.

Analysis of the ontological and epistemological foundations of Hume's philosophy focusing, from a unitary perspective, on the central problems discussed in the *Treatise*, book I, and in the *Inquiry Concerning Human Understanding*, as: causality, the independent existence of sensible objects, personal identity and nature and role of Hume's skepticism.

## FILO 6717: Logical Empiricism

3 credits

The contributions to contemporary philosophy of the most significant philosophical movement of the first half of the 20th century, namely, logical empiricism (or positivism). Study of some of the most representative works of this movement and written by some of its central figures, such as Schlick, Carnap and Reichenbach.

## FILO 6725: Philosophical Cosmology

3 credits.

A study of ancient and contemporary philosophical conceptions of the world.

## FILO 6731: Metaphysics

3 credits.

This course introduces the origins and development of metaphysical thought, exploring its fundamental problems. It examines the role of metaphysics in the evolution of philosophy and the connection between metaphysical systems and the historical periods in which they emerged. The course also addresses metaphysics as the foundation (Descartes) of knowledge and investigates the relationship between theoretical metaphysical knowledge and practical life.

## FILO 6747: Philosophy of Mind

3 credits.

This course offers a critical analysis of the so-called mental or inner life of the human person and its manifestations in human behavior. Key topics include consciousness and the unconscious, perception ("to see" and "to know"), memory and imagination, emotions and valuation, intentions and motivation, the will, and other forms of mental life.

# FILO 6775: Problems and Controversies of the Philosophy of Science I: The Controversy on Scientific Realism

3 credits.

Discussion about the conception of the degree and the kind of reality belonging to the theoretical objects of modern physics. Study of the realistic interpretation by Boyd, Churchland, Hooker and Hacking, as well as the antirealistic interpretation in its historical development, up to Van Fraassen and Dummett.

# FILO 6777: Problems and Controversies in the Philosophy of Science II: The Function of Mathematics in Natural Science.

3 credits.

This course involves the study of the background of the topic in Eudoxus and the mathematical structures used for natural philosophy by Galileo and Newton. It then focuses on current literature, particularly the controversy raised by Hartry Field's *Physics without Numbers*. Additionally, the course examines the theories proposed by Sneed's school, which characterizes the core of physical theories as mathematical structures and seeks to provide a rational reconstruction of these theories.

# FILO 6778: Problems and Controversies in the Philosophy of Science IV: Modern Science and Man's Self-understanding

3 credits.

This course examines the controversy surrounding the thesis that posits the a priori low probability of the species *Homo sapiens*, considering physical cosmology and biological theories. It explores questions related to public policy on the use of genetics in social contexts and objectives, as well as the ethical implications. Additionally, the course addresses the feasibility of viewing the human brain through an analogy to computers.

# **FILO 6925: Husserl's Transcendental Phenomenology** 3 credits.

Introduction to Husserl's transcendental phenomenology. Discussion of some of its most principal themes and critical examination of some of its different interpretations.

# FILO 6931: Classical Problems of Philosophy 3 credits.

This course discusses classical philosophical problems, including: the metaphysical question; the relationship between being and thought; knowledge; substance; ontology; the foundations of science; universals; the connection between science and philosophy; knowledge and belief; the concepts of God, the soul, and the world; and the nature of truth.

# FILO 5035: Philosophy and Aesthetics of Music 3 credits.

Exploration of the relationship between the musical arts and individual phenomena, (for example, the relation of music to cognitive processes) or collective processes, such as other artistic forms. Requires the appreciation of musical pieces as well as the reading of philosophical texts on the topic, a selection of which will encompass classical through contemporary works. It is aimed at students of music and philosophy and all those interested in exploring the relationship between music and other areas of knowledge and culture. This course will be offered face-to-face, hybrid and online modalities.

## FILO 5036: Philosophy of Photography

3 credits.

This course examines themes in philosophy across its various aspects—epistemological, aesthetical, ethical, and political. The study includes the work of various photographers and different types of photographs, with the goal of applying the theoretical concepts from the first part of the course and developing interpretive skills specific to photography analysis. The course is offered in face-to-face, hybrid, and online modalities.

# FILO 6010/DERE 7010: Theories of Justice 3 credits.

Elective course in which the students will approach and discuss the contemporary theories of justice. The specific syllabus can include a combination of the contributions of the main exponents

of the theories of justice such as: John Rawls, Robert Nozick, Ronald Dworkin, Gerald Cohen, Catherine Mckinnon, Iris Marion Young, Michael Sandel and Amartya Sen.

## FILO 6026: Ancient Ethics and Political Philosophy

1 to 3 credits.

Course on themes related to the ancient Greek political philosophy and ethics, with the possibility to connect them to ancient metaphysical or epistemological issues. The student would be able to take the course more than once, up to a maximum of 3 credits, if it is offered on different topics.

#### FILO 6035: Ethics

3 credits.

An examination of classical and contemporary ethical theories and central ethical problems, such as the role of reason in the guiding and justification of moral behavior.

## FILO 6046: Jean Jacques Rousseau Philosophy

3 credits.

The purpose of the seminar is to critically approach Rousseau's philosophical thinking, from his famous works such as: discourses, *The Social Contract* and *Emile*, as well as other less-studied literary and autobiographical references.

## FILO 6427: Contemporary Philosophy of Action

3 credits.

Examination of four contemporary theories of action and human praxis: pragmatist, Marxist, existentialist and British analytical philosophy. A general exposition of the field will be given using Richard Bernstein's *Praxis and Action*. The students have to read and analyze four essays that represent the theories discussed.

## FILO 6428: Spinoza's Ethics

3 credits.

This course provides a systematic study of Baruch Spinoza's *Ethics Demonstrated in Geometric Order*. It begins with an exposition of Spinoza's concept of God, which serves as the foundational framework for examining the origin and nature of the mind, as well as an analytical study of the emotions (affects). The course explores the tension between human bondage and human freedom, while discussing key aspects of Spinoza's philosophy, such as necessitarianism, the mind-body relationship, the production of knowledge, the role of desire in human nature, the influence of imagination on passions, and the practical importance of living according to reason.

# FILO 6435: The German Ideology: Problems of Reading and Interpretation 3 credits.

The elaboration and foundation of an interpretative approach to the reading of this work will allow an adequate reconstruction and critical evaluation of the materialist conception of human history and society developed by Marx and Engels.

## FILO 6437: The Young Marx

3 credits.

This course focuses on the study of Marx's early writings to establish and critically analyze the development and philosophical foundations of his thought. Emphasis will be placed on examining how Marx appropriated and sought to overcome Hegel's philosophical legacy. Through a detailed exploration of these texts, students will engage with the formative processes of Marx's ideas and the key philosophical issues surrounding his engagement with Hegelian dialectics and other influences.

## FILO 6439: Philosophical Aspects of Capital

3 credits.

Analysis of the theoretical assumptions in Marx's Critique of Political Economy and of The Philosophical Problems that it Raises, to make possible an examination and evaluation of the different interpretations which have arisen in the discussion of this work in the twentieth century.

## FILO 6445: Hegel's Practical Philosophy

3 credits.

The course explains Hegel's social, political and moral philosophy based on his philosophy of right (English version with commentaries by Knox). The chief aim is to present the practical side of Hegel's system.

## FILO 6449: Dialectic in Capital

3 credits.

This seminar will focus on how Marx applies the Hegelian dialectic in his critique of political economy, particularly through his book *Capital*. The course will examine the specific differences between Hegel's and Marx's dialectics, with an emphasis on Marx's development of dialectics as a critical tool for analyzing political economy. Students will explore the methodological and philosophical implications of Marx's adaptation of dialectics in his economic critique, considering its role as a necessary framework for understanding capitalism and its contradictions.

#### FILO 6457: Aristotle's Ethics and Politics

3 credits.

Reading and commentary on Aristotle's *Nichomachean Ethics* and *Politics*, to explain necessity of political life. The following aspects of ethics will be emphasized: criticism of the goodness itself, the theory of virtue doctrine of the mean, the concept of justice, pleasure, friendship, etc. This course will be offered face-to-face, hybrid and online modalities.

## FILO 6745: Philosophy of Literature

3 credits.

An interdisciplinary study of classical and contemporary philosophical theories of literature and other theoretical approaches to literature

## FILO 6995: Topics on Contemporary Political Philosophy

1 to 3 credits.

This course offers a study of various currents in contemporary European, North American, and Latin American political thought. It focuses on the theoretical shift from modernity's foundational topics, such as the justification of values (justice, democracy) and institutions (the state, the law), to more recent philosophical approaches that aim to understand the social and cultural mechanisms underlying political organization and social transformation. This exploration will provide insights into how these diverse political philosophies address the changing dynamics of contemporary societies.

## FILO 6993: Aesthetics

1 to 3 credits.

Course directed to the study of some of the major philosophical and aesthetic theories about art. Throughout the course, various themes, texts and/or concepts will be examined, contributing to the comprehension of the problems historically raised about art and the dialogue established with other dimensions of thought. The course can be thematic or be focused on a particular author. The course can be taken up to a maximum of six credits with different themes. This course will be offered face-to-face, hybrid and online modalities.

## Logic or Philosophy of Language

## **FILO 6016: Definite Description**

3 credits.

This course examines the philosophical debate surrounding definite descriptions, sparked by Bertrand Russell's 1905 work "On Denoting." It will explore key contributions to this debate, with a focus on recent semantic and pragmatic perspectives. Topics include Russell's theory of descriptions, Strawson's critique, the referential/attributive distinction, the ambiguity thesis, Gricean defenses by Kripke and Neale, the role of definite descriptions in formal semantic theory, non-Gricean pragmatic approaches, and anaphora. The course offers a comprehensive view of the ongoing discourse in philosophy and linguistics on definite descriptions.

## FILO 6065: Pragmatism and Neo-Pragmatism

3 credits.

This course reviews the classic period of pragmatism, the foundational writings of this school of thought and its principal authors: Charles Pierce, William James and John Dewey. In addition, the course examines the major concepts of neo-pragmatism and its representatives for the second part

of the 20th century and the early 21<sup>st</sup> century. This course details the critical appropriation neopragmatism does on the doctrines of pragmatism.

## FILO 6475: Gottlob Frege's Philosophy

3 credits...

An introduction to Gottlob Frege's philosophy based on a detailed study of the foundations of arithmetic, followed by a discussion of writings representative of Frege's whole philosophical work.

## FILO 6477: Husserl's Logical Investigations

3 credits.

Exposition and interpretation of the most important problems discussed by Husserl in the second volume of the *Logical Investigations*, pointing out their relevance for different areas of the present philosophical discussion.

#### FILO 6485: The Philosophy of Quine

3 credits.

Introduction to the philosophy of Willard van Quine discussion of his contributions to the philosophy of logic, of language, and to other areas of philosophy.

## FILO 6487: Husserl's Theory of Intentionality

3 credits.

Study of specialized problems in transcendental phenomenology. Detailed presentation of the intentional structures corresponding to the objects of sense perception, imagination and remembrance.

## FILO 6495: Wittgenstein's Thought

3 credits.

Study of the principal problems presented in the philosophical investigations of Wittgenstein, seen as a second version of his work. The book is examined in relation to the earliest work of the philosopher, who takes a critical stand on his former way of thinking.

# FILO 6497: Ludwig Wittgenstein's *Tractatus Logico-Philosophicus* 3 credits.

Study of Wittgenstein's *Tractacus Logico-philosophicus*. Examination of some of its many interpretations. Investigation of the influences that it suffered and of the influence this work has had on contemporary philosophy.

#### FILO 6515: The Semantical Problem of Truth

3 credits.

A study of contemporary philosophical theories of truth.

## FILO 6708: Philosophy of Mathematics

3 credits.

This course is divided into two levels. The basic one includes the study of Platonism and intuitionism; the contributions of Leibniz, Kant, etc.; contributions by Frege, Husserl, and Poincare. The advanced level covers the ideas of Gödel, Weyl, Brouwer, Curry, Bourbaki, Kreisel and/or Heyting about mathematics.

## FILO 6720: Model Theory

3 credits.

Prerequisite: FILO 4031-4032.

Study of the semantics of first order languages. Consideration will be given to notions such as (i) elementary equivalence and elementary extension, (ii) completeness, model-completeness, and model consistency, (iii) ultraproducts and ultra-powers, (iv) elementary class and elementary class. The most important results related to those notions will be established.

## FILO 6721: Philosophy of Language I

3 credits.

Study of the following subjects: the linguistic sign; functions and aspects of language; the theories of meaning (referential, mentalist, behaviorist, meanings use) language and metaphysics; language and ethics; ideology and language.

## FILO 6737/LING 6737: Philosophy and Linguistics

3 credits.

In this course we will examine the philosophical foundations of the principal contemporary linguistic theories, and some of the most important contributions of philosophy to linguistics. Topics to be covered include: the innateness of language, and human evolution, language and cognition the truth-conditional view of meaning, the reference, quantification in natural languages, the pragmatic theories of Grice, Sperber and Wilson and metaphor.

## FILO 6755: Symbolic Logic

3 credits.

This course offers an in-depth exploration of symbolic logic, covering essential topics such as propositional logic, first-order logic (including identity and descriptions), schematization, truth tables, truth trees, natural deduction, axiom systems, and models. Additionally, it examines significant metalogical results, including soundness, decidability, completeness, and the undecidability of first-order logic, alongside the completeness of monadic first-order logic and the

incompleteness of polyadic first-order logic, equipping students with the necessary tools for rigorous logical analysis and reasoning.

## FILO 6999: Hermeneutics

3 credits.

Introduction to the science of interpretation. Review of the development of hermeneutic thought (main problems and solutions) from ancient times to the present. The course will also cover subjects like the role of hermeneutics and its rules in religious, literary, historical and philosophical exegesis; and hermeneutics as a philosophical method in thinkers like Schleiermacher, Dilthey, Heidegger and Gadamer.



Mailing Address: 13 Ave. University, Suite 1301 San Juan, PR 00925-2533

**Graduate Program Coordinator**: Dra. Sandra Pujals **Phone**: (787)-764-0000 Ext. 89561; 89562; 89564, 89594

Fax: (787) 772-1461 (Atención: Programa Graduado en Historia)

Email address: pgh.rrp@upr.edu

**Website:** https://humanidades.uprrp.edu/graduados/?page\_id=439

**DEGREE:** 

#### **Master of Arts in History**

#### **FACULTY:**

**Maria del Carmen Baerga,** Ph.D., State University of New York-Binghamton, 1997.Professor. Sociology with a specialization in History; Workers' history; gender and social movements.

Bruno Ferrer, Ph.D., University of Barcelona, Spain, 2003. Professor. Ancient history.

**Marcial Ocasio**, Ph.D., Michigan State University, 1988. Professor. History; United States; Latin America; Mexico; Diplomatic history and historiography.

**Sandra Pujals**, Ph.D., Georgetown University 1999. Professor. Global/transnational history; Russia and the Soviet Union; Modern and Contemporary Europe, European Cinema.

**César Solá,** Ph.D., University of Michigan, 1999. Professor. History; Africa; Imperialism; Latin America.

### **ADMISSION REQUIREMENTS:**

### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific master's Program Requirements**

In addition to the general admission requirements required by the Rio Piedras Campus, the student must meet the following:

- 1. Bachelor's degree in history or another discipline
- 2. Successfully completed the undergraduate seminars in Theory of History and Historical Research (HIST 4225-4226).
- 3. Academic average of no less than 3.00, in general and in History courses.
- 4. For students with bachelor's degrees in other disciplines, a minimum of 15 undergraduate

credits in History is required, including the courses "Theory and Methodology of History" (HIST 4225-4226) or an equivalent.

## **GRADUATION REQUIREMENTS:**

Comply with the general graduation requirements of the Río Piedras Campus. In addition, students will need to meet the program-specific requirements:

1. Successfully completed 6 credits in a third language and prerequisites indicated in your letter of admission to the program.

#### **PROGRAM OF STUDY:**

The master's degree with a specialty in History is offered in the areas of History of Puerto Rico and the Caribbean; Continental America (Latin America and the United States); Cultural History; History of Europe

Program Requirements	Credits
HIST 6051-6052 Historiography and Historical Criticism	6
Area of Emphasis Courses (History of Puerto Rico and the Caribbean; Continental America (Latin America and the United States; Cultural History; History of Europe)	12
Free Electives (in History or another subject)	6
HIST 6991 Master's Project I	3
HIST 6992 Master's Project II	3
Total Credits	30

#### **COURSE DESCRIPTION:**

The following course descriptions are the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus, as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## HIST 6051 Historiography and Historical Criticism

Three credits. Three hours of lecture a week.

Study of the historical development of Western historiography. Critical analysis of the representative works of each period, movement and cultural nucleus. This course is offered in face-to-face, hybrid, and online modalities.

#### HIST 6052 Historiography and Historical Criticism

Three credits. Three hours of lecture a week.

Prerequisite: HIST 6051



Study of the Historical Development of Western Historiography. Critical analysis of the representative works of each period, movement and cultural nucleus. This course is offered in face-to-face, hybrid, and online modalities.

## HIST 6991 Master's Project I

Three credits.

Prerequisites: HIST 6051, HIST 6052.

Students will develop a proposal and begin research for their final master's project. Each student must select their own research topic and choose a professor with whom to collaborate, based on the topic and/or historical context of their research. Students will work directly with their mentor to identify a theoretical and methodological framework for the project, as well as the main bibliography relevant to their topic and historical context. They will also define the historiographical categories, document types, and archival resources to be used in their final project. This course will be offered in face-to-face, hybrid, online, and distance modalities.

## HIST 6992 Master's Project II

Three credits. Three hours of thesis work per week.

Prerequisites: HIST 6052, HIST 6052, HIST 6990, History Graduate Program approval.

In this course, students will develop a research project to be defended as their final master's project. Each student must choose their own research topic and select a professor to mentor them based on the topic and/or historical context of their research. Additionally, students will identify two other professors from the graduate history program to serve as final readers. They will work directly with their mentor to create a historiographic project with a robust theoretical and methodological framework, aiming for a high quality suitable for publication in a peer-reviewed academic journal (publication is not mandatory for the student to fulfill the final requirement for their degree).

The student will complete the course by defending their final project before their committee and the coordinator of the graduate history program. This course will be offered in face-to-face, hybrid, online, and distance learning modalities.

#### OTHER COURSE DESCRIPTIONS:

#### **HIST 6001 Latin America and International Politics**

Three credits. Three lecture hours per week. Prerequisite: HIST 3211-3212 or equivalents.

Examination of fundamental aspects of Latin America's political, military, and economic relations with European, non-Hispanic imperialist powers, and the United States, from thesixteenth century to the present.

#### **HIST 6002 Latin America and International Politics**

Three credits. Three lecture hours per week. Prerequisite: HIST 3211-3212 or equivalents.

Examination of fundamental aspects of Latin America's political, military, and economic relations with European, non-Hispanic imperialist powers, and the United States, from the sixteenth century to the present.

## HIST 6007 Colonial Spanish-American Historiography

Three credits. Four hours of lecture per week, Prerequisite: HIST 3211-3212 or its equivalents.

Critical analysis of the historical works representative of Spanish-Americanhistoriography during the colonial and independent periods.

## HIST 6008 Hispanic American Historiography XIX-XX Centuries

Three credits. Four hours of lecture per week.

Prerequisite: HIST 3211-3212 or its equivalents.

Critical analysis of the historical works representative of Hispanic Americanhistoriography during the nineteenth and twentieth centuries.

## HIST 6011 History of Medieval Institutions in Western Europe

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3185 or its equivalent.

Comparative study of the Church, the monarchyand the nobility as axes of the development of medieval history in Spain, France and England.

## **HIST 6012 History of Medieval Institutions in Western Europe**

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3185 or its equivalent.

Comparative study of the Church, the monarchyand the nobility as axes of the development of medieval history in Spain, France and England.

#### **HIST 6016 History of the French Revolution**

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3155 or its equivalent.

Examination of the forces leading to revolution, economic and constitutional reforms, attempts to organize responsible government and therise of Napoleon, European reaction to the imperial idea, and the fall of Napoleon.

## **HIST 6017 History of the Mexican Revolution**

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3211 – 3212 or its equivalents.

Study and analysis of the antecedents and ideological and institutional process of the Mexican revolution, from its origins towards the end of the nineteenth century to its institutionalization in the 1920s

## **HIST 6018 History of the Labor Movement in Puerto Rico**

Three credits. Three hours of lecture a week. Prerequisite: HIST 3241-3242 or equivalents.

Study of the development of the Puerto Ricanlabor movement within the context of Puerto Rico's social, economic, and political problems during the twentieth century.

#### **HIST 6020 The Napoleonic Era**

Three credits. Three hours of lecture a week.

This course involves the study of the Napoleonic era, focusing on the Directory and the significant military and political influence it exerted on the course of human history.

## HIST 6021 Historical Analysis of European Diplomacy 1870-1914

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3195, 3185, 3165, 3205 or their equivalents.

This course offers a historical analysis of European diplomatic relations from 1870 to 1914, emphasizing the key aspects that led to the outbreak of the First World War.

#### HIST 6022 Historical Analysis of European Diplomacy 1919-1939

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3195, 3185, 3165, 3155, 3205, 3202, 6021.

This course provides a historical analysis of European diplomatic relations from 1919 to 1939, with a particular focus on the factors that contributed to the outbreak of the Second World War.

#### **HIST 6023 Historical Analysis of Diplomacy**

Three credits. Three hours of lecture a week.

Prerequisite: HIST 6022

This course examines the Cold War at the diplomatic level, analyzing the postwar world through key documents and influential personalities, from the initial "Atlantic Charter" of 1941 to the Shanghai Communiqué of 1972, with an emphasis on the emerging structure of an internationally organized world.

#### **HIST 6025 Thesis Seminar**

Three credits. Three hours of lecture a week.

Prerequisite: 21 credits in graduate History courses.

Production of the proposal for the master's thesis. This course is offered in face-to-face, hybrid, and online modalities.

## **HIST 6026 Spanish-American Paleography**

Three credits. Three hours of lecture a week.

Prerequisite: Director's authorization.

Familiarity with the study of the modes of writing of the centuries prior to ours from the sixteenth century onwards. Documents up to the nineteenth century are examined in relation to Latin America. This course is offered in face-to-face, hybrid, and online modalities.

## HIST 6027 U.S.-Puerto Rico Relations: Twentieth Century

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241-3242, 3111-3112 and authorization from the Director of the Department of History.

Relations between the United States and Puerto Rico in this centuryemphasizing political evolution through the Foraker Act-Jones Organic Act and the development of the Commonwealth with the current constitution.

## HIST 6028 Relations of Puerto Rico and the Caribbean XIX - XX Centuries

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241-3242 and authorization from the Director of the Department of History.

Analysis of the Economic, Social, and Political Relations of Puerto Rico and the Caribbean: Centuries XIX–XX.

## **HIST 6029 Spanish-American Diplomatic History XIX-XX Centuries**

Three credits. Three hours of lecture and three hours of practice workshop.

Prerequisite: Authorization from the Director of the Department of History.

Study of the structures of Spanish-American historical documents of the 19<sup>th</sup> and 20<sup>th</sup> centuries.

## **HIST 6031 Colonial Institutions of Spanish America**

Three credits. Three hours of lecture per week.

Prerequisite: HIST 3211-3212 or equivalents.

Implantation and development of the institutions established by Spain in its colonies: the economic policy and contributions of Spanish America to the Spanish colonial system.

## **HIST 6032 Colonial Institutions of Spanish America**

Three credits. Three hours of lecture per week.

Prerequisite: HIST 3211-3212 or equivalents.

Implantation and development of the institutions established by Spain in its colonies: the economic

policy and contributions of Spanish America to the Spanish colonial system.

## HIST 6035 History of the Era of the American Revolution 1775-1800

Three credits. Three lecture hours per week.

Prerequisite: HIST 3211-3212 or equivalents.

The course covers the precedents of the American Revolution, including both remote and immediate causes, as well as the post-revolutionary effects of independence in America and its international implications.

## **HIST 6036 Church and Society in Medieval France**

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

The course examines the major problems in the social history of France during the Central Middle Ages and their correspondences and effects on the Medieval French Church.

## HIST 6037 Geopolitics of the Antillean Archipelago and the Continental Brands in the 16th -17th Centuries

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the Director of the Department of History.

Historical examination of the Spanish geopolitics of imperial defense in the Caribbean and the Mexican Peninsula and the development of aregional logistical vision.

## **HIST 6038 Political Development of Puerto Rico Twentieth Century (1898 – 1952)**

Three credits. Three hours of lecture per week.

Prerequisite: Director's Authorization.

The course analyzes the political evolution of Puerto Rico from the change of sovereignty to the implementation of the Commonwealth in 1953, focusing on the government systems established under the Foraker and Jones charters, the political parties and their leaders, general elections, ideological issues, and overarching problems.

## HIST 6039 Economy and Society of Puerto Rico in the Nineteenth Century

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the Director of the Department of History.

Analysis of the main processes that determined the economic development of Puerto Rico in the nineteenth century.

## HIST 6040 Economy and Society of Puerto Rico in the Twentieth Century

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the Director of the Department.

The course examines economic development and the trajectory of Puerto Rican society in the

present century, and is offered in face-to-face, hybrid, and online modalities.

## **HIST 6041 History of Inter-American Relations**

Three credits.

Prerequisite: HIST 3111–3112 or equivalents.

Critical study of the Monroe Doctrine and analysis of U.S. foreign policy.

## **HIST 6042 History of Inter-American Relations**

Three credits.

Prerequisite: HIST 3111–3112 or equivalents.

Critical study of the Monroe Doctrine and analysis of U.S. foreign policy.

#### HIST 6045 History of the Latin American Labor Movement in the Twentieth Century

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3211-3212 or equivalents.

Study of the development of the Latin American labor movement within the context of the social, economic, and political problemsof Latin America during the twentieth century.

## HIST 6046 The Hispanic Caribbean: Economy and Society, 14th-20th Centuries

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241-3242 and Director's authorization.

Historical review of sugar plantation gowth in Cuba, Dominican Republic, and Puerto Rico.

#### HIST 6052 Historiography and Historical Criticism

Three credits. Three hours of lecture a week.

Prerequisite: HIST 6051 Study of the Historical Development of Western Historiography.

Critical analysis of the representative works of each period, movement and cultural nucleus. This course is offered in face-to-face, hybrid, and online modalities.

#### **HIST 6055 Slavery in the Americas**

Three credits. Three hours of lecture a week.

Study of the comparative history of slavery in Brazil, the United States and the Caribbean.

## HIST 6056 Problems of Spain in the Nineteenth Century - I

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Seminar of Readings on historical problems of Spain during the Nineteenth Century.

## HIST 6057 Problems of Spain in the Nineteenth Century - II

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Seminar of Readings on historical problems of Spain during the Nineteenth Century.

## HIST 6058 Problems of Spain in the Nineteenth Century - III

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Seminar of Readings on historical problems of Spain during the Nineteenth Century.

## HIST 6059 Problems of Spain in the Nineteenth Century - IV

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Seminar of Readings on historical problems of Spain during the 19<sup>th</sup> Century.

## HIST 6061 History of Puerto Rico 1808-1898

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241, HIST 3242 or their equivalents.

The course highlights Ramón Power's participation in the Spanish courts, his involvement in the constitutional governments, the role of Don Miguel de la Torre, and the broader historical movement during the era of the special laws leading up to 1898.

## HIST 6062 History of Puerto Rico 1808-1898

Three credits. Three hours of lecture a week.

The course highlights Ramón Power's participation in the Spanish courts, his involvement in the constitutional governments, the role of Don Miguel de la Torre, and the broader historical movement during the era of the special laws leading up to 1898.

#### **HIST 6065 Programming Techniques in History**

Three credits. Three hours of lecture a week.

Prerequisite: Bachelor's degree.

This course focuses on the application of statistical analysis in historical research, emphasizing the development of skills in using the Special Program for the Social Sciences (SPSS). Students will undertake projects involving the management of quantitative data extracted from censuses, market balances, and historical registries from the nineteenth and twentieth centuries in Puerto Rico.

## HIST 6066 History of the Progressive Movement in the United States 1870–1920

Three credits. One hour of lecture and two hours of discussion per week. Prerequisite: HIST 3111-3112, equivalent, or teacher's authorization.

Analysis of the social origins of the progressive movement in the United States and theimpact of

this movement on key socio-economic groups between 1870 and 1920.

## HIST 6067 The United States and the Spanish-American War

Three credits. Three hours of lecture a week.

Analysis of the causes and consequences of the Spanish-American War and its impact on U.S. domestic and foreign policy.

## HIST 6068 The United States and Its Dependencies in the Twentieth Century

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Research seminar student to examine the relationship of the United States with its dependencies.

## HIST 6069 U.S. Foreign Policy in the Caribbean 1900-1920

Three credits. Three hours of lecture a week.

The course studies the foreign policy of the United States towards the Caribbean in thefirst decades of the twentieth century.

## HIST 6071 Independence Movement in Spanish America 1800-1830

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3211-3212 or its equivalents.

Critical study of the origins and development of emancipatory feats in Latin America.

#### HIST 6072 Independence Movement in Spanish America: 1800-1830

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3211-3212 or its equivalents.

Critical study of the origins and development of emancipatory feats in Latin America.

#### HIST 6075 Cuba in the Transition to Socialism

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Examination of the transformation of Cuba into asocialist state during the period from 1952 to 1968.

### History 6076 Historical Sociology of Race and Ethnicity

Three credits. An hour and a half of discussion and an hour and a half of seminar.

This course explores the concepts of race and ethnicity, emphasizing their significance in sociology and daily human interactions. Through a comparative and historical lens, it critically examines the construction of these concepts and their interrelations with other notions, such as class and nation, as well as social processes like nationalism, racism, and migration. The course

analyzes diverse understandings of race and ethnicity using case studies and research from various regions, including the Caribbean, the American South, and Nazi Germany. Designed for high-level discussion and debate, it integrates theoretical frameworks with historical research while engaging with students' projects and research processes. This course is equivalent to SOCI-6076 in the Department of Sociology.

## HIST 6077 Historiographical Debates on the Cold War

Three credits. Three hours of seminar per week.

This course discusses and analyzes the diversity of the most relevant events about the ColdWar (1945-1991), such as the aftermath of the Yalta Conference, the concept of national security in the international politics of the United States after 1945, the influence of nuclearweapons in the context of national security, the impact of the Cold War on consumption and political outlook, the emergence of regional conflicts during the post-World War II period, and the collapse of the Cold War and its aftermath.

## HIST 6078 Historiographical Debates on U.S. International Relations in the Twentieth Century

Three credits. Three hours of seminar per week.

This course involves the discussion and analysis of key historiographical issues related to U.S. international relations during the 20th century. Topics of study include various theoretical frameworks surrounding U.S. international relations historiography, World War II, the Cold War, the debate on multilateralism, the impact of cultural and gender studies on the field, and the effects of neoconservatism in the post-Cold War era.

#### **HIST 6081 Research Seminar on Puerto Rican History**

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241-3242, HIST4225-4226 and authorization from the Professor.

Research Seminar on Diverse Topics in Puerto Rican History.

#### **HIST 6082 Research Seminar on Puerto Rican History**

Three credits. Three hours of lecture a week.

Prerequisite: HIST 6081

Research Seminar on Diverse Topics in Puerto RicanHistory.

# HIST 6085 Introduction to Topics in Historiography of the United States Twentieth Century Three credits. Three hours of seminar per week.

This course discusses and analyzes some of the most important historiographical issues in the United States during the twentieth century, such as: the theoretical perspectives that have influenced the historiography of the United States after World War II, the most prominent debates surrounding contemporary social historiography, the influence of genderas a category of analysis on the historiography of the United States, the importance of laborhistory in industrial and post-

industrial America and the various historiographical schools that study the presence of the United States in the international arena during the twentieth century.

### HIST 6086 Seminar on Historiographical Debates on the New Deal

Three credits. Three hours of seminar per week.

This course focuses on the discussion and analysis of the historiographical diversity surrounding key themes and debates related to the New Deal (1932-1938). Topics include various historiographical interpretations of the New Deal, the emergence of the welfare state, the transformation of American politics through New Deal reforms, the impact of the New Deal on urban policies, the collapse of the New Deal in the late 1930s, and its consequences for the social, political, and economic development of the United States.

## HIST 6105 Puerto Rican History Seminar (1505-1599) - Part I

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241, Director's authorization.

Monographic course of research and analysis of documentary sources, cartographic works, relations, memories, chronicles and histories of that and other centuries about the political, economic, demographic, urban, educational, religious and strategic development of Puerto Rico during the sixteenth century.

## HIST 6106 Puerto Rico History Seminar (1551-1599) - Part II

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241 or Director's authorization.

This monographic course focuses on the research and analysis of documentary sources, cartographic works, reports, memoirs, chronicles, and histories from the sixteenth century and other periods, examining the political, economic, demographic, urban, educational, religious, and strategic development of Puerto Rico during that time.

## **HIST 6115 Oral History Theory and Methodology**

Three credits. Three hours of lecture a week.

Detailed and analytical study of several of the most relevant writings on the theory and methodology of oral history. Oral history practices, using readings, discussions, and guest lecturers. The student will undertake an oral history project that includes in-depth research, interviewing, transcribing and editing, and writing a final essay. This course is offered in face-to-face, hybrid, and online modalities.

## HIST 6145 Seminar on Contemporary Theoretical Readings and Problems

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student

This course involves readings on contemporary theoretical problems, covering topics such as modernity and postmodernity, feminist theories, nation and nationalism, the ethnic question, racism, colonialism and postcolonialism, popular culture, urban issues, ecology, new paradigms in science and technology, state, market and democracy, post-industrialism, globalization, and transitions of social formations. Students may enroll in the course up to three times (for a maximum of 9 credits) without repeating topics. The course is offered in face-to-face, hybrid, and online modalities.

## **HIST 6150 European History Reading Seminar**

Three credits. Three hours of seminar per week.

Prerequisite: Admission to the Graduate Program in History or authorization from the professor.

Analysis of the historical processes that contributed to the development of Europe. The topic will change depending on the teacher's specialization. Students may takethe course a maximum of three times (9 credits) without repeating the topics. This course is offered in face-to-face, hybrid, and online modalities.

## HIST 6205 Research Seminar on Puerto Rican Social History (XIX Century) I

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241-3242 or authorization from the professor.

ResearchSeminar on Topics of Puerto Rican Social History.

#### HIST 6206 Research Seminar on Puerto Rican Social History (XIX Century) II

Three credits. Three hours of lecture a week.

Prerequisite" HIST 3241-3242 or authorization from the professor.

Research seminar on topics of Puerto Rican social history.

## HIST 6207 Research Seminar on Puerto Rican Social History (XIX Century) III

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3241-3242 or authorization from the professor.

Research seminar on topics of Puerto Rican social history.

## HIST 6208 Research Seminar on Puerto Rican Social History (XIX Century) IV

Three credits. Three hours of lecture a week.

Prerequisite: HIST 3 241-3242 or authorization from the professor.

Research seminar on topics of Puerto Rican social history.

#### HIST 6215 Colonial History of the Caribbean (Fifteenth - Eighteenth Centuries) I

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Discussion seminar on selected Caribbean topics and countries during the first three centuries of European colonization.

## HIST 6216 Caribbean Colonial History (15th - 18th Centuries) II

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Discussion seminar on selected Caribbean topics and countries during the first three centuries of European colonization.

## HIST 6217 Caribbean Colonial History (15th - 18th Centuries) III

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Discussion seminar on selected Caribbean topics and countries during the first three centuries of European colonization.

## HIST 6218 Caribbean Colonial History (15th - 18th Centuries) IV

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Discussion seminar on selected Caribbean topics and countries during the first three centuries of European colonization.

## HIST 6525 History of the Spanish Language in Puerto Rico

Three credits. Three hours of seminar per week.

Study of the history of Spanish in Puerto Rico. Analysis of the linguistic influences and cultural roots of Puerto Rican speech from the Arawak Taino substratum to the cultured andsemi-cultured linguistic uses of the twentieth century.

#### **HIST 6900 Comprehensive Exam (master's Program)**

No credits.



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**Graduate Program Coordinator**: Dra. Sandra Pujals **Phone**: (787)-764-0000 Ext. 89561; 89562; 89564, 89594

Fax: (787) 772-1461 (Atención: Programa Graduado en Historia)

Email address: pgh.rrp@upr.edu

Website: http://humanidades.uprrp.edu/graduados/?page\_id=569

**DEGREE**:

## **Doctor of Philosophy in History**

#### **FACULTY:**

**Maria del Carmen Baerga,** Ph.D., State University of New York-Binghamton, 1997. Professor. Sociology with a specialization in History; Workers' history; gender and social movements.

Bruno Ferrer, Ph.D., University of Barcelona, Spain, 2003. Professor. Ancient history.

**Marcial Ocasio,** Ph.D., Michigan State University, 1988. Professor. History; United States; Latin America; Mexico; Diplomatic history and historiography.

**Sandra Pujals,** Ph.D., Georgetown University, 1999. Professor. Global/transnational history; Russia and the Soviet Union; Modern and Contemporary Europe, European Cinema.

**César Solá,** Ph.D., University of Michigan, 1999. Professor. History; Africa; Imperialism; Latin America.

#### **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Requirements of the Doctoral Programme**

In addition to the general admission requirements required by the Rio Piedras Campus, the student must meet the following:

- 1. Master's degree in history or its equivalent.
- 2. Average of no less than 3.00, in general and in area of specialization.

- 3. For students with a master's degree in other disciplines, a minimum of fifteen graduate credits in History is required, with at least six credits in Historiography and Critical Studies (HIST 6051-6052) or an equivalent course.
- 4. Applicants must satisfy the requirement of 6 credits in a third language.

## **GRADUATION REQUIREMENTS:**

Comply with the general graduation requirements of the Río Piedras Campus. Inaddition, students will need to meet the program-specific requirements:

- 1. Successfully completed 6 credits in a third language and prerequisitesindicated in your letter of admission to the program.
- 2. Formulate, defend, and obtain approval for your research proposal on the selected topic.
- 3. Write and successfully complete a historiographical essay (literature review) on your dissertation topic as part of your degree requirements.
- 4. Write, defend, and obtain approval for your doctoral thesis on an original and unique topic grounded in academically relevant primary sources.

#### PROGRAM OF STUDY:

The Ph.D. with a specialty in History is offered in the areas of Puerto Rican History and Caribbean and Cultural History (which may include focus on other geographic areas such as Continental America (Latin America and the United States) and Europe.

Program Requirements	Credits
Courses in one of the areas of emphasis	9
Free Electives in History or another discipline	9
HIST 8900 Doctoral Thesis Proposal	3
Degree Exam	0
HIST 8891 PhD Thesis	0
HIST 8892 Doctoral Thesis Continuation	0
Total Credits	21

#### **COURSE DESCRIPTION:**

The following course descriptions are the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus, as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **History 8900 Doctoral Thesis Proposal**

Three credits.

Prerequisite: 18 credits graduated in doctoral program in History.

Preparation of proposalfor original research, based on primary sources.

### **HIST 8891 Thesis (Doctoral Program)**

No credit.

Prerequisite: 18 credits graduated in doctoral program, plus HIST – 8900.

Thesis Writingin its traditional format.

#### **HIST 8892 Continuation of Thesis (Doctoral Program)**

No credit.

Prerequisite: 30 credits graduated in the doctoral program and successfully completed HIST 8891.

Continuation of thesis writing in its traditional form.

#### OTHER COURSE DESCRIPTIONS:

#### HIST 8005 Research Seminar on Puerto Rican History I

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program requires either completion of six approved graduate-level credits in Puerto Rican history or equivalent qualifications.

Monographic course on research and analysis of primary sources on diverse topics in the history of Puerto Rico.

## HIST 8006 Research Seminar on Puerto Rican History II

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program requires either completion of six approved graduate-level credits in Puerto Rican history or equivalent qualifications.

Monographic course on research and analysis of primary sources on various topics in thehistory of Puerto Rico.

#### **HIST 8007 Research Seminar on Puerto Rican History III**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program requires either completion of six approved graduate-level credits in Puerto Rican history or equivalent qualifications.

Monographic course on research and analysis of primary sources on various topics in the history of Puerto Rico.



## HIST 8008 Research Seminar on Puerto Rican History IV

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program requires either completion of six approved graduate-level credits in Puerto Rican history or equivalent qualifications.

Monographic course on research and analysis of primary sources on various topics in thehistory of Puerto Rico. This course is offered in face-to-face, hybrid, and online modalities.

#### History 8009 The (De)construction of Cultural Heritage

Three credits. One hour of lecture and two hours of discussion per week.

The course examines the institutional support offered by international and national organizations for managing cultural, tangible, intangible, and human heritage. It explores the connections between heritage management, its political and social applications, and its role in shaping and reproducing cultural identities. Additionally, the course addresses the economic conceptualization of heritage within the tourism industry and aims to foster critical discussions on the conflicts arising from various uses of heritage in contemporary cities.

## **HIST 8010 Industrial Revolution and Underdevelopment**

Three credits. Three hours of lecture a week.

Prerequisite: Graduate student.

Discussion seminar on the European industrial revolution and attempts to replicate it in Latin America.

## HIST 8015 Seminar of Readings on Latin America: Nineteenth and Twentieth Centuries- I

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits on Latin America or authorization from the professor.

This seminar focuses on readings addressing the challenges faced by Latin America in the nineteenth and twentieth centuries, including issues of militarism, the rise of nationalism, constitutionalism, populism, socialism, and other relevant themes.

## HIST 8016 Seminar of Readings on Latin America: Nineteenth and Twentieth Centuries - II Three credits. Three hours of lecture a week.

Prerequisite Admission to the doctoral program or six approved credits on Latin America or authorization from the professor.

This seminar focuses on readings addressing the challenges faced by Latin America in the nineteenth and twentieth centuries, including issues of militarism, the rise of nationalism, constitutionalism, populism, socialism, and other relevant themes.

## HIST 8017 Seminar of Readings on Latin America: Nineteenth and Twentieth Centuries - III.

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits on Latin America or authorization from the professor.

This seminar focuses on readings addressing the challenges faced by Latin America in the nineteenth and twentieth centuries, including issues of militarism, the rise of nationalism, constitutionalism, populism, socialism, and other relevant themes.

## HIST 8018 Seminar of Readings on Latin America: Nineteenth and Twentieth Centuries - IV

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits on Latin America or authorization from the professor.

This seminar involves readings on the challenges faced by Latin America in the 19th and 20th centuries, including militarism, the rise of nationalism, constitutionalism, populism, socialism, and other significant issues. The course will be offered in face-to-face, hybrid, and online modalities.

## **HIST 8030 Contemporary Puerto Rican Historiography**

Three credits. Three hours of seminar.

Prerequisite: HIST 4225, 6051, 6052.

Critical examination of the various contemporary historiographical and methodological currents of Puerto Rico and identification of futureareas of research with relevant sources and applied methodologies.

#### HIST 8035 Supervised Reading Seminar in History I

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or 18 graduate credits in history.

Supervised reading course on special topics or specific problems of individual interest. Prior to enrollment, the student and the professor will agree in writing on the topic to be studied andthe course requirements.

### HIST 8036 Supervised Reading Seminar in History II

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or 18 graduate credits in history.

Supervised reading course on special topics or specific problems of individual interest. Prior to enrollment, the student and the professor will agree in writing on the topic to be studied andthe course requirements.

## **HIST 8037 Supervised Reading Seminar in History III**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or 18 graduate credits in history.

Supervised reading course on special topics or specific problems of individual interest. Prior to

enrollment, the student and the professor will agree in writing on the topic to be studied andthe course requirements.

## **HIST 8039 African History Topics Seminar**

Three credits. Three hours of seminar per week.

This seminar involves readings on themes related to African history, focusing on topics that have generated controversy in the historiography of sub-Saharan Africa. It covers issues related to political, ethnic, cultural, and socio-economic development, addressing specific cases from various nations and phenomena that extend beyond borders, requiring a comparative approach. Students may take the course a maximum of three times (9 credits) without repeating topics.

## HIST 8045 Seminar on Directed Research in History I

Three credits. Three hours of seminar.

Prerequisite: Admission to the doctoral program or 18 approved credits in history at the graduate level.

Monographic research course on specific topics or problems of individual interest. Prior to enrollment, the student will agree with the professor on the topic to be studied and the course requirements.

## HIST 8046 Directed Research Seminar on History II

Three credits. Three hours of seminar per week.

Prerequisite: Admission to the doctoral program or 18 approved credits in history at the graduate level.

Monographic research course on specific topics or problems of individual interest. Prior to enrollment, the student will agree with the professor on the topic to be studied and the course requirements.

## **HIST 8047 Research Seminar Directed at History III**

Three credits. Three hours of seminar.

Prerequisite: Admission to the doctoral program or 18 approved credits in history at the graduate level.

Monographic research course on specific topics or problems of individual interest. Prior to enrollment, the student will agree with the professor on the topic to be studied and the course requirements.

## HIST 8048 Directed Research Seminar on History IV

Three credits. Three hours of seminar.

Prerequisite: Admission to the doctoral program or 18 approved credits in history at the graduate level.

Monographic research course on specific topics or problems of individual interest. Prior to enrollment, the student will agree with the professor on the topic to be studied and the course

requirements.

#### HIST 8055 Seminar on Colonial Latin America I

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits.

This seminar focuses on Latin America during the sixteenth to eighteenth centuries and is offered in face-to-face, hybrid, and online modalities.

#### HIST 8056 Seminar on Colonial Latin America II

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits.

This seminar focuses on Latin America during the sixteenth to eighteenth centuries and is offered in face-to-face, hybrid, and online modalities.

#### **HIST 8057 Latin America Seminar III**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits.

This seminar focuses on Latin America during the sixteenth to eighteenth centuries.

#### **HIST 8058 Latin America Seminar IV**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program or six approved credits.

This seminar focuses on Latin America during the sixteenth to eighteenth centuries.

## **HIST 8065 Caribbean History Reading Seminar I**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

Reading seminar on the economic, social, cultural and political development of the Caribbean.

#### HIST 8066 Caribbean History Reading Seminar II

Three credits. Three hours of lecture a week.

Reading seminar on the economic, social, cultural and political development of the Caribbean.

#### **HIST 8067 Caribbean History Reading Seminar III**

Three credits. Three hours of lecture a week.

Reading seminar on the economic, social, cultural and political development of the Caribbean.

#### **HIST 8068 Caribbean History Reading Seminar IV**

Three credits. Three hours of lecture a week.

Reading seminar on the economic, social, cultural and political development of the Caribbean.

## HIST 8075 Caribbean History Research Seminar I

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores the economic, social, cultural, and political development of the Caribbean, offered over a four-semester cycle with varying subject matter each semester.

### HIST 8076 Caribbean History Research Seminar II

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores the economic, social, cultural, and political development of the Caribbean, offered over a four-semester cycle with varying subject matter each semester.

## HIST 8077 Caribbean History Research Seminar III

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores the economic, social, cultural, and political development of the Caribbean, offered over a four-semester cycle with varying subject matter each semester.

#### **HIST 8078 Caribbean History Research Seminar IV**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores the economic, social, cultural, and political development of the Caribbean, offered over a four-semester cycle with varying subject matter each semester.

### HIST 8085 Brazil: Economy and Society I

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores readings on specific topics in the economic and social history of Brazil.

HIST 8086 Brazil: Economy and Society II

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores readings on specific topics in the economic and social history of Brazil.

## **HIST 8087 Brazil: Economy and Society III**

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores readings on specific topics in the economic and social history of Brazil.

## HIST 8088 Brazil: Economy and Society IV

Three credits. Three hours of lecture a week.

Prerequisite: Admission to the doctoral program, or nine graduate credits, or authorization from the professor.

This research seminar explores readings on specific topics in the economic and social history of Brazil.

## HIST 8091 Seminar of Readings on Problems of the United States Nineteenth and Twentieth Centuries I

Three credits. Three hours of seminar per week.

Prerequisite: Admission to the graduate program in History or authorization from the professor.

This lecture course addresses various problems in the United States during the 19th and 20th centuries, with themes changing each semester. Students will engage in intensive readings on specific topics chosen by the instructor based on their expertise. Possible discussion topics include industrialism, the labor movement, women and gender, ethnicity and immigration, state and society, political history, the civil rights movement, urban history, and consumer culture. Students may take the course up to three times (for a maximum of 9 credits) without repeating topics. The course is offered in face-to-face, hybrid, and online modalities.

#### **HIST 8095 History of U.S.-Cuba Relations**

Three credits. Three hours of seminar per week.

Prerequisite: Graduate student

This course explores the historical process in which Cuba and theUnited States have developed their economic and political relations.

#### **HIST 8105 Topics in Arab and Islamic History**

Three credits. Three hours of seminar per week.

This seminar involves readings and discussions on Arab and Islamic themes, encompassing current

Arab countries and all territories historically associated with Islamic civilization. Each offering will focus on different topics, including but not limited to modernity and Islam in the contemporary world, fundamentalism, and the religious, political, and economic history of Al-Andalus. Students may take the course up to three times without repeating topics, which will change periodically.

## HIST 8125 Women's History Seminar I

Three credits. Three hours of lecture a week. Prerequisite: Graduate student.

Research Seminaron Women's History.

## HIST 8126 Women's History Seminar II

Three credits. Three hours of lecture a week. Prerequisite: Graduate student.

Research Seminaron Women's History.



Mailing Address: 13 Ave University Ste 1301 San Juan, PR 00925-2533

**Director: Dr. Richard Swope** 

Graduate Program Director/Coordinator: Dr.Patrick-Andé Mather

**Telephone:** 787-764-0000 Ext. 89535, 89549

**Portal:** http://humanidades.uprrp.edu/graduados/?page\_id=442

Email: patrick.mather@upr.edu

#### **DEGREE:**

## **Master of Arts in English Literature**

#### **FACULTY:**

Ann Albuyeh, Professor, Historical Linguistics, Psycholinguistics, Ethnolinguistics

Loretta Collins, Professor, Caribbean Literature and Culture, Creative Writing, Medical Humanities

**James Peter Conlan, Professor**, Medieval & Renaissance Literature, Early New World Travel Narrative, Legislation, Literature & Law

**Robert Dupey, Professor,** Code-Switching, Syntax, Comparative Analysis of English & Spanish

Nicholas Faraclas, Professor, Creole Studies, Sociolinguistics, Language and Globalization

Mirerza Gonzalez, Professor, Communication Competance, Ethnicity and Discourse, Latinx Media

**Cristal Heffelfinger-Nieves, Assistant Professor,** Linguistics, Pragmatics, Discourse Analysis, Bilingualism

**Dannabang Kuwabong, Professor**, Caribbean Literature and Culture, Environmental Studies, Trauma Theory, African Diaspora Literatures

**Janet MacLennan, Professor,** Relational and Intercultural Communication, Health Communication, Qualitative Research, Narrative

Patrick-André Mather, Professor, Sociophonetics, Pidgins & Creoles, Language Policy & Planning

Nalini Natarajan, Professor, 19th-Century British & Women's Literature, Cultural Studies, Post-colonial Theory



**Daniel Nevárez Araújo, Assistant Professor**, Disability Studies, Cinema Studies, Comedy, Apocalyptic Fiction, Heavy Metal Music

**Carmen Haydée Rivera, Professor,** US Latinx Literature, Literature of Puerto Rican Diaspora, and Hispanophone Caribbean Literature

Yolanda Rivera, Professor, Phonology, Syntax, Language Typology, Creole Studies,.

**Michael Sharp, Professor,** Caribbean & African Studies, Romanticism, Victorian Literature, 20<sup>th</sup> Century Poetry

Alma Simounet, Professor, Ethnolinguistics, Discourse Analysis, Bilingualism, Applied Linguistics

Maritza Stanchich, Professor, U.S. American, U.S. Latinx, Caribbean Literatures

**Rick Swope, Professor,** 20th-Century U.S. Literature, Postmodernist Fiction, Detective Fiction, Literary Paris

Don Walicek, Professor, Linguistics, Caribbean studies, Cultural studies, Writing

## **ADMISSION REQUIREMENTS:**

- 1. Bachelor's degree in English (or in a field related to Literature, Language, or Education).
- 2. Grade-point average of 3.00 or higher.
- 3. Personal Statement (1-2 pages single spaced) introducing applicant's background in the field (literature or linguistics), reasons for seeking the degree, specific topics of interest for future research or creative projects, and plans for career development.
- 4. Two (2) Letters of Recommendation (preferably from professors familiar with the applicant's academic work).
- 5. Two (2) Copies of all relevant official academic transcripts.

## **SPECIFIC MASTER'S PROGRAM REQUIREMENTS:**

The specialization in Linguistics requires candidates to have completed an introductory Linguistics course (ENGL 4205 or an equivalent in any language department), along with three additional credit hours in Linguistics. For the specialization in Literature, candidates are recommended to have taken survey courses in English and North American literatures, and at least one advanced writing course.

#### **GRADUATION REQUIREMENTS:**

1. Students in the M.A. program are required to complete a minimum of **30 credits**. All M.A. majors must complete ENGL 6205—Seminar in Critical Writing (3 credits with a B or better)\*; **24 credits** of courses at the 6000 level or higher with a minimum GPA of 3.0; and



- a Research Essay (6891 for Literature and 6893 for Linguistics) or a Creative Thesis (6895) with a passing grade.
- 2. \*A student can be excused from ENGL 6205 if a similar course has already been taken, including ENGL 3291 for those who studied with us as undergraduates, or evidence can be presented to demonstrate highly developed academic writing skills. In instances where the course is waived, the 3 credits are replaced with an elective in English (see graduate student manual for more information).

#### STUDY PROGRAM

PROGRAM REQUIREMENTS	CREDITS
Core Courses	
ENGL 6205 Critical Writing	3
ENGL 6415 Literary Criticism and Theory	3
Two (2) Period Specific Courses	3
Two (2) Genre/Author/Topic/Genre Courses	3
One (1) Elective in Linguistics	3
Two (2) 6000 level Electives (3 credits may be taken in another department)	
ENGL 6891 Research Essay in Literature	
Total:	30
REQUIREMENTS FOR SPECIALIZATION IN LINGUISTICS	CREDITS
Core Courses	
ENGL 6205 Critical Writing	3
ENGL 6051 Syntax I	3
ENGL 6499 Phonology of English	3
Three (3) Core Courses from Menu below	9
ENGL 6045 Language and Culture	
ENGL 6052 Syntax II	
ENGL 6100 Introduction to Linguistics	
ENGL 6106 Applied Linguistics	
ENGL 6408 Comparative Analysis of the Phonology of English and	
Spanish	
ENGL 6435 Grammatical Structures of English and Spanish	
ENGL 6440 Dialects of American English	
ENGL 6466 Studies in Bilingualism	
ENGL 6467 History & Development of English	
ENGL 6469 Creole Languages	
ENGL 6475 Dialectology of the English-speaking World(s)	
ENGL 6488 Literature, Language, and Culture of the English-Speaking	
Caribbean	
ENGL 6496 Topics in the Analysis of Contemporary English	
ENGL 6505 Semantics of Modern English	
ENGL 6507 The Acquisition of English	

Two (2) Electives in Linguistics	6
Two (2) 6000 Level Electives (one in Literature)	3
ENGL 6893 Research Essay in Literature	3
Total Credits:	30
Note: 3 of the 30 credits must be in pre-1800 literature courses.	

#### **COURSE DESCRIPTIONS:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## ENGL 5035 Travel Study in Literature, Communication, and Linguistics

Credit hours: 3

Prerequisites: All students need the authorization from the professor and the ability to engage in the travel portion of the course. The cost of travel must be met in a timely manner.

This course combines study and travel, allowing students to encounter the places, cultural artifacts, and historical contexts relevant to their studies in literature, communication, or linguistics. Various study trips will be offered, providing students with the opportunity to visit countries associated with the literature, communication, or linguistic topics they are studying. These experiences will enable them to engage directly with the culture, language, discourse, history, art, and architecture of specific periods, authors, or genres. Students may take this course up to three times, provided the topics differ.

#### **ENGL 6029 Special Topics Literature**

Credit hours: 3

Description: A specialized topics course reflecting current trends and issues in the study of literature and culture. Topics vary per semester.

#### **ENGL 6035 African Literature**

Credit hours: 3

A study of some of the major creative writings and films by Twentieth Century and contemporary African authors. Special emphasis is given to the development of distinctively African techniques and themes.

#### **ENGL 6037 Studies in Fiction**

Credit hours: 3

A specialized topics course reflecting trends and issues in the study of fiction. Topics vary per semester.

#### **ENGL 6045 Language and Culture**

Credit hours: 3



A study of the relationship between language and culture. An examination of sociolinguistics, ethnography of speaking, language and variation, methodologies of investigation, and current research in the field.

## **ENGL 6049 Contemporary US Latino/a Literature**

Credit hours: 3

This course offers a comprehensive study of contemporary U.S. Latino/a literature, framed within social, cultural, and historical contexts. It encourages theoretical readings and in-depth critical literary analysis, allowing students to explore the diverse voices and experiences represented in this literary tradition

## ENGL 6051 Syntax I

Credit hours: 3

An introduction to modern syntactic theory, with a focus on English.

## **ENGL 6052 Syntax II**

Credit hours: 3

Continuation of Syntax I. An in-depth study of influential literature in modern syntactic theory.

## ENGL 6059 Current Trends in Literary Criticism & Theory

Credit hours: 3

A specialized topics course reflecting trends and issues in the study of literary criticism and theory. Topics vary per semester.

#### **ENGL 6066 Texts/Authors and Their Critics**

Credit hours: 3

This course will focus on one or a related set of authors and their texts as well as the criticism surrounding their works.

#### **ENGL 6067 Studies in Literature and Film**

Credit hours: 3

A specialized topics course reflecting trends and issues in the study of Literature and film. Topics vary per semester.

#### **ENGL 6069 Minorities and Cultures of the Caribbean**

Credit hours: 3

This course examines the literature of ethnic minorities within Caribbean theory and literature, focusing on the previously unstudied representations of groups whose histories and cultures have been integral to the formation of Caribbean identities. It addresses the voices of marginalized or silenced communities, including Chinese, Arabs, Jews, and Muslims, highlighting their contributions to the rich tapestry of Caribbean culture and scholarship.

#### **ENGL 6100 Introduction to Linguistics**

Credit hours: 3

This course is designed for students with little or no background in linguistics and the study of language. It provides an introduction to contemporary linguistic theory across various areas, including phonetics and phonology, morphology, syntax, semantics, applied linguistics, and discourse analysis, as well as language variation and change. The course has a dual purpose: to familiarize students interested in language instruction with field-specific problems and terminology, and to offer a theoretical foundation for those wishing to pursue further studies in linguistics.

#### **ENGL 6105: Gender and Sexuality Discourses**

Credit hours: 3

This course provides an introduction to the paradigms that inform influential theories of gender and sexuality. It explores how various discourses surrounding gender and sexuality construct the relationship between theory and practice, as well as between identity and community.

#### **ENGL 6106 Applied Linguistics**

Credit hours: 3

This course considers how the field of linguistics contributes to the solution of real-world problems involving language learning/ teaching, language testing, curriculum design, literacy, and language planning. All material presented is applied to the existing language situation of Puerto Rico to clarify for students, possible avenues for change in their praxis as teachers.

#### ENGL 6127 20th-Century U.S. Literature

Credit hours: 3

A study of the literary forms and shifts in period style as well as the cultural logic that informed U.S. literature of the 20th Century.

## **ENGL 6205 Seminar in Critical Writing**

Credit hours: 3

An intensive course to practice the writing of essays on literature and language. Students will make full use of the library, computing, and the Internet.

### **ENGL 6405 Seminar in Nineteenth-Century American Literature**

Credit hours: 3

A study of selected works and movements of the period excluding Romanticism and Transcendentalism.

## ENGL 6408 Comparative Analysis of the Phonology of English and Spanish

Credit hours: 3

Phonetic and phonemic analysis of the sound systems of English and Spanish, including major dialectal varieties, vocalic, consonantal, and syllabic structures, stress and intonation patterns.

## **ENGL 6410 Caribbean Poetry and Drama**

Credit hours: 3

This course involves a detailed study of major works in various genres by Caribbean writers in English, framed by an exploration of the relevant social and historical background to facilitate in-depth discussions of the texts.

#### **ENGL 6415 Introduction to Literary Criticism and Theory**

Credit hours: 3

A study of the major literary theories and schools of criticism.

#### **ENGL 6425 Seventeenth-Century British Literature**

Credit hours: 3

Trends in early seventeenth-century literature.

#### **ENGL 6426 Chaucer**

Credit hours: 3

The language and poetic techniques. Focus on The Canterbury Tales, its cultural background and its continental influences. Study of the shorter poems.

## ENGL 6428 Nineteenth Century-American Romanticism and Transcendentalism

Credit hours: 3

An intensive study of earlier nineteenth-century American Literature with stress on Romanticism and Transcendentalism. Focus is on the major figures of the period: Poe, Hawthorne, Melville, Emerson, Thoreau, and Whitman.

**ENGL 6430 Shakespeare: Selected Topics** 

Credit hours: 3

This course provides a comprehensive study of representative tragedies, comedies, romances, and history and problem plays, focusing on their thematic depth, structural elements, and historical context.

**ENGL 6435 Grammatical Structures of English and Spanish** 

Credit hours: 3

A study of similarities and differences between the principal syntactic and morphological structures of the two languages.

ENGL 6438 Sex, Love, and Marriage in Restoration and Eighteenth-Century British Literature

Credit hours: 3

This course offers a comprehensive study of representative tragedies, comedies, romances, and history and problem plays, emphasizing their themes, structures, and historical contexts.

**ENGL 6439 Studies in Poetry** 

Credit hours: 3

A specialized topics course reflecting trends and issues in the study of poetry. Topics vary per semester.

**ENGL 6440 Dialects of American English** 

Credit hours: 3

Phonological, grammatical, and lexical variations of Spoken English in North America and the Caribbean.

**ENGL 6446 The Language of Earlier Literature** 

Credit hours: 3

Detailed study of the language and rhetoric of literary texts spanning the major periods of the history of English.

**ENGL 6447 Studies in Drama** 

Credit hours: 3

A specialized topics course reflecting trends and issues in the study of drama. Topics vary per semester.

ENGL 6449 Major Themes in Medieval and Renaissance Literature

Credit hours: 3

A study of a series of works and themes in which source study and comparative analysis will be used to read the works in their largest possible contexts. Consideration of European backgrounds followed by close analysis of the main texts.

#### **ENGL 6456 The Age of Satire (1660-1750)**

Credit hours: 3

The art of satire as practiced during the Neoclassical Period, including background and theory. Emphasis on Dryden, Pope, and Swift.

#### **ENGL 6466 Studies in Bilingualism**

Credit hours: 3

A study of bilingualism in Puerto Rico, the Americas, and elsewhere.

## **ENGL 6467 History and Development of English**

Credit hours: 3

The historical stages in the development of the English language. Analysis of the important external and internal events from the 6<sup>th</sup> century to the present.

## **ENGL 6469 Creole Languages**

Credit hours: 3

A study of Creole languages, primarily of the Western Hemisphere. Examination of the sociohistorical and sociolinguistic factors involved in linguistic and cultural creolization.

#### ENGL 6475 Dialectology of the English-speaking World(s)

Credit hours: 3

A study of English as a native, second, and international auxiliary language. Analysis of the structure and functions of these varieties.

#### ENGL 6480 Age of Shaw

Credit hours: 3

British drama before the Second World War, with special emphasis on the drama of George Bernard Shaw.

#### **ENGL 6486 Caribbean Theory and Literature**

Credit hours: 3

A study of the literary and cultural theory from the Caribbean in relation to literary texts from the region.

## ENGL 6488 The Literature, Language and Culture of the English-speaking Caribbean

Credit hours: 3

Prerequisite: Professor's authorization.

The leading contemporary poets and novelists with particular attention to their use of English Creole languages and with reference to their socioeconomic and historical backgrounds. This course is a prerequisite for all doctoral courses.

#### **ENGL 6489 Caribbean Narrative**

Credit hours: 3

A study of Caribbean fiction in English with emphasis on the development of distinctively Caribbean themes, techniques, and language.

## ENGL 6490 Introduction to Anglo-Saxon Language and Literature (Old English)

Credit hours: 3

The phonology, grammar, vocabulary of Anglo-Saxon. Readings for analysis.

## **ENGL 6491 Studies in Anglo-Saxon Literature**

Credit hours: 3

The study of the major works of Anglo-Saxon Literature in their textual and cultural contexts.

#### ENGL 6496 Topics in the Analysis of Contemporary English

Credit hours: 3

Examination of a current topic in linguistics of relevance to the analysis of English. The topic may change from semester to semester.

### ENGL 6497 Colonial and Eighteenth-Century American Literature

Credit hours: 3

A study of the primary religious, political, philosophical, journal, and creative writers in North America during the colonial period and the first years of independence

#### **ENGL 6499 Phonology of English**

Credit hours: 3

Current approaches to the analysis of the phonology of contemporary English.

#### **ENGL 6505 Semantics of Modern English**

Credit hours: 3

Detailed consideration of selected topics in semantic representation, with examples from contemporary English. Consideration of various theoretical approaches.

## **ENGL 6507 The Acquisition of English**

Credit hours: 3

Language acquisition is considered from various theoretical perspectives.

## ENGL 6891 MA Research Essay in English Literature I

Credits: 3

This course focuses on the study and development of research methods and sources essential for writing a research essay in English-language literature and culture, emphasizing archival and bibliographical research in various areas such as literature, creative writing, literary history, oral literature, and performance, with research approaches varying based on the essay's theme. Students enrolled in Research Essay in English Literature I receive full-time student status.

## ENGL 6892 MA Research Essay in English Literature II

Credits: 3

This course continues the study and development of research methods and sources essential for writing a research essay in English-language literature and culture, with an emphasis on archival and bibliographical research in areas such as literature, creative writing, literary history, oral literature, and performance. The research focus adapts based on the theme of the essay. Students enrolled in Research Essay in Literature II receive full-time student status.

## ENGL 6893 MA Research Essay in English Linguistics I

Credits: 3

This course focuses on the study and development of research methods and sources necessary for successfully writing a research essay or project in English-language linguistics and culture, with an emphasis on archival and bibliographical research in language and linguistics. The research approach varies based on the chosen theme, including print, electronic, fieldwork, and experimental methods. Students enrolled in Research Essay in English Linguistics I receive full-time student status.

#### **ENGL 6894 Research in English Linguistics II**

Credits: 3

This course continues the study and development of research methods and sources necessary for writing a successful research essay or project in English-language linguistics and culture, with an emphasis on archival and bibliographical research in language and linguistics. The research approach varies based on the chosen theme, including print, electronic, fieldwork, and experimental methods. Students enrolled in Research Essay in English Linguistics II receive full-time student status.

#### ENGL 6895 M.A. Thesis

Credit hours: 0

Enrollment: One semester only.

## ENGL 6896 M.A. Thesis

Credit hours: 0

Enrollment: Continuation; enrollment up to a maximum of three semesters.

## **ENGL 6905 Independent Study**

Credit hours: 3

Enrollment: enrollment up to a maximum of two semester



Mailing Address: 13 Ave University, Suite 1301 San Juan, PR 00925-2533

**Director:** Dr. Richard Swope

Graduate Program Cooridnator: Dr. Patrick-André Mather

**Phone**: (787) 764 – 0000 ext. 89611, 89612, 89653 **Websites:** http://humanidades.uprrp.edu/ingles/

http://humanidades.uprrp.edu/graduados/?page\_id=572

Email address: pgi.rrp@upr.edu

#### **DEGREE:**

## **Doctor od Philosophy and Letters in English**

The Ph.D. program provides advanced studies in the literature and languages of the English-speaking Caribbean. Doctoral students may specialize in Literature or Linguistics. Some students may combine both areas in their dissertations.

The Ph.D. program began in January 2000. Its emphasis is on critical studies of oral and scribal forms of Anglophone literary and cultural expression and on the analysis of the development and structure of Anglophone creole languages within the broader context of Caribbean, Caribbean Rim, and diasporic metropolitan societies and cultures. Its seminars include in-depth analyses of specific Caribbean authors like Naipaul and Walcott, Caribbean literature in metropolitan, postcolonial, and global contexts, Caribbean women's literature, African influence in the Caribbean, the structure and acquisition of pidgin and creole languages, language, identity, and power relations, and fieldwork in Caribbean and African settings.

#### **FACULTY:**

Ann Albuyeh, Professor, Historical Linguistics, Psycholinguistics, Ethnolinguistics.

**Loretta Collins, Professor,** Caribbean Literature and Culture, Creative Writing, Medical Humanities.

**James Peter Conlan, Professor,** Medieval & Renaissance Literature, Early New World Travel Narrative, Legislation, Literature & Law.

**Robert Dupey, Professor,** Code-Switching, Syntax, Comparative Analysis of English & Spanish.

Nicholas Faraclas, Professor, Creole Studies, Sociolinguistics, Language and Globalization.

Mirerza Gonzalez, Professor, Communication Competance, Ethnicity and Discourse, Latinx Media.

**Cristal Heffelfinger-Nieves, Assistant Professor**, Linguistics, Pragmatics, Discourse Analysis, Bilingualism.



**Dannabang Kuwabong, Professor,** Caribbean Literature and Culture, Environmental Studies, Trauma Theory, African Diaspora Literatures.

**Janet MacLennan, Professor,** Relational and Intercultural Communication, Health Communication, Qualitative Research, Narrative.

Patrick-André Mather, Professor, Sociophonetics, Pidgins & Creoles, Language Policy & Planning

Nalini Natarajan, Professor, 19th-Century British & Women's Literature, Cultural Studies, Post-colonial Theory.

**Daniel Nevárez Araújo, Assistant Professor**, Disability Studies, Cinema Studies, Comedy, Apocalyptic Fiction, Heavy Metal Music.

**Carmen Haydée Rivera, Professor,** US Latinx Literature, Literature of Puerto Rican Diaspora, and Hispanophone Caribbean Literature.

Yolanda Rivera, Professor, Phonology, Syntax, Language Typology, Creole Studies

**Michael Sharp, Professor,** Caribbean & African Studies, Romanticism, Victorian Literature, 20<sup>th</sup> Century Poetry.

Alma Simounet, Professor, Ethnolinguistics, Discourse Analysis, Bilingualism, Applied Linguistics.

Maritza Stanchich, Professor, U.S. American, U.S. Latinx, Caribbean Literatures.

**Rick Swope, Professor,** 20th-Century U.S. Literature, Postmodernist Fiction, Detective Fiction, Literary Paris.

**Don Walicek, Professor**, inguistics, Caribbean studies, Cultural studies, Writing.

### **ADMISSION REQUIREMENTS:**

#### **General Requirements of the Rio Piedras Campus**

Comply with the general requirements for admission to graduate studies at the Río Piedras Campus.

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Requirements of the Program:**

Additional coursework may be required to supplement the M.A. degree if deemed necessary at the time of admission and will be specified in the acceptance letter. This work must be successfully

completed with a grade of B or better, and up to 3 credits may count toward the minimum of 36 required credits. This applies particularly to ENGL 6051 – Syntax I, and ENGL 6499 – Phonology of English, as well as addressing any deficiencies at the master's level in Literature.

- 1. Master of Arts degree or its equivalent in literature, language, linguistics or related field.
- 2. Grade point average of 3.0 in the specialization and all previous graduate work.
- 3. a 3 to 5-page essay (in English) describing the candidate's reasons for pursuing a doctorate in English with specialized studies in Caribbean literature or language.
- 4. Interview (when feasible) with the members of the Graduate Admissions Committee.
- 5. Three letters of recommendation,
- 6. An original piece of research in the field of Caribbean or related studies (i.e. M.A. thesis, published article, scholarly research paper, etc.).

#### **GRADUATION REQUIREMENTS:**

All requirements for the Ph.D. must be completed within seven (7) sequential calendar years for full-time students from the date of first admission/enrollment as a Ph.D. student. Part-time students have 8 (eight) sequential calendar years to complete the requirements. Only under extraordinary circumstances will requests for extensions be considered, and those will normally not exceed a two-year period. Time is measured from initial entry to the program, and is based on academic years, that is, ending either December 15 or May 15. "Time out" is counted, unless the student officially withdraws from the program and then subsequently applies as a new student.

For more information on the program requirements and policies, please see our <u>Graduate Student</u> Manual.

The Department of English offers a special post-M.A. "Certificate in Caribbean Studies in Literature and Language" program for students interested in taking 6000- and 8000-level courses solely for professional improvement or personal interest.

- 1. Comply with the one-year residency requirement.
- 2. Complete 6 credits (depending on the nature of the courses taken) in a third language or successfully complete an equivalent proficiency exam.
- 3. Take ENGL 6488 Literature, Language and Culture of the Anglophone Caribbean, prior to beginning doctoral seminars.
- 4. Two 6000-level courses in Caribbean literature (for literature majors) or Caribbean language (for linguistics majors).
- 5. Completion of 36 graduate credits after completion of the M.A. degree, a minimum of 15 of which will consist of English Ph.D. seminars at the 8000 level in their area of study.
- 6. Pass the graduate examination.
- 7. Defend a research proposal.
- 8. Write a doctoral dissertation.

#### **STUDY PROGRAM:**

The doctoral program with a major in English is offered in the areas of literature and linguistics of

the English-speaking Caribbean. Related fields include studies in literary genres, second language acquisition, and linguistics. ENGL 6488 is required for all admitted students regardless of the area they select.

Requirements for Graduation (effective 2015)	Credits
ENGL 6488 Literature, Language, and Culture of the English-speaking	3 credits
Caribbean	3 Cicaits
Two (2) Caribbean specific 6000-level courses:	
ENGL 6410, ENGL 6486, or ENGL 6489 for Literature specialization	
ENGL 6469, ENGL 6045, ENGL 6475, ENGL 6051, or ENGL 6499 for	
Linguistics specialization.	
NOTE: These courses count toward the three (3) required Electives in English (see	
below)	
One (1) Caribbean specific 6000-level courses in other concentration:	
ENGL 6410, ENGL 6486, or ENGL 6489 for Literature specialization	3 credits
ENGL 6469, ENGL 6045, ENGL 6475, ENGL 6051, or ENGL 6499 for	
Linguistics specialization.	
An 8000-level course may fulfill this requirement with the Professor's	
authorization.	
Five (5) 8000-Level Seminars (Core Courses) in area of specialization (Lit or	15 credits
Ling)	
Three (3) Electives in English at the 6000 or 8000 level	9 credits
The two (2) Caribbean specific 6000-level courses can be used here.	
Two (2) Free Electives at the 6000 or 8000 level	6 credits
ENGL 8099 Research in Caribbean Literature and Linguistics (Position Paper)	0 credits
ENGL 8890 Writing of Doctoral Critical Essays (Comprehensive Exam)	0 credits
ENGL 8891 Dissertation I	0 credits
Total Credits	36 credits

#### **COURSE DESCRIPTIONS:**

The course descriptions below represent the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

## **ENGL 6488 The Literature, Language, and Culture of the English-speaking Caribbean**

Credit hours: 3

Pre-requisite: Authorization from the professor.

The leading contemporary poets and novelists with special attention to their use of English Creole languages and with reference to their socioeconomic and historical backgrounds. This course is a prerequisite for all doctoral courses.

## **ENGL 8005 Pidgin and Creole Languages**

Credit hours: 3

Prerequisites: ENGL 6469

A diachronic and synchronic analysis of English-based Caribbean creoles; current theories of the process of pidginization, creolization, and decreolization.

#### ENGL 8006 The Encounter between Africa and the West

Credit hours: 3

This course places Africa as its geographical center, and the relationship between Africa and the West during the last five hundred years as its thematic focus.

#### **ENGL 8007 Language Birth and Language Death**

Credit hours: 3

This course analyzes the "life cycle" of languages, beginning with birth and proceeding through change, spread, maintenance, shift, death, and revival.

#### **ENGL 8008 The Art of Derek Walcott**

Credit hours: 3

Prerequisites: ENGL 6410

The examination of Walcott's artistic maturation through the four decades in which he has been the leading Caribbean poet and playwright writing in English.

#### **ENGL 8009 Language Acquisition and Creoles**

Credit hours: 3

This course explores the unique development of creole languages as test cases for addressing questions in language acquisition through the perspectives of two major frameworks: Bickerton's Language Bioprogram Hypothesis and Chomsky's Universal Grammar.

## ENGL 8010 Caribbean Children's and Young Adult Literature and Theory

Credit hours: 3

This course explores the development of the literature addressed to a specific audience (schoolchildren) within the context of nations developing independently both politically and imaginatively, especially Jamaica, Trinidad, Barbados, Antigua and St. Lucia.

#### ENGL 8015 V.S. Naipaul

Credit hours: 3

The study of one of the most prolific Caribbean writers who has excelled in the novel, the short story, the travel book, and the essay.



#### **ENGL 8016 Oral and Scribal Traditions of Caribbean Verse**

Credit hours: 3

The history and development of anglophone Caribbean poetry and poetic oral expression, and the emergence of the impressive body of formal poetry written over the past fifty years.

## **ENGL 8017 Phonological Aspects of Caribbean Creoles**

Credit hours: 3

A study of the major phonological aspects of (primarily) English-derived Caribbean creoles, though reference to other European-language-derived creoles will also be made, e.g. to Haitian Creole and to Dutch Antillean Papiamento.

#### **ENGL 8018 Caribbean Drama and Performance**

Credit hours: 3

A close examination of the development of 20th century Caribbean drama and performance as a cultural mosaic that reflects (1) syncretic folk festivals, plays, masquerades, and spectacles, (2) the formal theater, and (3) the social milieu of the postcolonial Caribbean.

## ENGL 8019 Fieldwork in Caribbean Languages: Methodology and Analysis

Credit hours: 3

The problems and principles of studying language in its social and cultural context. It focuses on fieldwork methodology, particularly collection of data, the analysis and interpretation of data, and their interrelationships.

#### **ENGL 8020 Caribbean Women's Fiction**

Credit hours: 3

Analysis of fiction by Caribbean women writers in the context of recent critical approaches, such as narrative, feminist/womanist, postcolonial, historical, and socio-political theories.

#### **ENGL 8026 Caribbean Literature in Metropolitan Contexts**

Credit hours: 3

A study of the experience of migration, from primarily the Anglophone Caribbean to Europe and North America as recorded in fiction, screenplays, travel writings, memoirs, and testimonies by Caribbean authors writing in metropolitan centers.

#### 8027 Language Typology and Creole Languages

Credit hours: 3 ENGL

A study of the typological relations between Creoles, substrata, lexifiers, and other languages.



## **ENGL 8035 Postcolonial Theory and Caribbean Literature**

Credit hours: 3

A study of the major approaches, texts, and critiques of colonial discourse analysis and postcolonial literary theory and their connection to Caribbean issues and literary texts.

## **ENGL 8045: Independent Study**

Credit hours: 3

Students who would like to focus on a topic not covered by any existing (or regularly offered) course in the Doctoral degree program in English can propose a 3-credit independent study to pursue their interests. Students can take a maximum of two independent study courses.

#### ENGL 8046 Seminar in Language and Identity in the Caribbean

Credit hours: 3

In this course, we will look at the development of identity in the Caribbean through a close reading of texts extracted for their historical, sociological, cultural, linguistic, and literary relevance to ascertain the role of multiple factors and contexts in the construction of the various identities in the Caribbean world. The role of social interaction in the construction of identity will also be made evident.

## ENGL 8080 Caribbean Literatures and Languages in a Global Context

Credit hours: 3

The exploration of different contemporary (global) issues of literary form, cultural theory, and/or linguistic analysis as they affect the student of the literature, language, and culture of the Anglophone Caribbean. This umbrella course has different manifestations depending on the professor offering it in each semester and can be repeated up to three times under different subtitles.

#### **ENGL 8099 Research in Caribbean Literature and Linguistics**

Credit hours: 0

Enrollment: For one semester only.

Study and development of the research methods and sources necessary for the successful writing of a Ph.D. dissertation proposal.

## ENGL 8105 Tense, Mood, and Aspect in Caribbean Creoles

Credit hours: 3

A synchronic and diachronic analysis of the verbal systems of English-based Caribbean creoles.



## **ENGL 8106 Language and Power: The Construction of Socio-Political Discourse** in the Caribbean and Beyond

Credit Hours: 3

This course is a survey of the growing body of academic work that focuses on the role of language in the construction of socio-political discourses and systems.

## **ENGL 8107 Imagining Caliban: The Presence of the Caribbean in the American Imaginary**

Credit hours: 3

The exploration of the Caribbean (its region and its people) as a presence that informs the texture of the American imaginary in the formulation of an identity and in the production of a definition of aesthetics that affect literature, cinema, and popular culture.

#### **ENGL 8109 The Political Novel**

Credit hours: 3

Study and analysis of the Caribbean novel using critical and cultural theories centered on ideology as developed by R. Williams, F. Jameson, L. Hutcheon, T. Eagleton, E. Said, and S. Hall.

## **ENGL 8201 Seminar on Fieldwork on the Languages and Cultures of the Anglophone Afro-Caribbean**

Credit hours: 3

This course prepares students to do effective linguistic fieldwork. Students survey scholarly work on the language and literature of their target group, then go into the field in the Anglophone Afro-Caribbean to collect data from native speakers, and finally do linguistic and cultural analysis of the data.

## ENGL 8301 Literature from the Hispanophone Caribbean in Diaspora

Credit hours: 3

This course offers a comprehensive and critical study of literary works by authors from the Hispanophone Caribbean diaspora, written or translated into English, with a focus on texts featuring code-switching. It examines authors from Puerto Rico, Cuba, and the Dominican Republic who migrated to the United States or were born in the US to island émigrés.

## **ENGL 8890 Writing of Doctoral Critical Essays (Comprehensive Exams)**

Credit hours: 0

Enrollment: For three semesters only.

**ENGL 8891 Dissertation I** 

Credit hours: 0

Enrollment: For one semester only.

**ENGL 8892 Dissertation II** 

Credit hours: 0

Enrollment: Continuation in subsequent semesters

Mailing Address: 13 University Ave. Suite 1301 San Juan, PR 00925-2533

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Website: <a href="http://humanidades.uprrp.edu/graduados/?page\_id=445">http://humanidades.uprrp.edu/graduados/?page\_id=445</a>

**DEGREE:** 

## **Master of Arts in Linguistics**

#### **FACULTY:**

**Héctor Aponte Alequín**, Ph.D., University of Puerto Rico-Río Piedras, 2014. Assistant Professor, College of Education, UPR-Río Piedras. Morphosyntax, Semantics, Variation, Text Linguistics, Caribbean Spanish, and Applied Linguistics in Mass Communication.

**Sunny Cabrera Salcedo**, Ph.D., University of Massachusetts-Amherst, 1999. Full Professor, Department of Hispanic Studies, College of Humanities, UPR-Río Piedras. Lexical Semantics of Spanish, Hispanic Dialectology, General Linguistics.

**Gibran Delgado Díaz,** Ph.D., Indiana University at Bloomington, 2018. Assistant Professor. Sociolinguistics, Phonetics and Phonology, Experimental Phonetics, Variation, Morphosyntax, Grammaticalization.

**Robert Dupey Heding**, Ph.D., University of Puerto Rico-Río Piedras, 2006. Full Professor, Department of English, College of Humanities, UPR-Río Piedras. Contrastive Analysis, Narrative Discourse, Research and Critical Writing, Codeswitching, Phonology/Phonetics.

**Nicholas Faraclas Photakis**, Ph.D., University of California-Berkeley, 1989. Full Professor, Department of English, College of Humanities, Río Piedras. Creole Languages, Syntax, Phonology, Sociolinguistics, Applied Linguistics.

**Iraida Galarza,** PhD, Indiana University at Bloomington, 2020. Assistant Professor. Second Language Acquisition, Sociolinguistics, Phonetics and Phonology, Applied Linguistics.

**Melvin González Rivera,** Ph.D., Ohio State University, 2011. Full Professor, Department of Hispanic Studies, College of Arts and Sciences, UPR-Mayagüez. Syntax, Semantics and Pragmatics of Caribbean Spanish, Linguistic Attitudes and Language Policies.

**Rosa Guzzardo Tamargo,** Ph.D., The Pennsylvania State University, 2012. Full Professor, Department of Hispanic Studies and Graduate Program in Linguistics, College of Humanities, UPR-Río Piedras. Psycholinguistics, Acquisition of Spanish as L2, Bilingualism, Codeswitching, Linguistic Attitudes.

**Luis Ortiz López,** Ph.D., University of New México, 1996. Full Professor, Department of Hispanic Studies, College of Humanities, UPR-Río Piedras. Sociolinguistics, Language Contact, Creolization.

Cristina Martínez Benito, Ph.D., The University of Texas at Austin, 2013. Assistant Professor, Resource Center of Interdisciplinary Research and Undergraduate Learning. College of Natural Sciences, UPR-Río Piedras. Morphosyntax, Languages in Contact, Languages in Extinction, Sociolinguistics, Anthropological Linguistics.

**Doris Martínez Vizcarrondo,** Ph.D., Autonomous University of Madrid, 1998. Full Professor, Department of Hispanic Studies, College of Humanities, UPR-Río Piedras. Hispanic Linguistics, Discourse Analysis.

**Patrick André Mather**, Ph..D, University of Pittsburgh, 2000. Full Professor, Department of Foreign Languages, College of Humanities, UPR-Río Piedras. Languages in Contact, Sociolinguistics, Socio-phonetics, Applied Linguistics.

**Yolanda Rivera Castillo,** Ph.D., University of California-Davis, 1994. Full Professor, Department of English, College of Humanities, UPR-Río Piedras. Creole Languages, Phonology, Syntax.

**Alma Simounet Bey,** Ed..D., Interamerican University of Puerto Rico, 1987. Full Professor, Department of English, College of Humanities, UPR-Río Piedras. Ethnolinguistics, Plurilingualism, Language and Ideology, Discourse Analysis.

**Don Walicek Lindley**, Ph.D., University of Puerto Rico, Río Piedras, 2009. Full Professor, Department of English and Graduate Program in Linguistics, College of Humanities, UPR-Río Piedras. Sociolinguistics, Socio-historic Linguistics, Language and Ideology, Language Contact in the Caribbean.

## **ADMISSION REQUIREMENTS:**

## **General Requirements of the Rio Piedras Campus:**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

#### **Specific Requirements of the master's Program**

In addition to complying with the general requirements for admission to graduate studies of the UPR Campus, the student must comply with the specific requirements of the M.A. Program in Linguistics.

1. The student must have approved (with an A or a B) 9 undergraduate credits or of a higher level in the field of Linguistics. (If the student does not have these credits, they will take an introductory course offered by the Graduate Program in Linguistics during the first semester as a prerequisite of the M.A. degree.)

2. An interview with the candidates may sometimes be required by the evaluating committee.

## Required Documents for the Application of Admission to the Program

- 1. The application for admission to Graduate Studies is available on the platform of the Graduate Studies and Investigation Affairs.
- 2. The applicant will be required to have two letters of recommendation written by people who have an academic relationship with them. They will discuss the applicant's performance, the ability to do critical analysis and the potential to do academic research and to successfully complete graduate studies.
- 3. Two official copies are required of the academic records from all the institutions in which the applicant has received an academic degree.
- 4. The applicant will provide a 500 to 1000-word essay in which they describe the individual's academic or professional background in areas related to Linguistics, will justify an interest in the M.A. Program in Linguistics, and show a commitment to research in addition to putting in detail the individual's academic and professional goals.
- 5. The applicant is also required to provide a sample of their academic work, such as an academic article, a chapter from a thesis or book, an essay, or a term paper (10 to 20 pages), written by the applicant and closely related to the area of Linguistics (recommended requirement).

## **GRADUATION REQUIREMENTS:**

In addition to complying with the general requisites for graduation from a program in graduate studies at the UPR Río Piedras Campus, the applicant must also comply with the following specific requisites of a Master's Degree in Arts with a specialty in Linguistics:

- 1. Completion of 12 graduate credits in core courses from the Graduate Program in Linguistics.
- 2. Completion of 18 graduate credits in elective courses of which a maximum of 9 credits may come from other graduate programs (with the approval of the Graduate Committee)
- 3. Successful completion of the Qualifying Exam.
- 4. Successful completion of a thesis or a monographic project.

## **STUDY PROGRAM:**

Requirements of the Program	Credits
Core courses:	12
LING 6020 Research Methods in Modern Linguistics	3
LING 6040 Phonology	3
LING 6050 Morphosyntax	3
LING 6060 Semantic Theory	3
Elective Courses:	18
LING 6920 Qualifying Exam	0

Total	30
LING 6896 Continuation of Thesis (optional)	0
LING 6895 Thesis (Essay Project) of the M.A. Degree	0

#### **COURSES DESCRIPTION:**

The description of the courses appears below. They are the most recently registered in the System of Student Information of the Office of the Registrar of the Rio Piedras Campus up to the 30th of November 2023, to be included in the Graduate Catalogue 2023-2024.

#### LING 6020 Research Methods in Modern Linguistics

Three credits. Three hours of lecture work per week.

Seminar on the most recent research methods in synchronic linguistics, including bibliographical sources and auxiliary equipment. The course is offered in the in-person, hybrid, and online modalities.

## LING 6040 Phonology

Three credits. Three hours of lecture work per week.

Pre-requisite: Admission to the program.

Presentation and analysis of the most outstanding phonological theories of the  $20^{th}$  century. The course is offered in the in-person, hybrid, and online modalities.

#### LING 6050 Morpho-syntax

Three credits. Three hours of lecture work per week.

Pre-requisite: Admission to the program.

Theory and practice of the new directions in the analysis of morphology and sentence structures. The course is offered in the in-person, hybrid, and online modalities.

#### LING 6060 Semantic Theory

Three credits. Three hours of lecture work per week.

Pre-requisite: Admission to the program.

Critical analysis of the current postulates in the theories of meaning and semantic structures. The course is offered in the in-person, hybrid, and online modalities.

#### LING 6920 General Examination of the Degree

Credits: 0

Preparation for the subject degree exam. The course is offered in the in-person, hybrid, and online modalities.

#### LING 6895 Thesis

Credits: 0



Pre-requisite: Total number of credits required for the degree.

Methodologically grounded research project presented in the form of a written dissertation.

#### LING 6896 Continuation of Thesis

Credits: 0

Methodologically grounded research project presented in the form of a written dissertation.

#### OTHER COURSE DESCRIPTIONS:

#### **LING 6000 Articulatory Phonetics**

Three credits.

Three hours of lecture and six hours of laboratory work per week.

Discrimination, production and transcription of the sounds of natural languages, essential skills in phonological research.

## LING 6001 Theory and Practice of Contemporary Linguistics

Three credits. One hour and a half of lecture and one hour and a half of discussion per week.

This course focuses on the principles of linguistic analysis to develop theoretical and research skills. Graduate students explore various branches of linguistics while identifying basic units in phonetics-phonology, morphosyntax, lexical-semantics, and pragmatics. By the end of the semester, students propose a linguistic phenomenon for research. The course is offered in inperson, hybrid, and online modalities.

#### LING 6005 Lexicon and Semantics of Spanish

Three credits.

Two hours of lecture and one hour of discussion per week.

This course examines the theoretical foundations of semantics, focusing on their application to the teaching of Spanish. It includes the identification and analysis of meaning in linguistic units such as words, sentences, and utterances, as well as exploring the relationships between lexicology, lexicography, and semantics. The course is offered in in-person, hybrid, and online modalities.

#### LING 6008 Spanish in the United States: Grammars in Contact

Three credits. Three hours of lecture per week.

Pre-requisite: Graduate student.

Presentation of the relevant theoretical and methodological issues related to problems of grammars in contact, according to current research done on the Spanish of the United States (Mexican American and Puerto Rican varieties). The course is offered in the in-person, hybrid, and online modalities.

#### **LING 6010 General Linguistics**

Three credits. Three hours of lecture per week.

Pre-requisite: Director's authorization.

Study of the most important aspects of the history of linguistics and analysis of the ideological content and methodology of the different schools of contemporary linguistics. The course is offered in the in-person, hybrid, and online modalities.

## LING 6015 Text Production: Towards Communicative Competence

Three credits. Two hours of class discussion and one hour of laboratory work per week.

Study of communicative strategies used in message production, with intensive and systematic computer-aided practice. Exercises aim to develop language skills by means of systematic analysis and synthesis operations. Detailed discussion of acceptable and ungrammatical alternatives in cohesion of discourse.

#### **LING 6030 Instrumental Phonetics**

Three credits. Three hours of lecture per week.

Pre-requisite: Director's authorization.

Descriptive analytical study of language from the synchronic point of view.

## LING 6070 Dialectology of the Hispanic Caribbean

Three credits. Three hours of lecture per week. Pre-requisites: LING 6010 or ESPA 4011-4012.

This course examines the phonological, morphosyntactic, and lexical-semantic aspects of Caribbean Spanish varieties, focusing on sociological conditioning and issues related to contact and interference. It is offered in in-person, hybrid, and online modalities.

#### LING 6080 Plurilingualism: A Multidisciplinary Approach

Three credits. Three hours of seminar work per week.

Pre-requisites: LING 6010. Authorization of the professor of the course and the academic adviser.

Co-requisites: It can be taken concurrently with any of the courses of level 6.

Study of plurilingualism from a multidisciplinary perspective. Examination and evaluation of theoretical models of various disciplines that deal with the study of the phenomenon of individuals and societies that use more than one language on a daily basis.

#### **LING 6100 Generative Grammar**

Three credits. Three hours of lecture per week.

Pre-requisite: Director's authorization.

A study of the theoretical antecedents which have led to the development of a generative model of linguistic description. Presentation of the elements of the requirement for a generative grammar. Syntactic and phonological components. Critical survey of the successes and failures of these models.

## LING 6105 Eye Tracking in Linguistic Research

Three credits. Two hours of seminar work and one hour of workshop per week.

In this course we examine different linguistic studies that use eye-tracking techniques in order to investigate both auditory comprehension and reading comprehension. In addition, there is a course component consisting of a practical workshop on the procedures involved in the use of eye-tracking hardware and software to design and conduct linguistic experiments.

## LING 6106 Code-Switching

Three credits. Three hours of seminar work per week.

Detailed study of code-switching, a linguistic phenomenon that consists of the use of two or more languages within the same stretch of discourse. Examination of diverse theoretical approaches to the phenomenon and the methodologies used in research on the topic. Discussion of the evolution of the study of code-switching by means of the critical analysis of academic articles that have been fundamental for its development.

#### **LING 6110 Language Planning**

Three credits. Three hours of lecture per week.

Pre-requisites: Director's authorization.

Introduction to the concepts of language planning, their implementation in the modern world and their application to the case of Puerto Rico.

#### LING 6150 Applied Linguistics

Three credits. Three hours of lecture per week.

Presentation of the application of linguistic study to the resolution of practical issues related to language use in diverse professional and social contexts. Examination of the occupations and professions that are most relevant to Spanish applied linguistics. Analysis of Spanish from a dynamic and multidisciplinary perspective. This course is offered in the in-person, hybrid, and online modalities.

#### LING 6170 General Dialectology

Three credits. Three hours of lecture per week.

This course covers synchronic dialectology, focusing on the individual speaker and speech communities, examining concepts like idiolects, dialects as subsystems, diasystems, language norms, and isoglosses. It also explores the relationship between dialect differences and social differences in urban contexts. Additionally, it addresses diachronic dialectology, including dialect geography, local differentiation, the comparative method, linguistic change, and the diaystem from a historical perspective.

#### LING 6190 Introduction to Sociolinguistics

Three credits. Three hours of lecture per week.

This course explores the relationship between language and society as interrelated structures, examining the factors that influence linguistic habits within a community. It considers the speaker's linguistic awareness, the listener, the surrounding environment, the synchrony and diachrony of language, and various extralinguistic factors that contribute to dialectal diversity within a social context. The course is offered in in-person, hybrid, and online modalities.

## LING 6210 Psycholinguistics

Three credits. Three hours of lecture per week. Pre-requisite: B.A. Degree.

Current approaches to experimental and developmental psycholinguistics; recent development in neurolinguistics.

#### LING 6230 Ethnolinguistics

Three credits. Three hours of lecture per week.

General principles of ethnolinguistics. Critical exposition of Whorf's hypothesis; culture, world-vision, and language; linguistic universals and semantics. The course is offered in the in-person, hybrid, and online modalities.

## LING 6270 Semiology

Three credits. Three hours of lecture per week. Pre-requisite: Graduate student at M.A. or PhD levels.

A presentation of the main semiological trends from Saussure to the present times. The course will be particularly guided to classify the intersection that links linguistics and semiology together in order to expand its interdisciplinary reach towards the theory of communication.

## **LING 6290 Text Linguistics**

Three credits Three hours of lecture per week.

Pre-requisite: LING 6010

A study of the main trends of contemporary text-theory and text-linguistics; its accomplishments and limitations for discourse studies and discourse descriptions. The course is offered in the inperson, hybrid, and online modalities.

#### LING 6300 Introduction to Mathematical Linguistics

Three credits. Three hours of lecture per week.

Pre-requisite: Authorization of the director of the Department of Linguistics.

The study of mathematical and symbolic logic notions needed for the formal analysis of natural languages.

## LING 6340 Introduction to Computational Linguistics

Three credits. Three hours of lecture per week.

Pre-requisite: Graduate student.

This course covers electronic equipment and computer languages in relation to linguistic research, focusing on various types of linguistic studies within the field of computational linguistics. It is offered in in-person, hybrid, and online modalities.

## LING 6355 Language Devices for Text Editing

Three credits. Three hours of lecture per week.

In this course, graduate students describe and apply language devices during the editing process of informative and research texts, emphasizing effective communication skills from an applied linguistics perspective. They edit various non-fiction documents, such as research papers, abstracts, essays, brochures, and reports, while carefully observing phonetic-phonological, morphosyntactic, lexical-semantic, and pragmatic features. The course is offered in in-person, hybrid, and online modalities.

#### LING 6370 Phonological Analysis

Three credits. Three hours of lecture per week.

Pre-requisite: Graduate student.

An introduction to the theory and practice of generative phonology, including its raison d'être, origins, methodology and place in linguistic theory.

## LING 6400 Metatheory

Three credits. Three hours of lecture per week.

Pre-requisite: Authorization from the Department Director.

Examination and analysis of the various forms in which linguistics has been conceptualized in regard to the position it has among the other sciences. This course is offered in the in-person, hybrid, and online modalities.

## LING 6500 Spanish Phonetics and Phonology

Three credits Three hours of lecture per week.

Pre-requisite: Director's authorization.

The formation and development of phonetics and phonology as disciplines of linguistic science. Discussion of the phonetic and phonological system beginning with the Prague School of language and its followers. Phonetic and phonological transcription of Spanish, considering the various systems, classes, and methods. The functions of spectrograph and analysis of spectrograms.

#### LING 6520 Oral Language in the Folkloric Tradition of Puerto Rico

Three credits. Three hours of lecture per week.

Pre-requisite: Authorization from the Department Director.

The study of the process of transmission of language and its manifestations in folklore throughout the ages. Literary expressions in oral tradition. Techniques for the investigation and compilation of linguistic literary forms transmitted orally.

## LING 6525 History of the Spanish Language in Puerto Rico

Three credits. Three hours of seminar work per week.

Study of the history of Spanish in Puerto Rico. Analysis of the linguistic influences and cultural roots of Puerto Rican Spanish from the Arawak Taino substratum to the cultured and semi-cultured usages of the twentieth century.

#### LING 6530 African Linguistic Influences in the Caribbean

Three credits. Three hours of lecture per week.

Pre-requisite: Graduate student.

A study of African influences present in the phonology, morphology, syntax and lexicon of the various languages of the Caribbean.

#### LING 6540 Morphosyntax of Spanish

Three credits. Three hours of lecture per week.

Pre-requisite: Admission to the Graduate Program in Linguistics.

Presentation and analysis of the morphosyntactic structures of Spanish. Study of the morphosyntactic level of language applied to Spanish, and its relation to the phonological, semantic and pragmatic levels, according to recent theoretical models. This course is offered in the in-person, hybrid, and online modalities.

## LING 6550 Seminar: Current Themes in Linguistics

Three credits. Three hours of seminar per week. Students may repeat the course with a maximum of 12 credits.

Pre-requisite: Authorization from the professor.

Seminar on a current topic in linguistics to be decided on by the instructor. The topic is to be announced the semester before the class is offered. No topic will be covered more than once. The course is offered in the in-person, hybrid, and online modalities.

#### LING 6551 Directed Linguistic Research

One credit One hour of seminar per week.

Pre-requisite: LING 6010, 6020, 6040, 6050, 6060 and the elective course related to the theme of each seminar.

This course involves research on a specific topic or problem to which a previously studied model can be applied, based on the student's completed coursework.

## LING 6590 Seminar in Historical Linguistics

Three credits. Three hours of lecture per week.

Pre-requisite: Authorization of the director.

This course focuses on Neogrammarian, structuralist, and transformational generative analyses of language change, examining diachronic morphology, phonology, and syntax, along with lexical change and the social motivations behind language evolution.

## LING 6595 Brain and Language: Critical Analysis of Current Literature

Three credits. Three hours of seminar per week.

Study of the neural basis of natural human language through current literature. Critical evaluation of the relevance of published neuroscience research to the understanding of language in general, linguistic structure, language development, the learning and processing of language, and to language impacts of disease states.

## LING 6600 Introduction to the Cognitive Neuroscience of Language

Three credits. Two hours of lecture per week. Pre-requisite: LING 6010 or its equivalent.

This course explores the cognitive foundations of normal and abnormal language development, acquisition, and adult processing, emphasizing the interplay between intellectual capacity, environmental factors, and neurological conditions, with practical experience in data collection and analysis included.

## LING 6995 Interdisciplinary Approaches to Linguistics

One to three credits. One to three hours of seminar work per week.

This theoretical and practical seminar explores the intersections between linguistics and various disciplines, covering both theoretical and practical aspects to investigate the application of linguistics in different fields, including themes in historical sociolinguistics. The course is offered in in-person, hybrid, and online modalities.

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**Website:** http://humanidades.uprrp.edu/graduados/?page id=448

## **DEGREE:**

#### **Master of Arts in Comparative Literature**

## **FACULTY:**

**Elidio La Torre Lagares**, Ph.D., University of Puerto Rico, Río Piedras, 1996. Comparative literature, Caribbean and Hispanic American literatures, noir novel, narrative and art in transmedia cultures, film studies.

**Noel Luna,** Ph.D., Princeton University, 2003, Professor. Classical literature, modern and contemporary poetry, literary theory.

**Marla Pagán Mattos,** Ph.D., University of Pennsylvania, 2012, Assistant Professor. Medieval and Early Modern literatures, sound culture, the history and materiality of the book, literary theory.

**Marian E. Polhill**, Ph.D., Cornell University, 2002, Professor. Cultural studies; Medieval and Premodern narrative and poetry; literature and medicine; bestiaries; medievalism.

**Eduardo** (Lalo) Rodríguez, M.A., Université de París, 1987, Associate Professor. Caribbean literature, Latin American literature, Modern and Contemporary literatures; writer.

#### ASSOCIATED FACULTY:

**Víctor Castro,** Ph.D., Friedrich-Alexander Universität Erlangen-Nürnberg, 1992, Professor. Department of Foreign Languages and Department of Comparative Literature. German language and literature, XVIII and XIX centuries; Classical studies.

**Juan Gelpí,** Ph.D., Princeton University, 1983, Professor. Department of Hispanic Studies. Literary theory, Puerto Rican and Latin American literatures, Chilean literature.

**Luce López Baralt**, Ph.D., Harvard University, 1974, Emeritus Professor, Department of Hispanic Studies. Aljamiado literature, Spanish Golden Age, mysticism and poetry.

**Dorian Lugo Beltrán,** Ph.D., University of Puerto Rico, Río Piedras, 2007. Professor. Program in Interdisciplinary Studies, Program in Cultural Management, Department of Comparative Literature, film theory, Spanish Golden Age, cultural studies.

**Juan Otero**, Ph.D., Harvard University, 1998, Professor. Hispanic Studies, Caribbean and Latin American literatures, cultural studies.

**Teresa Peña Jordán,** University of Pittsburgh, 2005, Adjunct Professor, Department of Comparative Literature, Program in Women's and Gender Studies. Latin American literature of XIX<sup>th</sup>, XX<sup>th</sup>, and XX<sup>th</sup> centuries; Cuba and Puerto Rico, women's studies, politics, transatlantic studies, body theory, psychoanalysis.

**Antoine Philippe,** Ph.D., University of California at Irvine, 2002, Professor. Department of Foreign Languages, Department of Comparative Literature. Contemporary French culture and film, literary theory, linguistics.

**Emmanuel Ramírez Nieves,** Ph.D., Harvard University, 2015. Spanish Medieval and Early Modern cultures and languages, literature and religion, humor in literature.

**Julio Ramos**, Ph.D., Princeton University, 1985, Emeritus Professor of Spanish and Portuguese, UC Berkeley. Latin American literature, contemporary literature.

**Rubén Ríos Ávila**, Ph.D., Cornell University, 1983, Professor, NYU. Modern and contemporary literature, psychoanalysis, film and literature, Baroque and Neo-Baroque literatures.

**Ada M. Vilar**, DML, Middlebury College, Retired Professor, Department of Foreign Languages and Department of Comparative Literature. French literature, literary theory, narratology.



## REQUIREMENTS FOR ADMISSION TO GRADUATE SCHOOL:

## **General requirements of the Rio Piedras Campus:**

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

## **Specific Requirements of the master's Program:**

Applicants must meet all the general requirements for admission to graduate studies at the Río Piedras Campus. They must also fulfill the following requirements:

- 1. The applicant must hold a B.A. degree in Comparative Literature, Liberal Arts, or their equivalent. Candidates who may not have fulfilled certain requirements, according to the evaluation of the Graduate Committee, may be classified as transitional students until they complete those requirements.
- 2. Knowledge of a third language for research purposes. Candidates who have not studied a third language must begin to do so in their first semester of the program.
- 3. Two letters of recommendation.
- 4. Applicants are required to write a three-page essay analyzing and critiquing a provided essay related to the field of Comparative Literature.

## **GRADUATION REQUIREMENTS:**

Candidates for the master's degree must meet all the Río Piedras Campus's graduation requirements and complete the following:

- 1. A minimum of 18 graduate credits in Comparative Literature.
- 2. Successfully complete the course, LITE 6007, Seminar on Theory and Research.
- 3. A maximum of 9 graduate credits in Hispanic Studies, English, History, Philosophy, Linguistics, or related fields, approved by the Graduate Program.
- 4. A maximum of 9 credits completed at other universities or colleges, subject to approval by the Graduate Committee.
- 5. A maximum of 6 credits in independent study courses.
- 6. Demonstrate reading knowledge of a third language.
- 7. Successfully complete a written comprehensive examination.
- 8. Present and defend a thesis before an Examination Committee, which consists of three members, the student's thesis advisor and two readers.

#### PROGRAM OF STUDY

Program requirements	Créditos
Courses in Comparative Literature	18
LITE 6007, Seminar of Theory and Research	3

Courses in Hispanic Studies, English, Linguistics, or related fields	9
LITE 6900, Written Comprehensive Examination	0
LITE 6895, Thesis proposal	0
LITE 6896, Thesis	0
Total Credits	30

#### **COURSE DESCRIPTIONS:**

The following course descriptions reflect the most recent registration in the Student Information System of the Registrar's Office of the Rio Piedras Campus as to November 30<sup>th</sup> of 2023, and they are to be included in the Graduate Catalog of 2023-2024.

The Graduate Program in Comparative Literature offers some courses at the 5000 level, which may count as graduate courses. For these course names and descriptions, please consult the General Catalog of Undergraduate Programs of the Río Piedras Campus.

#### **LITE 6005** Literature and Deconstruction

Three credits. One hour and half of lecture and one hour and half of discussion per week.

This course explores literature through a deconstructionist lens, focusing on key texts by Jacques Derrida to analyze the conventions that enable literary discourse.

#### LITE 6007 Seminar on Theory and Research in Comparative Literature

Three credits. One hour and half lecture and one hour and half of discussion per week.

This seminar introduces students to the historical context and key debates of Comparatism, focusing on its foundational theoretical currents and preparing them for the methodology of literary research; it is offered in face-to-face, hybrid, and online formats.

## LITE 6008 Psychoanalysis and the Baroque

Three credits. Three hours of lecture, discussion and seminar per week.

Prerequisites: For students who graduated from the Masters in Comparative Literature.

A comparison of the modern elements shared by the Baroque style and psychoanalysis, focusing on Disillusionment, Hermetism, and Formalism. Texts from Lacan, Deleuze, Gongora, Sor Juana, Gracian, Lezama Lima, Sarduy, Arenas y Perlongher will be read.

## LITE 6019 The European Novella and Legal Discourse

Three credits. One hour and half of lecture and one hour and half of discussion per week.

Prerequisite: LITE 3011, LITE 3012, LITE 3101.



The study of the relationships between legal discourse and the European novella, and the analysis of the relationships between the novella and the fictitious case, paying attention to the way in which individual authors appropriate themselves of this discourse from classical antiquity with the purpose of either validating or challenging legal systems and the hierarchies that they sustain.

## LITE 6021 (Premodern) Myths and Monsters

Three credits. Three hours of seminar per week.

This course will study literary representations of myths and monsters, comparing texts from a variety of geographical and temporal contexts, including for example, medieval Anglo-Saxon, European, pre-Columbian, Caribbean and/or global contexts. Theoretical readings encourage reflection on concepts such as monster, hero, authority, ethics and war. In-person course.

#### LITE 6022 Race, Music and Literature in the Caribbean

Three credits. One hour of lecture, one hour of discussion and one hour of seminar per week.

Interdisciplinary study of racial representations in Caribbean music and Literature. Borderline between European and American imperial powers, the Caribbean is a linguistic and racial diverse cultural area, interconnected by transits, fluxes and circuits of people, merchandises and cultures. Departing from the shared experience of slavery and mestizaje, the course examines the definitions and representations of the Caribbean as a region and some cases. In-person course.

## **LITE 6025 The Origins of Literary Theories**

Three credits. Three hours of lecture per week.

Prerequisites: LITE 3011 and LITE 3012.

Study of literary theory from the Greek and Roman ancient cultures to the European Renaissance and the Baroque. Study of literary theory from Aristotle and Horace to renaissance poetics (Cinthio, Castelvetro, Robortello, Tasso, etc.) and the Baroque (Lope de Vega, Gracian). Analysis of how these theoretical traditions have defined the constant of their object of study (literature in general) and its specific manifestations by constructing the concept of "literary genres". Focus on the tension caused by the existence of theoretical models that do not necessarily coincide with the actual literary practice that, nevertheless, attempts to legitimize itself by means of this predominant literary theory.

## LITE 6396 The Aljamiado Literature of the Spanish Moriscos.

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the Director of the Literature Department.

The clandestine literature of the 16th century Spanish Moriscos (moors) written in Spanish and Arabic characters. This surprisingly hybrid literature both Castilian and Arabic during the Spanish Golden century-includes poems, religious treatises, legends, and fascinating historical testimonies of the Morisco's tragic extinction as a people.

#### LITE 6401 Goethe's Faust

Three credits.

Prerequisite: Bachelor's degree.

Investigations into the Faust legend and its various manifestations in world literature from the sixteen century to the present.

#### LITE 6407 The Myth of Italy in Modern Literature

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the director of the Literature Department.

A textual analysis of the fascination exercised by Italy from the time of Goethe and Winkelmann to the 20th century, including the English and French Romantics.

## LITE 6411 Dante: the Divine Comedy and the Tradition of the Voyages Beyond the Grave Three credits.

This course provides a canto-by-canto analysis of Dante's *Divine Comedy*, examining the literary and philosophical traditions that inspired its creation.

## LITE 6412 Dante: The Divine Comedy and the Tradition of the Voyages Beyond the Grave. Three credits.

This course provides a canto-by-canto analysis of Dante's *Divine Comedy*, examining the literary and philosophical traditions that inspired its creation.

#### **LITE 6415 Man and Nature in Modern Literature**

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or its equivalent.

Changing attitudes toward nature as reflected in the literature from the Middle Ages to the present, with an emphasis on the last two centuries.

#### LITE 6417 Modern Drama: Structures

Three credits. Three hours of lectures per week.

Prerequisite: Bachelor's degree or authorization from the director of the Literature Department.

This course investigates the roots and causes of radical innovations in dramatic production over recent decades, analyzing the shift from traditional forms evident in early 20th-century works by Ibsen, Maeterlinck, and Strindberg to the new aesthetics employed by later authors such as Beckett, Ionesco, Genet, Pinter, Weiss, and Wesker.

#### LITE 6418 Modern Drama: Structures.

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

This course investigates the roots and causes of radical innovations in dramatic production in recent decades, analyzing the changes evident since the early 20th century in works by Ibsen, Maeterlinck, and Strindberg, which led to a departure from traditional forms and the emergence of new aesthetics utilized by authors such as Beckett, Ionesco, Genet, Pinter, Weiss, and Wesker.

## LITE 6419 Don Juan: Dramatic Myth

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Investigation of the origins and multiple complex variations of the theme throughout Europe from the sources of Tirso de Molina up to our time.

#### LITE 6420 Don Juan: Dramatic Myth

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Investigation of the origins and multiple complex variations of the theme throughout Europe from the sources of Tirso de Molina up to our time.

## **LITE 6421 Theory of the Novel**

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

The novel and novelists; theories and theoreticians of the novel.

#### **LITE 6422 Theory of the Novel**

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

The novel and novelists; theories and theoreticians of the novel.

#### LITE 6425 Woman, Myth and Reality

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree.

This course examines the portrayal of women as both themes and authors in world literature, analyzing their roles across different epochs and cultures.

#### LITE 6426 Woman, Myth and Reality

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree.

This course examines the portrayal of women as both themes and authors in world literature, analyzing their roles across different epochs and cultures.

## **LITE 6427** The Twentieth-Century Novel

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Investigation into the various dimensions of the twentieth-century novel, as reflected in the works of Joyce, Kafka, Faulkner, Hasek, Huxley, Sartre, Moravia, Robbe-Grillet, Bellow, Solzhenitzyn, and Garcia Marquez. This course is offered in face-to-face, hybrid, and online modalities.

## **LITE 6428** The Twentieth-Century Novel

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Investigation into the various dimensions of the twentieth-century novel, as reflected in the works of Joyce, Kafka, Faulkner, Hasek, Huxley, Sartre, Moravia, Robbe-Grillet, Bellow, Solzhenitzyn, and Garcia Marquez. This course is offered in face-to-face, hybrid, and online modalities.

#### **LITE 6429 Literature in the Renaissance**

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Advanced course research in certain literary genres, varying from year to year.

#### LITE 6430 Literature in the Renaissance

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Advanced course research in certain literary genres, varying from year to year.

#### **LITE 6431 Marcel Proust**

Three credits. Three hours of lecture per week.

An analytic and thematic study of remembrance of things past in its dimension as a poetic of memory and sensation.

## **LITE 6435 Fundaments of Romanticism**

Three credits.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

An investigation into the esthetic, historical, political, social, and philosophical foundations of romantic literature.

#### LITE 6456 Fundaments of Romanticism

Three credits.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

An investigation into the esthetic, historical, political, social, and philosophical foundations of romantic literature.

#### LITE 6437 Classical Myths in Modern Drama

Three credits. Three hours of lecture per week.

This course provides a comparative analysis of the tragic destinies of Classical Antiquity as depicted in attic tragedy, exploring various dramatic adaptations from the Renaissance to the present, focusing on couples like Orpheus and Euridice, Amphitryon and Alcmene, heroines such as Antigone and Iphigenia, and siblings like Orestes and Electra.

## LITE 6439 Homer and Virgil

Three credits. Three hours of lecture per week.

Prerequisite: Authorization from the Director of the Literature Department.

Inquiry of the esthetic historic, cultural and mythological content of the three epic poems.

#### LITE 6441 Homer, Dante, Joyce

Three credits. Three hours of lecture per week.

A group investigation into the structural, thematic, and stylistic relationships of the *Odyssey*, the *Divine Comedy*, and *Ulysses*, with some consideration of Virgil, Shakespeare, Ibsen and others.

#### LITE 6445 James, Woolf, Proust

Three credits. Three hours of lecture per week.

A comparative study of the techniques of James, Woolf and Proust, and how they influenced the development of the novel. Investigation and critical judgments of certain aspects of their works.

#### LITE 6447 The Essay as a Literary Form

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

Analysis of the essay as a particular type of literary composition. Consideration of some of its chief historical variants, beginning with its modern origins with Montaigne and Bacon; several of its thematic and stylistic characteristics will be examined. Face to face, hybrid and online course. Effective August 2020.

#### LITE 6448 The Epic Poem and the Novel in the Renaissance

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the professor.

A study of the development of the novel and the epic poem in the Renaissance, through the works of Boccaccio, Franco Sacchetti, Pulci, Boiardo, Ariosto, Sannazzaro, Bandello, Tasso and others, and their influence in other countries. A study will be made of the epic poem and procedure in the narrative.

#### LITE 6449 The Epic Poem and the Novel in the Renaissance

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the professor.

A study of the development of the novel and the epic poem in the Renaissance, through the works of Boccaccio, Franco Sacchetti, Pulci, Boiardo, Ariosto, Sannazzaro, Bandello, Tasso and others, and their influence in other countries. A study will be made of the epic poem and procedure in the narrative.

#### LITE 6450 Medieval Hebrew-Spanish Poetry

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

The course deals with medieval Spanish Jewish poetry written in Hebrew, including key figures such as Ibn Nagrella, Ibn Gabirol, Mose ibn Ezra during a period of such literary excellence that it is considered by some a true "renaissance". This poetic production will be studied in comparison with that of contemporary and later Spanish poets.

## LITE 6455 Medieval Arabic-Spanish Poetry

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

The course deals with Medieval Spanish Muslim poetry in classical Arabic, written by key figures like Ibn al'Arabi, Avempace, A'lmu'utamid of Seville. Their poetic production will be compared to that of medieval and Renaissance Spanish poets.

## **LITE 6458** The Literature of Existentialism

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A study of existentialism, considering the ideas of Kierkegaard and his influence on the literary works of Unamuno, Camus, Sartre and others.

#### LITE 6459 African Studies: Drama

Three credits. Three hours of lecture per week.

A critical investigation of African drama and its relationship with other literature.

#### LITE 6465 Studies in the Narrative: Nineteenth Century

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

An in-depth study of the most outstanding writers of fiction of the 19<sup>th</sup> century; their immediate circles, and the various literary and sociopolitical movements relevant to their work. Face to face, hybrid and online course. Effective August 2020.

#### **LITE 6466** Studies in the Narrative: Nineteenth Century

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

An in-depth study of the most outstanding writers of fiction of the 19<sup>th</sup> century; their immediate circles, and the various literary and sociopolitical movements relevant to their work.

## LITE 6467 Kafka and Borges

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A study of Kafka's The Castle and of some of Borges' short stories. Examination of the formal relations between these two authors.

## LITE 6468 The Epic

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A study of the epic from Gilgamesh to The Lusiads.

## LITE 6469 The Epic

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A study of the epic from Gilgamesh to The Lusiads.

#### LITE 6470 Contemporary Literary Criticism

Three credits. Three hours of lecture per week. Could be repeated maximum of six credits. Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

An examination of the basic assumptions of critical theory on which contemporary literary studies are based. One of the major trends (such as Stylistics, Marxism, the New Criticism) will be chosen.

#### LITE 6475 Contemporary Literary Criticism

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

An examination of the basic assumptions of critical theory on which contemporary literary studies are based. One of the major trends (such as Stylistics, Marxism, the New Criticism) will be chosen.

## **LITE 6478** Contemporary Occidental Poetry

Three credits. Three hours of lecture per week. Could be repeated, maximum of six credits. Prerequisites: Bachelor's degree or authorization from the Director of the Literature Department.

The paths and development of contemporary occidental poetry through the study of its chief creators after Baudelaire.

## **LITE 6479 Contemporary Occidental Poetry**

Three Credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

The paths and development of contemporary occidental poetry through the study of its chief creators after Baudelaire.

#### **LITE 6480** Theory of Drama

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A penetrating study of the characteristics of the "tragic vision" and the "comic vision" in western dramatic literature.

#### **LITE 6485** Theory of Drama

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A penetrating study of the characteristics of the "tragic vision" and the "comic vision" in western dramatic literature.

## LITE 6490 Africa in the Antilles

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

A critical investigation into the influences and relations between African culture and the literature of the Antilles.

## LITE 6497 Comparative Mythology

Three credits. Three hours of lecture per week.

Prerequisite: Bachelor's degree or authorization from the Director of the Literature Department.

The science of mythology is presented within the frame of Comparative Literature.

## LITE 6499 Caribbean Theater: Texts and Performance in the Greater and Lesser Antilles

Three credits. Three hours of lecture per week.

Prerequisite: Graduate student or third or fourth year undergraduate student.

Comparative study of the contemporary theater in French, Spanish, English, and/or Creole and nation languages of the Caribbean, with special emphasis on the critically Caribbean theater esthetics, that transcends linguistic, cultural, and political differences.

## LITE 6505 Oral Tradition, Visual Myth and Native Literature in the Andean World Three credits. Three hours of lecture per week.

The Andean cultural semiotics in their oral, visual, and written manifestations.

#### LITE 6506 Thor and Other Headcleavers: Medieval Scandinavian Literature

Three Credits. One hour and half of lecture and one hour and half of discussion per week. Prerequisites: LITE 3011, LITE 3012, LITE 3101.

This semester course examines Medieval Scandinavian literature within its cultural, historical, philosophical, and scientific contexts, analyzing mythological texts, the Sagas of the Icelanders, Scaldic poetry, and medieval literary theory, while exploring the intersections among these works and the construction of Icelandic national identity. The course is offered in face-to-face, hybrid, and online modalities.

## LITE 6515 Literature Science, and Culture in the Middle Ages

Three Credits. One hour and half of lecture and one hour and half of discussion per week. Prerequisites: LITE 3011-Modern Literature, LITE 3012-Contemporary Literature, LITE 3101-Literary Theory.

This seminar course explores the intersections among fictional, scientific, and cultural discourses of the medieval period, examining how medieval literature modifies, questions, or transcends the structures of knowledge of its time while considering the cultural consequences of this process. The course is offered in face-to-face, hybrid, and online modalities, effective August 2020.

#### LITE 6525 Metatheater: Five Centuries of Self-Conscious Theater

Three credits. Three hours of seminar per week.

Seminar course in which the theoretical and paradigmatic texts that define meta-theater (Abe/Richenberger) and its techniques (Hornby) will be studied. Once the theoretical framework is established and some literary models are analyzed, the student will choose at least two texts to develop their research comparing authors, dramatic genres, and historical periods, or tracing another literary or historical allusions, self-referentiality) in a set of texts from different periods, styles, nationalities or theatrical genres.

#### LITE 6550 Modernity, Literature, and the City

Three Credits. One hour and half of lecture and one hour and half of discussion per week.

This course explores the relationship between modernity, the city, and its cultural representations by analyzing literature from the sixth century to the present in Europe and America, focusing on the city as an organizer of new practices and subjectivities through perspectives like the panopticum, the flâneur, and the nomad. The course is offered in face-to-face, hybrid, and online modalities; effective January 2021.

#### LITE 6560 The Elizabethan Theater and the Spanish Theater of the Golden Age



Three Credits. One hour and half of lecture and one hour and half of discussion per week. Prerequisites: LITE 3011, LITE 3012, LITE 3101.

The study of the discursive practices of the English Elizabethan theater and the Spanish theater of the golden age to establish the common grounds and particularities of both traditions.

## LITE 6586 San Juan de la Cruz: Western and Semitic Tradition

Three Credits. One hour lecture and two hours of discussion per week.

A study of St. John of the Cross mystical poetry and prose, considering his literary dialogue with both Christian and Oriental mystical traditions.

## LITE 6665 Jorge Luis Borges and his Theory of Literature

Three credits. Three hours of lecture per week.

Prerequisite: Master or Doctorate students.

An analysis of Borges' theory of language and the literature phenomenon.

## **LITE 6666** Modernismo and Modernity

Three credits. Three hours of lecture per week.

Prerequisite: Director's authorization.

The presence of urban sensibility in the poetics of three representatives of "modernismo": Marti, Dario, Lugones.

#### **LITE 6667** Modernity and Avant-Garde

Three credits. Three hours of lecture per week.

Prerrequisite: LITE 3101.

This course explores the relationship between social and aesthetic modernization during the turn of the century and the early decades of the twentieth century. It is offered in face-to-face, hybrid, and online modalities, effective August 2022.

#### **LITE 6675 The Latin Love Elegy**

Three Credits. One hour and half of lecture and one hour and half of discussion per week.

This seminar course examines the Latin love elegy, as exemplified by Propertius, Tibullus, and Ovid, analyzing its role as a prototype of ancient lyric poetry and its flourishing during Augustus' reign. It explores the elegy's Greek roots, its poetics, themes, and techniques, as well as its invention of the lyric subject and treatment of the body compared to epic and tragic poetry, while also tracing its development from the Middle Ages to the present.

#### LITE 6895 Thesis

Credit: 0

Preparation, elaboration and approval of the proposal for the master's thesis under the direction of a thesis advisor. The student registers for this course only once.

#### **LITE 6896 Thesis Continued**

Prerequisite: Thesis.

Continuation of the preparation of the master's thesis (research and writing) under the director's guidance.

#### **LITE 6900 Qualifying Exam**

Credit: 0

## LITE 6905 Directed Research in Comparative Literature I

Three credits. Three hours of independent study per week.

Prerequisites: 12 graduate credits and authorization from the professor.

Directed research in comparative literature related to specific problems and topics of individual interest. The course can be taken twice.

#### LITE 6906 Directed Research in Comparative Literature II

Three credits. Three hours of independent study per week

Prerequisites: 12 graduate credits and authorization from the professor.

Directed research in comparative literature related to specific problems and topics of individual interest. The course can be taken twice.

#### LITE 6991 Body, Memory and Writing

A credit to six credits.

This course investigates the body as an inscribed surface of memory, exploring various manifestations such as healthy bodies, bodies in ill health, sexed bodies, and those marked by trauma from experiences like war, exile, monstrosity, or madness. It emphasizes how both human and inhuman bodies serve as narratives that can be textually analyzed and contextualized within their cultural and historical frameworks.

#### LITE 6995 Caribbean Poetics and Debates: Comparative Approaches

One to six credits. Two hours of conference and four hours of discussion.

This course presents and analyses distinctive literary poetics in representative debates, texts and authors of the Caribbean, from a comparative and interdisciplinary perspective. Taking into account the region's necessary historical and cultural contextualization, it seeks to highlight the region's singularity, which can no longer be studied exclusively within the conventional paradigms of race, ethnicity, language and geography. It will include the Hispanic, francophone, anglophone, and creole, as well as the other Caribbean of its migration and diasporas.

#### **LITE 6996** Comparative Medieval Literature

One to three credits. One to three hours of seminar per week.

This course will study medieval literature in a comparative fashion, analyzing texts written originally in different languages, from various geographical contexts and/or of different discourses; or analyzing the literature from a theoretical perspective.

# LITE 6997 Topics in Literature and Writing in the 20<sup>th</sup> and 21<sup>st</sup> Centuries One to three credits. Three hours of seminar per week.

This course examines the intersections of literature, philosophy, writing, and media culture, focusing on the evolution of literary forms in the 20th and 21st centuries. It is a variable course that can be taken multiple times for up to six credits, provided that the specific topics differ and with academic advisor approval. The course is offered in face-to-face, hybrid, and online modalities.



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**DEGREE:** 

#### **Master of Arts in Translation**

#### **FACULTY:**

**Alejandro Álvarez Nieves,** Ph.D., University of Salamanca, 2012; Assistant Professor. Translation Theories, Literary Translation, Spanish Syntax, Writing and Style. <a href="mailto:alejandro.alvarez2@upr.edu">alejandro.alvarez2@upr.edu</a>

**David A. Auerbach,** Ph.D., City University of New York, 1993; Professor. Legal Translation, Business Translation, Translation for Museums, Literary Translation, Editing. david.auerbach@upr.edu

Luis A. García Nevares, Ph.D., University of Salamanca, 2016. Associate Professor. Computer Tools for Translators, Scientific and Technical Translation, Localization and Accessibility. <a href="mailto:luis.garcianevares@upr.edu">luis.garcianevares@upr.edu</a>

**Aurora Lauzardo,** Ph.D., Princeton University, 1990, Professor. Literary Translation, Translation of Literary, Drama and Gastronomic Texts. <a href="mailto:aurora.lauzardo1@upr.edu">aurora.lauzardo1@upr.edu</a>

Margaret Charlotte Ward, Ph.D., Harvard University, 1981, Professor. Semiotics, Writing, English Syntax, Poetic Theory. <a href="margaret.ward@upr.edu">margaret.ward@upr.edu</a>

#### **ADMISSION REQUIREMENTS:**

General requirements for admission of the University of Puerto Rico

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

**Specific admission requirements of the Master's program:** 

- 1. Two letters of recommendation.
- 2. An essay explaining your interest in pursuing graduate studies and your long-term professional or research plans. It must be written in your mother tongue or in the same language you are planning to take the Admissions Test.
- 3. Admissions Test offered by the PGT.

## **GRADUATION REQUIREMENTS:**

Candidates must meet the general graduation requirements required by the University. They must also:

- 1. Pass 45 credits in courses at the graduate level of the study program.
- 2. Pass a Comprehensive Examination.
- 3. Present and satisfactorily defend thesis.

Program requirements		Credits	
Core Courses			
TRAD 6451-6452 Advanced Spanish Syntax I y II	6		
TRAD 6453-6454 Writing and Style I y II	6		
TRAD 6455 Contemporary Translation Theories or an_equivalent	3		
Core Courses total		15	
Practice Seminars		18	
Elective Courses			
Directed elective course – Practice Seminar in English	3		
Directed elective course – Syntax or Writing course in English	3		
Free elective course (any 6000-level course; undergraduate level Latin or Greek)	6		
Elective Courses total		12	
TRAD 6920 Comprehensive Examination		0	
TRAD 6895 Thesis for master's degree		0	
TRAD 6896 Thesis Continuation		0	
Total credits		45	

#### **COURSE DESCRIPTIONS:**

The following course descriptions reflect the most recent registration in the Student Information System of the Registrar's Office of the Rio Piedras Campus as to November 30<sup>th</sup> of 2023, and they are to be included in the Graduate Catalog of 2023-2024.

## TRAD 6451 Advanced Spanish Syntax I

Three credits. Three hours of lecture per week.

Advanced course in Spanish syntax from a descriptive, historical, and stylistic point of view. It will consist of lectures and practical exercises. The course is offered in face-to-face, hybrid, and online modalities.

## TRAD 6452 Advanced Spanish Syntax II

Three credits. Three hours of lecture per week.

Second part of the advanced course in Spanish syntax from a descriptive, historical, and stylistic point of view. It will consist of lectures and practical exercises. The course is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6453 Writing and Style I

Three credits. Three hours of lecture per week.

This course focuses on the theory and practice of writing, exploring techniques and key challenges associated with writing. It emphasizes clarity and organization in constructing phrases and clauses, accuracy in language use, and the application of the ideo-constructive method. The course is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6454 Writing and Style II

Three credits. Three hours of lecture per week.

This course is the second part of the theory and practice of writing, focusing on writing techniques and key challenges. It emphasizes clarity and organization in constructing phrases and clauses, accuracy in language use, and the application of the ideo-constructive method. The course is offered in face-to-face, hybrid, and online modalities.

## **TRAD 6455 Contemporary Translation Theories**

Three credits. Three hours of lecture per week.

This course discusses the main translation theories and their application to translation. The course is offered in face-to-face, hybrid, and online modalities.

#### **TRAD 6920 Comprehensive Examination**

Credits: 0

## TRAD 6895 Thesis for master's degree

Credits: 0

Preparation of a translation of medium length done under the supervision of a faculty member. The complete thesis once examined, is the final requirement for the degree. The course is offered in face-to-face, hybrid, and online modalities.

#### **TRAD 6896 Thesis Continuation**

Credits: 0

Prerequisites: Total of credits required for the degree.

Preparation of a translation of medium length done under the supervision of a faculty member. The complete thesis, once examined, is the final requirement for the degree. The course is offered in face-to-face, hybrid, and online modalities.

#### OTHER COURSE DESCRPTIONS:

#### TRAD 6001 Localization

Three credits. Three hours of lecture per week.

Localization includes the translation of electronic media such as websites computer programs and video games to other linguistic and cultural markets. This advanced course explores technical aspects in the field of localization and accessibility. The course is offered in face-to-face, hybrid, and online modalities.

## **TRAD 6006 Computer Tools for the Translator**

Three credits. One half an hour lecture and one half an hour laboratory per week.

This course offers an overview of current and emerging computer technologies in the field of translation, covering applications and tools such as translator workstations, online research tools, glossary software, voice recognition systems, and future translation-related research. Students will learn to use online glossaries, compile their own, and apply various professional applications in MS Word to enhance the presentation of translation work. The course includes practical training in fully automated machine translation (FAMT) and computer-assisted translation (CAT) programs, equipping students with essential tools for success in a rapidly evolving technological landscape. It is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6007 Translation of Informative Journalistic Texts

Three credits. Three hours seminar per week.

Seminar on translation of informative journalistic texts from English to Spanish. Includes discussion of the functions of newspaper journalism, journalistic style, and types of journalistic texts. Practice will be given in the translation of news articles, in-depth reports and interviews on a variety of topics and of different journalistic styles.

#### TRAD 6008 Translation of Interpretive Journalistic Texts



Three credits. Three hours of seminar per week.

Practice seminar of translation of interpretive journalistic texts. Discussion and application of basic concepts including the functions of written journalism (both printed and digital), journalistic style and the different types of journalistic texts. Students will translate news, briefings, headlines, interviews, editorials, reviews, and op-eds on a variety of topics and different journalistic styles. The course is offered in face-to-face, hybrid, and online modalities.

## TRAD 6010 Introduction to Community Interpreting

Three credits. Three hours of lecture per week.

This course provides an introduction to the role and context of the community interpreter, covering professional requirements, standards, practices, and ethical dilemmas. It explores community interpreting across various settings, including educational, social, medical, and international contexts. The course emphasizes the professional aspects and ethics of community interpreting while allowing students to understand and practice common modalities such as sight translation and consecutive interpretation. It is offered in face-to-face, hybrid, and online formats.

#### TRAD 6011 Translation and Media

Three credits. Three hours of lecture per week.

This practice seminar focuses on the translation of various media texts, including journalism (news and opinion articles), online media (from scholarly sites to blogs), advertising, and audiovisual content (dubbing and subtitling). It examines the role of the translator in the media from both theoretical and practical perspectives, addressing issues such as localization, transcreation, and the emerging industry of language service providers. Students will learn to make professional presentations of translations using relevant technology tools, with an emphasis on appropriate style and formatting. The course is offered in face-to-face, hybrid, and online modalities.

## **TRAD 6012 Intermediate Practice Seminar on Translation**

Three credits. Three hours of lecture per week.

Intermediate practice seminar on translation where students will translate diverse types of texts of moderate difficulty. Students will learn to identify and solve the textual and extratextual problems posed by various text types and will learn to perform the proper research according to text type. The course is offered in face-to-face, hybrid, and online modalities.

#### **TRAD 6013 Audiovisual Translation**

Three credits. Three hours of lecture per week.

This practical course on audiovisual translation focuses on accessibility of audiovisual products. Students will use subtitling tools while developing key skills for translating and subtitling various types of films for typical audiences as well as for audiences with special needs, such as deaf and hard-of-hearing. This course also includes a practical audio description component for the blind and people with visual impairment. The course is offered in face-to-face, hybrid, and online modalities.

#### **TRAD 6014 Translation of Gastronomic Texts**

Three credits. Three hours of lecture per week.

Translation of text related to cooking and gastronomy: recipes, menus, gastronomic reviews, utensils, techniques ingredients, gastronomy and cooking websites and blogs. The course is offered in face-to-face, hybrid, and online modalities.

#### **TRAD 6015 Translation of Literary Texts**

Three credits. Three hours of lecture per week.

Practice seminar of literary translation. Students will work on translations in a range of literary genres. Readings in literary and critical theory will be provided. Students will learn to assess potential translation problems and will have the opportunity to work individually and in teams to solve them. The course will deal with the following core issues: theoretical issues relating to the notions of translatability, domestication and foreignization, and the translator's imprint/remainder. Genre-related issues (poetry, narrative prose, essay, drama, etc.); literary, biographical and historical context of the source text, stylistic and grammatical analysis of texts; translation of figurative language; aesthetic considerations. The course is offered in face-to-face, hybrid, and online modalities.

#### **TRAD 6021 Translation for Museums**

Three credits. Three hours of lecture per week.

Practical seminar organized to provide students with practice in translating texts within a specific translation industry niche: translation for museums and cultural institutions (with a focus on translation of historical and visually oriented texts). Students will be resented with the real challenges of working within this field and will deal with specific industry demands in terms of style, register, terminology, as well as related issues such as intertextuality and transcreation. Specific problems, such as rendering of images\concepts or objects as text, visualization and visual literacy, intercultural translation, translation and identity, and translating museum materials without corresponding images, will be discussed. The course is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6100 Seminar in Translation into English

Three credits. Three hours of lecture per week.

Translation of moderate difficulty from Spanish into English. This course may be taken up to a maximum of six credits, with different topics.

#### TRAD 6102 Introduction to Liaison and Consecutive Interpreting for B Language

Three credits. Three hours of lecture per week.

Practical introductory course on liaison and consecutive interpreting techniques in B language using intermediate level speeches. Through interpreting exercises, students will practice and learn



to resolve common problems regarding this interpreting mode. The course is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6105 Translation: Theory and Practice

Three credits. Three hours of lecture per week.

A study of basic translation theory as well as different translation techniques.

#### TRAD 6108 Seminar on Commercial Translation Spanish to English

Three credits. Three hours of seminar per week.

Translation from Spanish to English of commercial documents such letters, memos, notices, announcements, bids and contracts.

#### TRAD 6185 Translation of French Newspapers and Magazines

Three credits. Three hours of lecture per week

This course involves exercises with texts of increasing difficulty sourced from publications like *Le Monde* and *Le Figaro*, covering various sections such as editorials, reportages, business and finance, women's and home sections, sports, theater and film criticism, and advertising.

#### **TRAD 6200 Criticism of Translation**

Three credits. Three hours of lecture per week.

Analysis of published translations (both into English and Spanish) emphasizing the semantic and pragmatic levels of language.

## **TRAD 6215 Scientific and Technical Translation**

Three credits. Three hours of lecture per week.

This intermediate to advanced course in scientific and technical translation covers various subjects and disciplines, including medicine, industrial machinery, automotive, computers, telecommunications, engineering, and science. Students will translate instruction manuals, technical reports, equipment specifications, journal articles, and specialized papers, studying text types such as informative texts, conference proceedings, abstracts, patents, regulations, and textbooks related to science and technology. The course is available in face-to-face, hybrid, and online modalities.

## **TRAD 6300 Literary Translation**

Three credits. Three hours of lecture per week.

A seminar and workshop course in which the various techniques of literary translation are taught using representative authors of the several genres and literary epochs of English and American literature. Emphasis will be given to theater and essay.

#### TRAD 6305 Great Authors and Translation

Three credits. Three hours of lectures per week.

Analysis of essays on translation written by prominent authors translators. Translations by great authors will be examined.

## TRAD 6400 Seminar in Translation into Spanish

Three credits. Three hours of lecture per week.

Careful consideration of alternative translations and possibilities of composite translation.

## **TRAD 6407 Seminar of French-Spanish Translation**

Three credits. Three hours of lecture per week.

Prerequisites: B.A. in French or equivalent knowledge.

Exercises of increasing difficulty, using journalistic texts and fragments from good contemporary writers. Simultaneously, a brief comparative study of morphological, grammatical, and syntactical relevant aspects.

#### TRAD 6408 Seminar of French-Spanish Translation

Three credits. Three hours of lecture per week.

Prerequisites: B.A. in French or equivalent knowledge.

Translation of texts of French literature since the seventeenth century.

## TRAD 6409 Seminar: Practice in Translation

Three credits.

Translation, criticism of translation, retranslation. Texts mainly related to philosophy of language.

#### **TRAD 6410 Seminar: Practice in Translation**

Three credits. Three hours of lecture per week.

Translation of literary texts from English into Spanish. The course may focus on a specific topic or approach within the general subject of literary translation. Specific topics will be stated in the course subtitle. Students may take the course twice if offered with different subtitles.

#### TRAD 6413 Seminar in Translation from French into English

Three credits. Three hours of seminar per week.

Prerequisites: Advanced course in French or authorization from the professor; mastery of French and English.

Study of translation techniques and theories from French into English, using passages representative of different genres, including orientation in reference works and criticism of existing translations.

#### TRAD 6430 Seminar: Independent Studies

Three credits. Three hours of lecture per week.

Students may request an area of individual interest, under the guidance of the instructor.

## **TRAD 6435 Seminar: Independent Studies**

Three credits.

Translation of non-specialized essays and reports using the computer; emphasis on the pragmatic aspect of language.

#### TRAD 6436 Seminar: Independent Studies

Three credits. Three hours of lecture per week.

Translation of essays on literary criticism, emphasizing the semantic level of language.

#### **TRAD 6437 Seminar: Independent Studies**

Three credits. Three hours of lecture per week.

Translation of texts of philosophy concerning linguistic problems.

## TRAD 6438 Comparative Analysis of the Morphology and Syntax of Spanish and English

Three credits. Three hours of lecture per week.

The structure of words and sentences. Morphological and syntactic functional units. Descriptive theory and practical application in Spanish and English exercises. Both languages will be used in the course.

#### **TRAD 6457 English Syntax**

Three credits. Three hours of lecture per week.

This course is designed for students interested in understanding the syntactic structure of modern English. While the material presented is not tied to any grammatical model, it provides an understanding of language structure. Students will become familiar with the key concepts and tools of syntactic analysis, such as word class categories and the use of tree diagrams. The course is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6459 Principles of Semantics and Translation

Three credits. Three hours of lecture per week.

This is a basic course in Semantics. It is designed to provide students with knowledge about meaning and its application to the translation process.

#### **TRAD 6465 Translation Internship**

Three credits. 120 hours per semester of internship, including meetings with the internship coordinator one hour every two weeks.

Supervised practice of translation in the workplace; the student will also perform other translation-related tasks, such as writing, editing or translation project management.

## **TRAD 6467 Introduction to Terminology**

Three credits. Three hours of seminar per week.

Introduction to the basic aspects of research in the field of terminology and its relation to translation, through the analysis of various texts concerning diverse technical fields (such as environment, economy, information technology, law art etc.).

## TRAD 6500 English to Spanish Translation Seminar

Three credits. Three hours of lecture per week.

Exercises in translating simple texts on the basis of which the theoretical principles of translation are pointed out.

#### TRAD 6501 Medical Translation I

Three credits. Three hours of lecture per week.

Translation of medical articles on anatomy, physiology, pathology, and surgical procedures.

#### TRAD 6502 Medical Translation II

Three credits. Three hours of lecture per week.

Translation of medical articles on diseases, syndromes, diagnostic tools, and treatments.

# **TRAD 6505 Sight Translation**

Three credits. Three hours of lecture per week.

Sight translation of various texts. Students will translate texts directly, on sight. The course is offered in face-to-face, hybrid, and online modalities.

### TRAD 6526 Seminar on English Writing

Three credits. Three hours of lecture per week.

The purpose of this course is to provide students with the techniques and skills necessary for developing written materials.

#### TRAD 6535 Translation Focus Research

Three credits. Three hours of lecture per week.

Basic research methods for translation. Management of bibliographic and non-bibliographic sources.

#### TRAD 6600 Seminar in Translation

Three credits. Three hours of lecture per week.

Translation of essays and similar texts into Spanish, under the supervision of the professor; discussion of various aspects and alternatives of the translation in question. Face-to-face, hybrid and online.

### TRAD 6601 English to Spanish Business Translation I

Three credits. Three hours of practice seminar per week.

This course focuses on the translation of various documents commonly used in business transactions, including letters, notices of meetings, corporate resolutions, bank resolutions, certificates of incorporation, stock certificates, regulations, financial statements, ongoing guarantees, incorporation papers, prospectuses, and lien agreements. Students will also utilize online business dictionaries, glossaries, and other reference works to enhance their translation skills in a business context.

#### TRAD 6602 Business Translation II



Three credits. One hour of lecture and two hours of practice per week.

Translation of texts from the banking and industry areas.

# **TRAD 6610 Literary Translation**

Three credits. Three hours of lecture per week.

A seminar and workshop course in which the various techniques of literary translation are taught using representative authors of the several genres and literary epochs of English and American literature. The course will deal with poetry and narrative fiction.

#### TRAD 6620 Seminar: Practice in Translation

Three credits. One hour of lecture and two hours of practice per week.

Translation of non-specialized texts considering the accuracy of lexical equivalence.

### TRAD 6640 Seminar in Translation into English

Three credits. Three hours of seminar per week.

Translation and revision of the stylist and pragmatic aspects of language (English).

# TRAD 6650 Seminar: Independent Studies

Three credits. Three hours of lecture per week

Revision of the stylistic and pragmatic aspects of the language (Spanish).

### TRAD 6660 Seminar in Translation into English

Three credits. Three hours of seminar per week.

Translation: revision of linguistic and stylistic suitability (into English). The course is offered in face-to-face, hybrid, and online modalities.

# **TRAD 6670 Seminar: Independent Studies**

Three credits. Three hours of lecture per week.

Translation: revision of linguistic and stylistic suitability (into Spanish).

## TRAD 6680 Seminar in Translation into English

Three credits of seminar per week.

Translation from Spanish into English of specialized essays and studies.

# **TRAD 6690 Problems of Legal Translation**

Three credits. Three hours of lecture per week.

Study and application of the specialized language of the different areas of law; English-Spanish terminological equivalences in legal procedures.

#### **TRAD 6700 Seminar in Translation**

Three credits. Three hours of lecture per week.

Translation and criticism of translations of intermediate difficulty.

# **TRAD 6705 Problems in Legal Translation**

Three credits. Three hours of lecture per week.

This course involves an in-depth study and application of specialized legal language, focusing on the terminological equivalences between English and Spanish in the context of legal translation.

### TRAD 6800 Seminar in Translation into English

Three credits. Three hours of lecture per week.

This course emphasizes careful consideration of alternative translation strategies and the possibilities of composite translation.

# TRAD 6900 Seminar of Translation into English

Three credits. Three hours of lecture per week.

Translation of specialized essays and articles (from a linguistic point a view) from Spanish into English.

# TRAD 6990 New Tendencies and Practices in Translation

One to three credits. One to three hours of seminar per week.

Theoretical and practical seminar of variable subject and credit on the most recent topics and tendencies in the study and practice of translation. The course will cover outstanding theoretical aspects of the new tendencies in translation both as an academic discipline and a professional practice. It will include practical translation exercises. The student will be able to repeat the course with different topics, up to a maximum of 6 credits. The course is offered in face-to-face, hybrid, and online modalities.

#### TRAD 6995 The Art of Translation: Its Fundamentals and Methods

One to three credits.

This theoretical and practical seminar examines how translation professionals can effectively address contemporary challenges and opportunities within the field. The course explores specific resources that approach translation as both an art and a craft, focusing on how skills and knowledge recognized as valuable for translators can be developed through innovative methods. Topics include trends in regional and international markets, business management strategies, and research in culture and society. The methodology is contextualized through specific subfields of translation and practical exercises. Students may repeat the course with different topics for up to 6 credits. It is offered in face-to-face, hybrid, and online modalities.



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Website: <a href="http://humanidades.uprrp.edu/graduados/?page\_id=435">http://humanidades.uprrp.edu/graduados/?page\_id=435</a>

#### **DEGREE:**

### Master of Arts in Cultural Management and Administration

#### **AFFILIATIONS:**

Member Center of the Latin American Council of Social Sciences (CLASCSO)

#### **FACULTY:**

**Dorian Lugo Bertrán,** Ph.D, University of Puerto Rico, 2007, Professor. Film and Audiovisual Theory; Contemporary Art Theory; Literary theory (from the sixteenth to the twenty-first centuries); Gender Role Theory and Queerness; Cultural Studies; Applied Humanities.

**Mareia Quintero Rivera**, Ph.D., University of São Paulo, 2002, Professor. Cultural Studies; Cultural Policies; Music and Society; Cultural and Community Management.

**Pedro Ángel Reina Pérez,** Ph.D., Center for Advanced Studies of Puerto Rico and the Caribbean, 1998, Professor. Administration of Cultural Organizations; Cultural History.

#### **ADMISSION REQUIREMENTS:**

#### General Requirements of the Río Piedras Campus

https://graduados.uprrp.edu/estudiantiles/admisiones-graduadas22/

# **Specific master's Program Requirements**

Applicants must meet the following admission requirements:

- 1. Bachelor's degree, or its equivalent, with a minimum academic average of 3.00 In exceptional cases, the Program may admit students with an index of less than 3.00.
- 2. Comply with the established Composite Income Index. This index is obtained by assigning the value corresponding to the following requirements:
  - Academic record (30%)
  - Interviews (20%)
  - Letters of recommendation (20%).
  - Intention Trial (25%)
  - Professional experience (5%)



- 3. Knowledge of Spanish and English
- 4. Knowledge in the use of the computer
- 5. A student may be considered for conditional or transitory admission based on the criteria established by the College of Humanities as outlined in its General Regulations for Graduate Studies (2000).

# **GRADUATION REQUIREMENTS:**

- 1. Successfully complete a minimum of 30 credits in graduate courses, distributed as specified in the study program.
- 2. Complete a residency period of two consecutive semesters with a minimum load of six (6) credits per semester.
- 3. Maintain a retention rate of 3.00. This will also be the graduation rate.

#### **PROGRAM OF STUDY:**

Program of Study	Credits
Core Courses	15
GECU 6005 Fundamentals of Cultural Management	3
GECU 6006 Cultural Theories	3
GECU 6205 Strategic Management of Arts Enterprises and Organizations	3
GECU 6999 Internship in Cultural Management and Administration	3
GECU 6901 Proposal in Cultural Management and Administration	3
GECU 6901 Draft Conclusion	0
Recommended electives, depending on field of study	9
GECU 6007 Cooperativism and cultural self-management	3
GECU 6105 Introduction to Museology	3
GECU 6115 Modes of Production in the Performing Arts	3
GECU 6207 Cultural Policies	3
GECU 6209 Economy of Culture	3
GECU 6215 Independent Research Seminar	3
GECU 6305 Cultural Management and Community Development	3
GECU 6306 Cultural Entrepreneurship	3
GECU 6405 Archives in Action: Digital Mediations and Visual Art Networks	3
GECU 6985 Digital Humanities	3

Program of Study	Credits
GECU 6990 Topics in Literature and Cultural Management	1-6
GECU 6991 Topics in Law and Culture	1-6
GECU 6992 Cultural Studies Research Seminar	1-6
GECU 6993 Topics in Visual Arts Management	1-6
GECU 6994 Topics in Cultural Project Management	1-6
GECU 6995 Topics in Cultural Management and Communication	1-6
GECU 6996 Topics in Cultural Heritage Management	1-6
GECU 6997 Management Modes in the Field of Music	1-6
GECU 6998 Topics in Performance Studies	1-6
Free Electives Any graduate-level course from the Río Piedras Campus, the University of Puerto Rico System, or another institution with which there is an agreement.	6
Total Credits	30

#### **COURSE DESCRIPTION:**

The following course descriptions are the most recent entries in the Student Information System of the Registrar's Office at the Río Piedras Campus, as of November 30, 2023, to be included in the 2023-2024 Graduate Catalog.

#### **GECU 6005 Fundamentals of Cultural Management**

Three credits. One hour of lecture, one hour of discussion, and one hour of seminar per week.

This course addresses the fundamentals of cultural management at an international level, highlighting its growing importance as both a professional and academic field. It emphasizes the significant role of culture in the social development of contemporary societies. Through the study and research of concrete experiences in cultural management, both in Puerto Rico and abroad, the course encourages reflective practice among cultural managers. Students will examine the interconnectedness of cultural management with various societal sectors, including the arts, education, economy, urban planning, citizen coexistence, and tourism. The course will also delve into the specificities of different management lines, exploring areas such as visual arts, performing arts, the music industry, entertainment, publishing, heritage management, and popular arts.

#### **GECU 6006 Cultural Theories**

Three credits. An hour and a half of lecture and an hour and a half of discussion.

The course addresses the various formulations of the concept of culture around which cultural debates have revolved from the 19th century to the present day. It examines the relationship between social transformations and reflection on culture, focusing on fundamental social processes in the European, Latin American and Puerto Rican contexts. The course explores various disciplinary approaches and perspectives that enrich cultural analysis, such as philosophical, literary, anthropological, sociological, and communicational approaches, among others.

# **GECU 6205 Strategic Organization of Cultural Organizations**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

Study of philosophical practice and ethics in the administration of artistic entities. It examines the different challenges faced by cultural institutions, whether for the purpose of and non-profit, including the legal and financial bases on which a cultural organization is created and operates, as well as its possible administrative structures. It also analyzes the formation of strategies and their consequent implementation, including aspects such as financing, relationship with government institutions, development of audiences, marketing and programming; and the administrative particularities of governmental and non-governmental entities related to culture. These topics will be discussed in the context of organizations dedicated to theater, music, dance, visual arts, or any other type of cultural expression.

### **GECU 6999 Internship in Cultural Management and Administration**

One to three credits. Five hours of contact for every 40 hours of fieldwork.

This course entails supervised work experience in a public, private, or community cultural institution, such as a museum, gallery, theater, cultural center, cultural cooperative, municipal office of culture, or with a cultural entrepreneur. It serves as a practical laboratory where students analyze, apply, integrate, and evaluate the knowledge, values, and principles of cultural management and administration. During this internship, students are expected to develop operational skills, integrate research into the daily practice of cultural management, and engage in reflective practices. This reflection, grounded in theoretical knowledge, aims to contribute to the implementation of projects, programs, and procedures within the hosting institution. This combined learning process equips students to confront real-world situations and challenges related to the management of cultural organizations across various facets and dimensions.

#### **GECU 6901 Proposal in Cultural Management and Administration**

Three credits. Two and a half hours of research and half an hour of discussion.

Prerequisites: GECU 6005, 6006, 6205, and fifteen approved credits.

Preparation and preparation of a research proposal or management of a cultural project. It should include a statement of the topic, justification, objectives, literature review, methodological strategies, work plan and bibliography.

#### **GECU 6902 Draft Conclusion**

Three credits. Two and a half hours of research and half an hour of thesis. Prerequisites: GECU 6005, 6006, 6215; successful completion of 24 credits.

Preparation and presentation of a research in the format of a master's dissertation or cultural management project as its equivalent. The student will be exposed to a series of guides aimed at offering useful elements for their research or management and the final presentation of their work.

# **Description of some Directed and Free Electives**

In the courses section, under the Academic Program section of the MAMAC website, you can learn about the courses available per semester, including new curricular offerings and broader descriptions, as the new courses are available.

Recent courses are normally offered in the first instance under the umbrella of an "umbrella course", that is, courses that have already been codified, the function of which is to make them specific for a course to come. However, below is a list of regular courses:

# **GECU 6007 Cooperativism and Cultural Self-Management**

Three credits. Two hours of discussion and one hour of lecture per week.

Interdisciplinary course that explores the development of cultural enterprises outside the market economy and emphasizes cooperativism as an economic model of artistic self-management. The theoretical foundations for a critical analysis of cultural industries are addressed, providing basic notions of the cooperative model to promote its practice and development in the field of art and culture. Aimed at advanced students from various disciplines of the humanities, communication, business administration, among others. The aim is for students to be able to creatively apply the cooperative model and develop skills for the creation of cultural policies.

# **GECU 6105 Introduction to Museology**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

This course adopts an interdisciplinary approach to explore the historicity of the museum form, examining how the act of collecting is defined and the significance attributed to objects. It investigates the relationships constructed between time, space, and individuals, and the roles assigned to curators and the public. Through the study of various types of museums, students will explore connections between these aspects and broader concepts such as modernity, progress, national identity, heritage, tourism, and the consumption of symbolic goods. The course aims to foster critical thinking about the cultural and social implications of museums and their practices in contemporary society.

#### **GECU 6115 Modes of Production in the Performing Arts**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

This course focuses on the development of cultural projects in Puerto Rico, with a particular emphasis on the roles and needs of managers in the performing arts sector. Students will define



the profiles of various members involved in theater, dance, and performance, including performers (actors, dancers, and performance artists), playwrights, choreographers, and designers (lighting, sound, costumes, installations), as well as independent producers and sponsoring institutions. The course will explore the physical and conceptual spaces available for artistic creation, providing students with insights into existing production models. Through this exploration, students will engage with current practices to propose innovative and alternative forms of cultural production that respond to the unique context of Puerto Rico's performing arts landscape.

#### **GECU 6207 Cultural Policies**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

This course explores the field of cultural policies, understood as those interventions carried out by the State, civil institutions, private entities or community groups with the aim of satisfying the cultural needs of the population and promoting the development of their symbolic representations. From a historical perspective, various modalities that characterize the development of cultural policies are studied. On the other hand, it addresses the recent international debates that give culture a central role for social development. Processes of articulation of local, national and transnational cultural policies are examined based on the study of specific cases at the international level. In addition, the development of cultural policies in Puerto Rico is studied, promoting a reflection on contemporary challenges.

#### **GECU 6209 Economics of Culture**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

Study of the economic dimension of culture, understood in its humanistic sense as artistic practices. Concepts such as commodity, capital, utility, market, production and consumption are examined, considering their application to the cultural realm. Economic policies related to the arts, such as public or private subsidies, are also discussed. On the other hand, the impact of economic systems and processes, such as neoliberalism and globalization, on the arts is analyzed. Questions such as: Is art a commodity? How is the economic value of art established? What is the impact of the cultural sector on the local economy? What role does the state and public subsidy play in the development of the cultural sector? The course investigates these topics from a variety of theoretical approaches belonging to microeconomics and macroeconomics, as well as economic and cultural sociology.

# **GECU 6215 Independent Research Seminar**

Three credits. Three hours of study a week.

Prerequisites: GECU 6005, GECU 6006, GECU 6505.

Independent research seminar that will allow the student to develop a research project on a topic of particular interest. Prior to enrollment, the student will agree in writing with the professor on the specific topic to be researched and the course requirements.

# **GECU 6305 Cultural Management and Community Development**

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

The course is based on a critical approach to the concepts and processes that define civil, and



community action based on theoretical discussion and research of concrete experiences, especially in Puerto Rico. It will focus on the interdependence between concepts, symbolic structures of action, and the materialization of community, organizational, and institutional practices. In this course, philosophical foundations, practice, and creative thought and action are deeply interrelated dimensions in the spectrum of every day, organizational, and collective actions.

# **GECU 6306 Fundamentals of Cultural Entrepreneurship**

Three credits. An hour and a half of lecture and an hour and a half of discussion.

The course explores business development in the cultural sector. The main theories of entrepreneurship and the profile of cultural and creative entrepreneurs are analyzed. The importance of understanding and analyzing the external environment of business management is discussed, including the economic, political-legal, demographic framework, the behavior of audiences and the analysis of the competition. The productive chain of cultural industries is analyzed as a mechanism to identify business opportunities. The course explores the development of business models that guarantee the economic and cultural sustainability of companies, as well as the discussion of key tools for entrepreneurship such as financial viability, organizational design, marketing, and commitments to government. Emphasis is placed on cultural innovation as a tool for competitive advantages in cultural entrepreneurship.

# GECU 6405 Archives in Action: Digital Mediations and Virtual Art Networks

Three credits. An hour and a half of lecture and an hour and a half of discussion per week.

An interdisciplinary approach to contemporary cultural practices requires not only new ways of creation and critique, but also innovative strategies of documentation, preservation, curatorship, cataloguing and discussion. In this way, the course aims to generate a critical discussion around the digital archive as informational production, as well as a laboratory of viable proposals for digital repositories of cultural management.

# **GECU 6985 Topics in Digital Humanities**

One to six credits. An hour and a half of lecture and an hour and a half of discussion per week.

Seminar on a variety of topics aimed at the study and application of contemporary practices in the digital humanities. You may retake up to a maximum of six credits with topics of study each time you enroll.

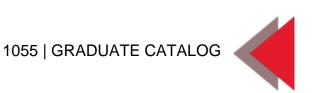
# **GECU 6990 Topics in Literature and Cultural Management**

One to six credits. One hour of lecture, one hour of discussion and one hour of seminar per week.

Seminar with a variable theme aimed at the theoretical and practical study of management in the literary field. Up to a maximum of 6 credits with different topics of study may be repeated each time the student enrolls.

# **GECU 6991 Topics in Law and Culture**

One to six credits. One hour of lecture, one hour of discussion and one hour of seminar per week.



Seminar on a variety of topics aimed at the study of the intersections between law and culture. Up to a maximum of six credits with different topics of study may be repeated each time the student enrolls.

#### **GECU 6992 Cultural Studies Research Seminar**

One to six credits. Three hours of seminar per week.

Seminar aimed at developing research skills in cultural studies, understood as a transdisciplinary field that addresses the relationships between culture, power and subjectivities from a diversity of methodological and analytical strategies. Up to a maximum of 6 credits may be repeated with different study approaches each time the student enrolls.

### **GECU 6993 Topics in Visual Arts Management**

One to three credits. One hour of lecture, one hour of discussion, and one hour of seminar per week.

Seminar with a variable theme aimed at the theoretical and practical study of the management of the visual arts. It may be repeated up to a maximum of 9 credits with different topics of study each time the student enrolls.

# **GECU 6994 Topics in Cultural Project Management**

From one to six credits. One hour of lecture, one hour of seminar and one hour of workshop a week.

Course with a variable theme aimed at the theoretical-practical study of the different facets of the management of cultural projects. It may be repeated up to a maximum of 9 credits with different topics of study each time the student enrolls. The course will cover the formulation of cultural projects, their implementation and evaluation; strategies for raising and financing cultural projects; proposal preparation, cultural management and community development.

# **GECU 6995 Topics in Cultural Management and Communication**

One to six credits. Three hours of seminar per week.

Seminar with a variable theme aimed at the theoretical and practical study of the relationship between management and communications. Up to a maximum of 6 credits with different topics of study may be repeated each time the student enrolls.

# **GECU 6996 Topics in Cultural Heritage Management**

One to three credits. One hour of lecture, one hour of discussion, and one hour of seminar per week.

Seminar with a variable theme aimed at the theoretical and practical study of the management of cultural heritage. Up to a maximum of 9 credits with different topics of study may be repeated each time the student enrolls.

# **GECU 6997 Management Modes in the Field of Music**

One to three credits. One hour of discussion, one hour of lecture and one hour of seminar per week.



Seminar with a variable theme aimed at the theoretical and practical study of management in the field of music. It may be repeated up to a maximum of 6 credits with different topics of study.

# **GECU 6998 Topics in Performance Studies**

One to six credits. One hour of lecture, one hour of discussion and one hour of seminar per week.

This seminar focuses on the theoretical study, research, and practice of Performance, defined broadly as artistic and cultural actions that extend beyond the confines of academic art. Students may repeat the course for up to six credits, exploring different topics each time they enroll.

# **Academic Programs on Moratorium**

# Graduate School of Business Administration

• **Doctor of Business Administration (Ph.D.) in Finance** (Cert. 69 JG, 2022-2023).

# College of Communication and Information

- Post-Bachelor's Certificate in Library Science (In-Person) (Cert. 138 JG, 2023-2024).
- Post-Bachelor's Certificate in Library Science (Online) (Cert. 138 JG, 2023-2024).

# College of Humanities

- Postgraduate Certificate in Applied Linguistics to Spanish (Cert. 112 JG, 2019-2020).
- Graduate Certificate in Specialized Translation (Cert. 112 JG, 2019-2020).

# **Governing Bodies of the University of Puerto Rico**

# **Governing Board**

The current members of the Governing Board for the fiscal year 2024-2025 are:

# **CPA Ricardo Dalmau Santana**

President

# Dr. Jorge Valentín Asencio

Vice President

Atty. Terilyn Sastre Fuente
Secretary

Hon. Eliezer Ramos Parés<sup>2</sup> Secretary of Education

Atty. Enrique A. Guzmán Matos

AAFAF

Dr. Mayda Velasco Bonilla

**Dr. Edgard R. Resto Rodríguez**Faculty Representative

Eng. Emilio Colón Beltrán

Dr. Hermán Cestero Aguilar

Dr. Gonzalo F. Córdova Santini

**Dr. Raúl J. Castro Santiago**Faculty Representative

Sr. Julio A. Cabral Corrada

**Sr. Simonely Hidalgo Rodríguez** Graduate Student Representative

**Sr. Daniel Fernández González** Student Representative

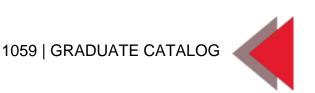
# **PRESIDENT**

Dr. Miguel A. Muñoz (Interim)

# RÍO PIEDRAS CAMPUS CHANCELLOR

Dr. Angélica Varela Llavona

To view the current members of the Governing Board, visit: https://juntagobierno.upr.edu/junta-degobierno



<sup>&</sup>lt;sup>2</sup> The Hon. Eliezer Ramos Parés, Secretary of Education of Puerto Rico, appointed Prof. María A. Mulero Patrana as his representative on the UPR Governing Board.

# Academic Senate<sup>3</sup> Academic Senators Ex Officio

Angélica Varela Llavona, Chancellor of the Río Piedras Campus and President of the Academic Senate

Luis A. Ferrao Delgado, President of the University of Puerto Rico

Nancy Abreu Báez, Director of the Library System

Reinaldo Berrios Rivera, Dean of Graduate Studies and Research

Agnes M. Bosch Irizarry, Dean of the College of Humanities

Grace M. Carro Nieves, Dean of the College of Education

Carlos J. Corrada Bravo, Dean of the College of Natural Sciences

Gloria Díaz Urbina, Dean of Students

Anna L. Georas Santos, Interim Dean of the School of Architecture

Mirerza González Vélez, Dean of Academic Affairs

Maria I. Jimenez Chafey, Director of the Counseling Department for Student

Development

Anaisa M. López Cedres, Dean of Administration

Rafael Marrero Díaz, Dean of the College of Business Administration

Milagros A. Méndez Castillo, Dean of the College of Social Sciences

Vivian I. Neptune Rivera, Dean of the School of Law

Carlos J. Sánchez Zambrana, Dean of the College of General Studies

Julia Y. Vélez González, Interim Dean of the College of Communication and Information

#### **Ex Officio Student Senators**

Will A. Gómez Ortiz, Student Representative on the Administrative Board Miguel Marín Fuster, President of the General Student Council Ángel A. Rodríguez Ramírez, Student Representative on the University Board

#### **Elected Academic Senators**

# **College of Business Administration**

José A. González Taboada Carmen A. Figueroa Jiménez Beatriz Rivera-Cruz Juanita Rodríguez Marrero

### **College of Social Sciences**

Roberto Frontera Benvenutti Carlos J. Guilbe López Dolores Miranda Gierbolini Grisell Reyes Nuñez

#### College of Education

Linda Clark Mora Ricardo León López María del R. Medina Diaz Mariel Nieves Hernández Farah A. Ramírez Marrero Rose M. Santiago Villafañe

## **College of Humanities**

Nicolas A. Luzzi Traficante Antoine Philippe Bernard Alejandro Quinteros Meléndez



<sup>&</sup>lt;sup>3</sup> Composition of the Academic Senate, as of August 22, 2024 (CSA-03-2024-2025) https://senado.uprrp.edu/miembros-2

Pedro A. Reina Pérez

School of Law

Oscar Miranda Miller Miguel A. Rivera Alvarez

Counselors, Social Workers, and Psychologists

Rose Marrero Teruel

**College of Natural Sciences** 

Nancy J. Correa Matos Heeralal Janwa Elvia J. Meléndez-Ackerman Ana H. Quintero Rivera

College of Communication and Information

Héctor Díaz Rodríguez

Vacant

**College of General Studies** 

Marta Collazo Santos Marlene Duprey Colon Marc C. Passerieu Carlos A. Pérez Coffie Edgard R. Resto Rodríguez

**School of Architecture** 

Jorge L. Lizardi Pollock Regner Ramos Ramírez

**Graduate School of Planning** 

Rafael L. Irizarry Odium

Library System

Luis J. Crespo González Sylvia Sola Fernández

### **Elected Student Senators**

Leilany Boria Figueroa, College of Communication and Information Eduardo A. Burgos Maldonado, College of General Studies Yadymar Figueroa Rivera, College of Social Sciences Sara I. García Rivera, Graduate School of Planning Adriel E. González Díaz, College of Education Simonely Hidalgo Rodríguez, School of Law Paola Lugo Cardona, College of Business Administration Damián E. Nieves Guzmán, College of Humanities Joel Ramos Díaz, School of Architecture Cynthia M. Rivera Sánchez, College of Natural Sciences

# **Description of the Facilities**

The University of Puerto Rico, Río Piedras Campus, was founded in 1903 following the relocation of the Insular Normal School from Fajardo. Since its inception, the Río Piedras Campus has become the heart of Puerto Rico's public university system, firmly embedded in the country's social fabric as one of its most distinguished educational institutions. From humble beginnings, the campus has expanded from its initial 97 acres to approximately 262 acres, housing 10 academic units: the College of Business Administration, the College of Communication and Information, the College of Education, the College of General Studies, the College of Humanities, the College of Natural Sciences, the College of Social Sciences, the School of Architecture, the School of Law, and the School of Urban Planning. Currently, the Río Piedras Campus offers 130 undergraduate and graduate programs, along with student and faculty services and amenities spread across 150 buildings, totaling approximately 5.9 million square feet of construction. The campus is also a notable green space in the San Juan area, with 88% of its grounds designated as open space. Its location and facilities comply with the regulations of Puerto Rico's Board of Postsecondary Institutions (JIPs).

Cultural facilities that enhance the student experience and are open to the public include the Museum of History, Anthropology, and Art; the University Theatre; the Student Center; and the José M. Lázaro University General Library. In total, the campus features 30 cultural and artistic spaces, including auditoriums, seminar rooms, exhibition galleries, and 11 main libraries. The Cosme Beitía University Sports Complex includes a gymnasium, two pools, track and field areas, courts for volleyball, basketball, and tennis, as well as soccer and baseball fields, and locker rooms. The Department of Physical Education and Recreation offers 11 dedicated sports programs and other related courses.

The University also provides a variety of services for students and staff, including medical and psychological services, counseling for students and faculty, and student housing, among others.

Physical address
14 Ave. Universidad
STE 1401
San Juan PR 00925
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Postal address P.O. Box 23305 San Juan PR 0093

Phone: 787-764-0000 ext. 83001 www.uprrp.edu

# **Accreditation & Affiliations**

The University of Puerto Rico was recognized as an institution of higher learning and admitted to the Middle States Association of Colleges and Secondary Schools on April 29, 1946. The most recent reaffirmation of accreditation for the Río Piedras Campus occurred in June 2016. The University has also been a member of the Association of Hispanic American Universities since 1955. In 1965, it joined the College Entrance Examination Board, and the Río Piedras Campus became institutionally affiliated in 1967. The institution is also a member of the American Council on Education. In 2006, the Carnegie Foundation classified the Río Piedras Campus as a research university with a high level of research activity, making it the only one of its kind in Puerto Rico. The Museum of History, Anthropology, and Art at the Río Piedras Campus is accredited by the American Alliance of Museums in Washington, DC. Additionally, the Library System has been evaluated and adheres to the standards set by the Association of College & Research Libraries. The Student Development Counseling Department is accredited by the International Association of Counseling Services (IACS), and the NAEYC (National Association for the Education of Young Children) Preschool Development Center is accredited by NCATE. The individual accreditations of the various faculties, schools, and departments are detailed in the corresponding sections.

# **University Regulations and Policies**

## **General Regulations of the University of Puerto Rico**

The General Regulations were amended and approved by the Council of Higher Education on December 10, 2006. These regulations establish the rules of general application in the University System necessary for the governance, organization, and better fulfillment of the objectives of the University of Puerto Rico. These regulations contain the general provisions on the composition and governance of the University System, powers and functions of its components at the central level and of the institutional units and faculties, and the regime of university personnel recognized at the University of Puerto Rico. The regulations' original version came into force on April 1<sup>st</sup>, 1981. The Governing Board, through certification #55 2022-2023, approved a new version that incorporates all the approved amendments. https://apicertificaciones.upr.edu/file/download/26272

# **General Regulations for Students of the University of Puerto Rico Rights and Duties**

Article 2.1 - Institutional Policy

The fundamental right of the university student in the academic community is the right to educate themselves. This right is not limited to the classroom, but encompasses all possible experiences and relationships with peers, teachers, non-teaching staff and with their fellow citizens in the community at large. The primary duty of the student is to fully exercise this right and to behave in such a way that their conduct does not limit other members of the community in the exercise of their rights or in the performance of their duties.

To make possible the high aims of education, the student will cultivate the principles of integrity, mutual respect and serene dialogue in their relations with the other members of the university community. The University is committed to these principles, and, in consideration of the students, all members of the university community must respect them and make them their own. The University of Puerto Rico will also guarantee the provision of student procurement services in the units of the System, in accordance with the rules adopted for that purpose.

#### Article 2.2 - Interpretation

These Regulations must be interpreted in such a way as to promote an institutional culture of respect for the rights recognized by our legal system and these Regulations.

#### Article 2.3 - Prohibition of discrimination

The University of Puerto Rico prohibits any discrimination in education, employment, and services on the basis of race, color, sex, birth, age, social origin, ancestry, marital status, religious or political ideas or beliefs, gender, sexual preference, nationality, ethnic origin, disability, status as a veteran of the Armed Forces, or for being a victim or perceived victim of domestic violence, sexual assault or stalking. This Anti-Discrimination Policy extends to all functions and activities of the University and the institutional units that make up its



System, such as employment and job selection, educational programs, services, admissions, and financial aid, among others.

This Anti-Discrimination Policy covers all students in their relationship with the University and will apply to the benefits, services, programs and benefits the University provides. The right of every student to orderly participate in the activities they carry out shall be guaranteed, as well as reasonable accommodation for any student with disabilities or conditions documented and not constituting, in themselves, a disability for university studies or a risk to other people.

Article 2.4 - Policies against Sexual Harassment and Illicit Use of Drugs, Controlled Substances and Alcohol Abuse

All members of the university community have the duty to behave appropriately and respectfully towards others. In accordance with this principle and applicable laws and policies, physical, verbal or psychological abuse, or sexual harassment from any member of the university community or the external community will not be tolerated in this Institution.

It is also the policy of the University to promote an environment free from the illicit use of drugs, controlled substances, and alcohol abuse.

The achievement of the above will be done through education and strict compliance and the law, regulations, policies and procedures adopted by the University on a case-by-case basis.

#### Article 2.5 - Student Records

Students' academic and disciplinary records will be kept separately. Information relating to these disciplinary records shall not be made available for use by unauthorized persons at or outside the University without the student's consent, except as required by a court or by law. The student has the right to obtain copies of their academic and disciplinary records and must be informed of any changes in the substantive content thereof, in accordance with the procedures set forth in the university rules and regulations. The university authorities shall not prepare student records for purposes other than those expressly authorized by applicable law and regulations and these may never be done in violation of students' civil rights or rights recognized in these Regulations. These rules are without prejudice to any federal or state laws and regulations that protect the information contained in student records.

### Part B - Academics

Article 2.6 - Academic Relationship

The work of the discipline or area of knowledge under study and its multiple links constitutes the focus of the relationship between the professor and the student. The utmost intellectual integrity must preside over the pursuit of knowledge. The professor-student relationship is based on mutual respect. Both will foster creative dialogue and freedom of discussion and expression. During the course, they will have the opportunity and the right to present



reasoned objections to the data or opinions presented by each other. Both will be able to examine any aspect of the discipline or area of knowledge in accordance with the rules of intellectual responsibility of the academy. Neither will use the classroom as a platform to preach doctrines unrelated to the subjects of instruction, whether political, sectarian, religious, or otherwise. The right to freedom of discussion and expression does not relieve the student or the professor of the responsibility to comply with the requirements of the course and the academic offer as approved by the official bodies of the University.

#### Article 2.7 - Guarantees of personal beliefs

The nature of the relationship between professors, students, and the administration deserves mutual respect. The student has the right to express their personal beliefs in the classroom within the context and framework of the academic discussion and will not be considered in administrative or any other type of proceedings against the student, nor in evaluating their academic performance or achievement. Information obtained by a faculty member during their work about the student's beliefs, views, ideology, or political affiliations will be considered confidential, and may only be used following university rules. In case of doubt about the nature of a student's conduct in the academic context and involving the manifestation of personal beliefs, the institutional policy will favor their right to freedom of expression.

#### Article 2.8 - Academic Care Outside the Classroom

The student-professor relationship outside the classroom is part of the educational process. The student has the right to receive due attention and supervision from the professor in charge of directing research projects, independent studies, theses or dissertations. In addition, they will have the right to meet with the lecturer at times specially designated for this purpose to request guidance or clarify any aspect of their academic work.

#### Article 2.9 - Classroom Discipline

Primary jurisdiction over classroom discipline and student conduct related to academic tasks, such as participation in daily tasks, assignment preparation, labs, exams, interviews, grades, and other similar activities, rests with the professor. This, without prejudice to the responsibility of the professor to report the conduct of a student to the Dean, Director of Department or other university authorities responsible for determining whether it is appropriate to initiate a disciplinary process under Chapter VI of these Regulations. See also Rule 6.14 of the Rules of Procedure.

#### Article 2.10 - Course Record or Syllabus

The student has the right to receive from their professor, no later than the first week of the course, a document in printed or electronic format, describing how the course work plan will be fulfilled. This document should be discussed in class by the professor and represents the agreement and commitment that the professor establishes with their students. The University encourages students to express their opinion about the topics, methodologies and evaluation criteria of the course, so the professor will provide students with the



opportunity they deem reasonable to suggest changes to the document.

The course syllabus will include at least the following elements:

- 1. Description and academic objectives of the course.
- 2. Methodology and strategies to use.
- 3. Calendar of course activities.
- 4. The prerequisites for course approval include, but are not limited to, evaluation mechanisms and criteria, rules on attendance, tardiness, reassessments, and participation in the course.
- 5. The professor's office hours, as well as the location of their office. The professor may inform about other mechanisms by which the student can contact the student outside of the classroom.
- 6. Notification to all of students displaying lack of academic integrity will result in disciplinary sanctions.
- 7. Notification required by institutional policy regarding reasonable accommodation for students with disabilities.
- 8. Any other information required by the relevant academic authorities.

In any case in which the file is delivered in electronic format, the student will have the right to request a printed copy from the corresponding department, if they do not have the resources to be able to print it.

#### Article 2.11 - Student Assessment

Students have the right to have their academic work evaluated fairly and objectively and that their grade is based only on considerations related to the evaluation of their academic work. Such assessment must be accessible to the student within a reasonable period of time to be established by the institutional unit.

#### Article 2.12 - Review of the evaluation

The student may request a review of the evaluation from the professor when they understand that it does not meet the established or agreed criteria, for which they will follow the procedure for reviewing grades established or customary in each unit. The first instance of review is constituted by the professor who was in charge of the course. The work that the student has done during a course will be retained by the professor for six (6) months after the student's final grade is submitted. Each Academic Senate shall establish procedures to be followed to ensure a fair and adequate review.

#### Article 2.13 - Replacement of material due to the absence of the professor

The student has the right to have the replacement of the discussion time on the material corresponding to any session of the course in which the professor has been absent.

#### Article 2.14 - Recognition for Academic Work and Authorship

Students have the right to be consulted and to have their contribution or authorship properly recognized when the product of their work is to be used by the professor, researcher or lecturer in any publication, research, conference or any other form of dissemination of knowledge.

# **Student Regulations of the Río Piedras Campus**

(These regulations are under review in the Academic Senate of the Río Piedras Campus as of the date of delivery of this document) <a href="https://apicertificaciones.upr.edu/file/download/25792">https://apicertificaciones.upr.edu/file/download/25792</a>

The law and tradition of the Campus recognize the rights of students as members of the university community and indicate the duties of moral and intellectual responsibility to which they are obliged as members of the university community. They also recognize the responsible participation of students in ensuring and maintaining order, security, and normality in institutional tasks. Thus, the campus welcomes the democratic and responsible participation of its students in institutional processes.

# **Rights and Duties**

#### Article 1.01

As students and as collaborators in the University's mission of culture and service, students are members of the university community and, as such, will enjoy the right to participate effectively in the life of that community and will have all the duties of moral and intellectual responsibility to which it by its nature obliges.

#### Article 1.02

Students have the duty and the right to strive in the search for and expression of the truth, always respecting dissenting criteria. This will be guided by academic rigor, the style of conduct inherent in the academic community, and the dictates of one's own conscience.

#### Article 1.03

Every university student has the duty to seek the intellectual and spiritual formation that tends to their full development as a person, and the right to demand it, in view of their responsibility as a citizen of the Puerto Rican community. It also has the duty and the right to preserve, enrich and disseminate the values of knowledge and culture, both universal and those of the people of Puerto Rico.

#### Article 1.04

Every university student shall have the right to receive the services of the student procurement, in accordance with the rules adopted for this purpose. The University of Puerto Rico has the duty to guarantee the services of the student prosecutor's office.

#### Article 1.05

Students may celebrate, in accordance with the established rules, any act, meeting or ceremony, and invite any person they wish to listen to speak to them on any topic of interest to them, provided that exercising any of the aforementioned rights does not interrupt the teaching, technical or administrative work of the institution, and complies with the provisions of the regulations in force.

Article 1.06

Students will receive administrative support for student activities, in order to facilitate the right of association and assembly, thus having time and space to do so.

#### Article 1.07

Students will be able to associate freely, and will be able to edit and distribute publications, always in accordance with the rules in force.

#### Article 1.08

No student may be deprived, on grounds of sex, race, origin, social status, political or religious belief, of the right of association or of the services and programs provided by the University.

#### Article 1.09

All members of the university community have the duty to observe appropriate and respectful conduct towards other people, including the use of information technologies. Therefore, physical, verbal or psychological abuse, or sexual harassment from any member of the university community or from outside the University will not be tolerated in this Institution.

#### Article 1.10

Every university student has the right not to have information related to their political, religious or philosophical beliefs disclosed by the University. The University will not keep a record of these beliefs. Academic and disciplinary records will be kept separately from each other. Information contained in academic or disciplinary records shall be confidential and is not available for use by unauthorized persons at or outside the University without the written consent of the student, parent or guardian and in cases where a court order is issued.

#### Article 1.11

The student will have the right and the duty to actively participate, consult their professors, express their doubts and divergences of criteria, and know their failures and achievements in academic work.

Students will have the right to receive information and dialogue with their teachers about the evaluation of their work and performances, the grades received and about the evaluation of the course as an essential part of the learning process.

#### Article 1.12

The professor-student relationship is based on mutual respect. Both will foster creative dialogue and freedom of discussion and expression. The right to freedom of discussion and expression does not relieve the student or the professor of the responsibility to comply with the requirements of the course and the academic offer as approved by the official bodies of the University.

#### Article 1.13

Students shall have the right to elect their representative(s), with voice vote, in the committees responsible for creating and reviewing the curriculum of their college or professional school in accordance with the institutional mechanisms established in the colleges and schools.

#### Article 1.14

The nature of the relationship between professors, students and administration deserves mutual respect. The student has the right to disagree in the classroom within the context and framework of the academic discussion and will not be considered in administrative or any other type of proceedings against the student, nor in the evaluation of their academic performance.

#### Article 1.15

Students will have the right to receive from their professor a transcript or syllabus in printed or electronic format, which describes how the course work plan will be complied with and how the student will be evaluated. This document represents the agreement and commitment that the professor establishes with their students and the responsibilities of the student in the course. The syllabus must be submitted and discussed during the first week of classes.

#### Article 1.16

The student will have the right to meet with the professor at times specially designated to request guidance or clarify any aspect of his or her academic work.

#### Article 1.17

Primary jurisdiction over discipline within the classroom and over student conduct related to academic work and other consonant activities rests with the teacher. This, without prejudice to the responsibility of the professor to report the conduct of a student to the head of the department, dean or other university authorities who are responsible for determining whether to initiate a disciplinary process.

#### Article 1.18

Students will have the right to have their academic work evaluated in a fair, objective and impartial manner, and to have their grade based only on considerations related to the evaluation of their academic work, as indicated in the course record or syllabus.

#### Article 1.19

The student has the right to request a review of their evaluation from the professor when they understand that it does not meet the established or agreed criteria, for which they will follow the grade review procedure established in the Certification in force at the time the situation arises.

#### Article 1.20

The student shall be entitled to receive from their professor the final grade of their



incomplete removal work no later than eight (8) weeks after submitting such work. If the professor does not make any notification regarding the change of the provisional grade within the established term, the student may go to the relevant committee or instance of the Dean's Office of each faculty or school for the evaluation of their work for the removal of incomplete.

#### Article 1.21

Students will have the right to have course schedules available three (3) days prior to the date the course selection process begins. Students will have the right to have the names of the professors who will teach the courses indicated in the timetable of the courses.

#### Article 1.22

Students will be entitled to a period of changes in their tuition. The dates set for changes in enrolment must be explicitly listed on the academic calendar from the date the course selection process begins.

#### Article 1.23

The student will have seven (7) school days, starting from the first day of classes at the Campus, to withdraw from a course without it being noted and with the right to receive 100% refund. In the case of summer courses, the student will have two (2) days after the session begins.

#### Article 1.24

Students shall have the right to have their discussion time made up on the material corresponding to any session of the course in which the professor has been absent.

#### Article 1.25

Students have the right to be consulted and to have their contribution or authorship properly recognized when the product of their work is to be used by the professor, researcher or lecturer in any publication, research, conference or any other form of dissemination of knowledge and media format.

#### Article 1.26

All students have the right to access quality and excellence services at the relevant and appropriate times, including enrollment processes; health care services; counseling services; guidance and procurement; financial assistance; the use and availability of library resources and laboratories; data centers; sports and recreation centers, and other similar services provided by the University. In addition, they have the obligation to comply with the rules established for the use or enjoyment of university services and facilities.

Students have the right to use university assets responsibly, as well as the duty to protect and care for them. Likewise, students have the right to enjoy physical facilities that comply with health protection and personal safety standards.

#### Article 1.27

The Dean of Students of the Campus will enable the participation of the students residing in the university residences of the institution to auscultate their needs and interests, according to the rules of the Campus.

#### Article 1.28

A complaint is a claim or protest made by a student due to a disagreement with a procedure or the treatment received from an employee. The complaint should be submitted to the higher authority of the individual who initially attended to the student. No specific formality is required for filing a complaint.

#### Article 8

The student will have the right to meet with the professor at times specially designated for this purpose, to receive guidance and clarify issues related to their academic work.

#### Article 9

Students will have the right and duty to actively participate in classes and related activities, to consult their professors, express their doubts and divergences of criteria, and learn about their shortcomings and achievements in academic work. Students shall have the right to receive from their professors, at the beginning of each course, appropriate guidance on the syllabus of the course, either orally or in writing, including explanations of the academic purposes and objectives, the pedagogical methods to be used, the topics of study, the readings and other work requirements. the qualification criteria and the other relevant aspects, all without prejudice to the necessary flexibility of the courses. Students will have the right to receive information and dialogue with their teachers about the tests taken and grades received and about course evaluation as an essential part of the learning process.

#### Article 10

Every student has the duty to exercise their rights and responsibilities intensely and responsibly as set forth in these regulations. By setting a good example both inside and outside the classroom, students can best protect and enjoy these rights.

These rights and duties, the disciplinary processes concerning the violation of these and many other matters of concern are described in the Student Regulations of the Río Piedras University Campus, available in the Office of the Dean of Students. (Copies of these Regulations, including their other provisions, are available from the Campus Dean of Students.)

#### FOREIGN NON-IMMIGRANT STUDENTS

The Río Piedras Campus is authorized by law to admit foreign non-immigrant students. (For additional information, refer to the Academic Regulations section and the Special Rights for Non-Resident Students section).

# REGULATIONS FOR THE USE OF FACILITIES OF THE DEPARTMENT OF PHYSICAL EDUCATION OF THE FACULTY OF EDUCATION

Approved in 1999, it establishes the rules for the use of the facilities of the Sports Facilities



of the Campus by students, professors and other interested parties. It is available in this department.

# INSTITUTIONAL POLICY OF THE RÍO PIEDRAS CAMPUS ON THE PRIVACY OF ACADEMIC RECORDS

The University of Puerto Rico intends to comply fully with the provisions of the Buckley Amendment (Family Educational Rights and Privacy Act of 1974, as amended). This law protects the private nature of students' educational records and establishes the right of students to inspect and review such records. It also provides guidelines for correcting the accuracy of information through informal and formal hearings. Students have the right to file complaints, if they choose, with the Family Educational Rights and Privacy Act Office, Department of Education, 400 Maryland Avenue, S.W. Room 4524, Switzer Building, Washington, D.C. 20202, regarding alleged violations of the law by the institution.

Copies of the institutional policy established by the University in compliance with the law may be obtained from the Office of the Dean of Students, the Office of Financial Aid, the Student Affairs Offices of colleges and schools, and the Registrar's Office.

# **INSTITUTIONAL POLICY ON EQUAL OPPORTUNITIES**

The Río Piedras Campus of the University of Puerto Rico guarantees equal opportunities to its applicants for employment and admission to study, and to students and employees both in terms of study and employment opportunities and the enjoyment of the academic services and programs offered and terms and conditions of employment.

The Precinct does not exclude from participation, deny benefits or discriminate against any person based on age, race, sex, sexual orientation, color, birth, origin or social status, physical or mental disability, or political or religious ideas.

Any applicant for admission to study or student, as well as any applicant or employee who believes that they have been discriminated against for the reasons set forth above, may file a complaint in writing with the designated officer, namely: Dean of Academic Affairs.

The establishment and enforcement of this policy and its publication is in accordance with the federal regulations for the implementation of Title IX, the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the American with Disabilities Act of 1990.

#### LAW AND BENEFITS FOR VETERAN AND DEPENDENT STUDENTS

The following individuals must be considered residents for the purpose of setting tuition and fees:

- A veteran who uses financial aid for studies under Chapter 30 GI Bill® or Chapter 33 Post-9/11, and lives in Puerto Rico while attending the University of Puerto Rico (regardless of residency status), must enroll within three years of their discharge or retirement from active duty of at least 90 days.
- Anyone who has been transferred the Post-9/11 or GI Bill® benefit, and lives in Puerto Rico while attending the University of Puerto Rico (regardless of residency status),



- must enroll within three years of discharge or retirement from active duty of at least 90 days.
- Anyone who uses benefits under the Marine Gunnery Sergeant John David Fry Scholarship Act, and lives in Puerto Rico while attending the University of Puerto Rico (regardless of residency status), must enroll within three years of the death of the veteran who was on active duty for at least 90 days.

Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three-year period following discharge or death described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United sates code.

#### Veteran services office

The Veteran Services Office attends to veterans, dependents of veterans, serviceperson in matters pertaining to the Veterans Administration such as: educational benefits, registration, and studies at the university.

## **Education and training benefits for veterans**

The school is approved by the Puerto Rico State Approving Agency to provide academic training to students under various GI Bill® programs. GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). UPR students who are veterans (as defined by the Veteran's Administration) of the United States Armed Forces can receive benefits under Chapters 1606 - Montgomery GI Bill® Selected Reserve, CH. 30 – Montgomery GI Bill® Active Duty, CH. 35 - Survivor and Dependents Educational Assistance, CH. 31 - Veteran Readiness and Employment, CH. 33 - POST-9/11 GI Bill®, and Title 38 - United States Code Section 3679(e) School Compliance Form.

Section 103, PL 115-407 prevents a school from penalizing a student while waiting for the VA to make tuition and fee payments. The institution cannot deny a student access to classrooms, libraries, or other institutional facilities. It cannot make the student borrow money to cover costs while waiting for payment or charge a late fee or penalty. This applies to students benefiting from Chapter 31 or Chapter 33 of the Post-9/11 GI Bill®.

#### Academic Progress (applicable to veterans and/or beneficiaries)

Veterans and/or beneficiaries should complete their studies during the regular time allotted (100%) as stated in the program curricula. If they exceed the time allotted, they lose eligibility for the benefits of Veterans Programs. This norm is not applicable to federal aids such as Pell Grant or others where eligibility is established by the institution and/or the entity/agency granting the scholarship if the recipients maintain the UPRRP Undergraduate Catalogue correspondent requisites. Also, students must maintain the minimum average required (general and major average) as established for each program to graduate. Repetition of courses (applicable to veterans and/or beneficiaries) The Veterans Administration (VA) only approves payment for the repetition of a failing grade ("F"). The VA



does not approve payment for repeated courses with passing grades, unless they are repeated in order to comply with the requirements of the program of study.

#### **BENEFITS OF MILITARY EDUCATION**

The University might evaluate if credits validations is possible for military education and training. This evaluation is based on institutional policies and procedures (see pages 47-49). The credits may be applied to meet degree requirements in areas, such as major's requirements, general education, or electives.

#### Office:

Plaza Universitaria, Torre Sur, 2do piso Phone: (787) 764-0000, ext. 85666

Website: https://www.uprrp.edu/oficina-registrador/oficina-de-veteranos/

Email: veteranos.rrp@upr.edu

### Institutional policy on security at the University of Puerto Rico

One of the main objectives of the University of Puerto Rico has always been to ensure the safety and well-being of the university community. This policy is intended to promote and maintain a safe study and work environment, free from risks, acts of violence and danger. It is recognized as a legitimate institutional interest, the protection of the life and safety of the members of the internal and external community that makes use of its services and physical facilities and the prevention of the occurrence of criminal acts within its jurisdiction. In addition, the right of students, prospective students, and the community at large to be informed of any criminal act occurring within university grounds and adjacent areas is recognized. The policy and procedures are detailed in Circular Letter 92-01 of the Office of the President of the University of Puerto Rico.

#### "Student right to know act"

In December 1995, the U.S. Department of Education issued regulations to implement the Student Right to Know Act (SRKA). This law requires postsecondary institutions participating in Title IV financial aid programs to collect, publish, and disseminate information regarding graduation and transfer rates. The Office of Academic Affairs of the Central Government, in conjunction with the institutional units, will promulgate appropriate procedures for disseminating information through various means, such as: brochures, catalogs, and literature on admissions.

### Policy on Unauthorized Reproduction of Works Protected by Law

The Institutional Policy approved in 1993 and expressed in Circular Letter No. 95-01 of the Office of the President of the University of Puerto Rico, guides the university community on applying the copyright laws. The Federal Copyright Law protects the authorship rights of all types of work perpetuated through any tangible means of expression. This protection extends to literary, musical, dramatic, pantomimic, graphic, filmic, architectural, and computer programs and other electronic media.

Among the copyrights recognized and subject to protection under the Federal Copyright Law



is the exclusive right of the owner of a protected work to reproduce it.

The law permits the reproduction of a protected work without the consent of its author, provided that and when it is for fair and reasonable use. A reasonable use of protected works is that which is made for educational or research purposes, non-profit, for critical purposes, for commentary on a text, and in news reports.

### **Institutional Policy on Patents and Inventions**

The institutional policy is to conduct academic work in an open and free atmosphere and to ensure that it reaches public dissemination. However, the University acknowledges that patentable inventions can and do result from research conducted by its employees, students, and other affiliates in the course of their work and/or while using University funds and facilities. Establishing the property, patent, licensing, and protection rights of these inventions is consistent with the University's purposes and mission.

The University of Puerto Rico intends to protect and encourage the application of patentable inventions in accordance with the laws of the Commonwealth of Puerto Rico and the intent of the United States Patent Act (Title 35, United States Code), as amended, with respect to inventions made under the auspices of the U.S. Government.

# The Use of Vertebrate Animals in Scientific Research

This Institution complies with all applicable provisions of the Animal Welfare Act and other federal statutes and regulations relating to animals. It also complies with the policy on the humane care and use of laboratory animals by institutions that award the Public Health Service. Its practices are governed by the U.S. Government's Principles for the Use and Care of Vertebrate Animals Used in Testing, Scientific Research, and Training.

#### The Protection of Human Subjects in Scientific Research

This Institution complies with all federal regulations regarding human subjects in scientific research, including those expressed in the Code of Federal Regulations, Department of Health and Human Resources.

In addition to this, the University has developed a Policy on Institutional Research which is detailed in Certification No. 108 (1998-99) of the Board of Trustees.

#### **Institutional Policy on Smoking**

Smoking is prohibited in all enclosed areas of the Campus, including, but not limited to, classrooms, laboratories, conference rooms, elevators, auditoriums, offices, museums, and other places where groups of people regularly gather. Smoking is permitted in designated areas approved as suitable for both non-smokers and smokers, such as hallways and other open spaces.

#### **Institutional Policy on Controlled Substances**

The University of Puerto Rico pursues a vigorous policy in combating the manufacture, distribution, supply, possession, and illegal use of controlled substances within its grounds as defined by Puerto Rico Law No. 40 of August 3, 1993, and further treated in subsequent



Federal and Commonwealth legislation. The policy means and procedures for its enforcement are detailed in the Certification #033-1999-2000 approved by the Governing Board of the University of Puerto Rico.

# **Institutional Policy on Sexual Harassment**

This institution adheres to the principles and statutes concerning sexual harassment and discrimination because of gender in the areas of employment, conduct in the workplace, and provision of services. Grievance procedures are stated in the Certification #107 (2021-2022) approved by the Governing Board of the University of Puerto Rico on March 15, 2022, and the Administrative Board Certification #93-94-303 [as amended by Certification 93-94-324] of April 7, 1994.

# Academic Integrity Policy of The University of Puerto Rico, Río Piedras Campus - Certification #66 2023-2024 Academic Senate

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. The Río Piedras Campus of the University of Puerto Rico (UPRRP) is committed to maintaining and promoting an intellectual and ethical environment based on the principles of academic integrity and rigor, trust, mutual respect, and serene dialogue among the people of the university community essential to the achievement of its mission. Integrity implies the firm adherence to a set of core ethical values, such as honesty, respect, and responsibility. It is part not only of teaching and learning, but also of the relationships and interactions inherent to the educational, research and administrative process. It must permeate all areas of university life and community. It focuses mainly on the student environment in the teaching and learning process and research. Academic integrity concerns all members of the university community: students, teaching and non-teaching staff.

# Institutional Policy on the Identification and Management of Conflicts of Interest in Research– Circular letter 96-03 1995-1996 President

The National Science Foundation (NSF) and the National Institutes of Health (NIH) have established as a requirement for institutions receiving funding from these agencies to develop an institutional policy that provides for the identification and management of conflicts of interest.

Each institution obtaining funds from these agencies must establish a policy and procedures for identifying conflict of interest situations, notifying authorities of instances in which they occur, and applying sanctions to individuals who violate this policy.

#### Regulations Related to the Population of Persons with Disabilities

Regulations for the Fulfillment of the Responsibilities of the University of Puerto Rico according to the Law of Comprehensive Services for Persons with Disabilities and the Bill of Rights of Persons with Disabilities. Certification #16 1997-1998 Board of Trustees and Law 238 of August 31, 2004.



It clearly establishes the responsibilities and functions of the University in its mission of searching for and disseminating knowledge and training of personnel to guarantee the optimal quality of life of infants, children and young people who have some condition of disability.

# Policy on Reasonable Modifications and Academic Services for Students with Disabilities Enrolled at the University of Puerto Rico, Certification No. 133 2015-2016 of the Governing Board of the University of Puerto Rico.

The purpose of this Policy is to establish uniform practices throughout the UPR System regarding the coordination of reasonable accommodations and academic services requested by students with disabilities, as well as to ensure faithful compliance with state laws federal governments that apply to this population.

### Institutional Policy on Environmental Protection-8 February 1996 JS

The University of Puerto Rico has recognized and assumed its responsibility to carry out affirmative actions that promote the protection of the environment. Through the Division of Environmental Quality and Occupational Safety of the Central Administration and its counterparts in the university units, we have begun to effectively implement Puerto Rico's Environmental Public Policy. To protect life and reduce property damage and the environment, the University of Puerto Rico will operationally implement a comprehensive disaster protection plan. This will include the development of mitigation strategies and preparedness, response and recovery plans against earthquakes, hurricanes, floods, fires and other natural and technological hazards that may affect us.

# Research & Planning

The University has developed a Policy on Institutional Research through Board of Trustees Certification 108 (1998-99). It seeks to establish a rational base of information and knowledge for planning processes, decision-making, and the allocation of resources, at the service of the academic and administrative managers of the University of Puerto Rico System. The Río Piedras Campus, motivated by the need to know the levels of execution in the various administrative and academic efforts leading to informed decision-making and to comply with the institutional mandate and the requirements of the accrediting agency, among others, has created the Division of Institutional Research and Appraisal attached to the Dean's Office of Academic Affairs to manage, receive, analyze, disclose and safeguard official data.

# Institutional Policy on the Acceptable Use of Information Technology Resources at the University of Puerto Rico - Certification No. 35 (2007-2008)

The purpose of this policy is to define a regulatory structure that allows members of the university community to make the best possible use of technology resources in a safe environment that promotes the University's objectives of transmitting and increasing knowledge through education, research, and service extension. This Policy applies to all users of the Information Technology (IT) of the University of Puerto Rico ("the University"), including, but not limited to, students, faculty, researchers, and employees



# **Protocol for Processing Academic Excuses due to Extracurricular Activities**

Participation in extracurricular, sports, academic, artistic and cultural events fulfills the purpose of offering students enriching experiences that allow them to use their talents in favor of their development as human beings. Certification No. 136 (2002-2003) of the Academic Senate established the Protocol for processing academic excuses to eligible students duly recommended by the Faculty Deans, School Directors, and Directors of Special Programs, who, in the exercise of their academic, athletic, artistic and cultural skills, exalt the name of the university. The Academic Excuses Processing Sheet forms will be available at the Faculty Dean's Offices, the Dean's Office of Students, or the corresponding Academic Departments or Programs.

# **General Academic Services**

# **Library System**

The Río Piedras Campus Library System is a unit attached to the Office of the Dean of Academic Affairs. It consists of a network of libraries and collections located in the José M. Lázaro Building and in some of the faculties and schools. It contributes to the management of learning, teaching, research, innovation, creative work and service that the Campus has as its mission. In addition, it extends its services to the community at large, thus fulfilling its social responsibility.

Its libraries and collections have information resources in various areas of knowledge and its development takes into consideration the criteria of quality, depth, scope, timeliness and diversity of formats as established in the standards of the Association of College and Research Libraries. Among the vast collection of information resources are the special collections of distinguished Puerto Rican and international personalities housed in the Puerto Rican Library and Newspaper Library, the El Mundo/Puerto Rican Digital Library Project, and the Zenobia and Juan Ramón Jiménez Room. In addition, it has thematic collections specialized in areas of the undergraduate and graduate curriculum.

The Library System has a Library Services Unit for Persons with Disabilities. It has specialized equipment such as tape players, digital players, talking calculators and video communication system for deaf people, among others. It subscribes to the National Library Service for the Blind and Physically Handicapped of the Library of Congress in Washington, D.C. through its liaison in Puerto Rico (Regional Library for the Blind and Physically Handicapped of Puerto Rico). They provide access to information resources, alternative formats, and specialized equipment.

It articulates services and programs where it integrates information and communication technologies that promote efficient and effective access to up-to-date information resources relevant to the curriculum and research. It actively encourages the development of information skills and competencies and promotes continuous learning and the formation of an individual capable of generating new knowledge. The services offered include: face-to-face and virtual information and reference consultations, access to the online catalogue of information resources, access to databases and electronic journals, educational activities through the program for the integration of information skills into the curriculum, loan of information resources, local and international interlibrary loans, information resources assigned in courses, computer centers, group study rooms, film library, conferences and exhibitions, and reproduction services. Through its website, you can access databases in all disciplines and thousands of full-text journals. Remote access is offered to students and employees active on campus by completing a brief identification process. Their website is complemented and updated with a blog and social media to promote communication and keep their users informed.

Contact the Library System staff at <a href="https://www.upr.edu/biblioteca-rrp/directory-sb">https://www.upr.edu/biblioteca-rrp/directory-sb</a>



# **Division of Academic and Administrative Technologies**

The Division of Academic and Administrative Technologies (DTAA) provides members of the university community with technological support services and technical assistance in their daily work. It is responsible for administering and ensuring the proper functioning of the administrative information systems that reside on the Campus. It is also responsible for implementing measures that advance the technological initiatives proposed in the strategic plans at the systemic and campus level and the academic and administrative plan of the Rector. In the area of services to the university community, its mission is to:

- Provide the university community with a platform of technological services to support the academic, administrative and student sectors.
- Introduce the user to the different changes in technology and its application in various work areas within the Río Piedras Campus.
- Disseminate the processes for technical support and help the user to solve problems caused by technological equipment related to the daily functions carried out by the university community

Institutional Policy on the Acceptable Use of Information Technology Resources Information at the University of Puerto Rico Certification No. 35 (2007-2008) https://www.upr.edu/ac/wp-content/uploads/sites/1/2017/06/cert352007-2008.pdf

#### Office of The Student Advocate

Certification 119 (2014-2015) approved by the Governing Board of the University of Puerto Rico (<a href="https://apicertificaciones.upr.edu/file/download/25682">https://apicertificaciones.upr.edu/file/download/25682</a>). Establishes the "principles that should govern the offering of student ombudsman services", as well as the functions of the Student Ombudsman at the System level. The Office of the Student Ombudsman of the Río Piedras Campus, attached to the Office of the Chancellor and a pioneer in the entire public university system, carries out a management aimed at streamlining the procedures or processes that in some way limit the academic performance and development of students.

Among its functions is to complement in an agile way procedures established by regulations in order to attend, informally, conflict situations between students and other members of the university community.

Steps to be taken to effectively address conflict situations between the University Community and the students of the Río Piedras Campus:

 Any member of the University Community, whether students, non-teaching staff or faculty, who has had a conflict involving students, has the option of going to the Office of the Student Ombudsman on the Second Floor of the Student Center so that he or she can exercise his or her function as a mediator, neutral advisor or intercessor, as the case may be and within the framework of the student rights and duties set forth in the regulations.



- The members of the University Community are assisted by the Student Ombudsman or their assistant, at the time of their visit. This request is evaluated by the Attorney General or their assistant and, depending on the conflict presented— academic, interpersonal, economic, or security— the course of action is determined.
- Although it is preferable to make an appointment, the Office also accommodates unannounced visitors ("walk-ins"). These visits are attended to immediately, and only in very exceptional cases is the visit scheduled for another date. For example, if the Procurator and/or their assistant are unavailable due to a meeting away from the Office, and depending on the nature of the visit, a later date may be arranged.
- Depending on the conflict presented, the member of the university community is guided according to the laws and regulations on academic and administrative issues, and/or the protocols in force in the System to deal with each particular situation. If our intervention and intercession are required and possible, the student's consent is obtained to manage the case. Communication is established with the parties involved in the situation.
- The information provided by the student is recorded on an information sheet for absolute internal use. These forms are filled out and worked on directly by the Procurator or the assistant, and are destroyed once the case is addressed. Notes are taken to expedite our advice and intervention and always with the commitment to maintain total confidentiality on the issues raised. Such confidentiality, mandated by both Certification 32 and the IOA, yields only to an "imminent risk of serious harm" which is the limit set forth in IOA's standards of practice.
- In the event that the visitor needs our intervention, after being guided and having exhausted the actions within their responsibilities or not feeling fit to carry them out by themselves, we proceed, as the case may be, to work on agreements and solutions with the different dependencies of the Institution that have to do with the conflict presented. Always ensuring that each situation is worked on within an environment of dialogue and effective communication, justice, confidentiality and healthy coexistence.
- In cases where there is a procedure for settling the situation, the Office ensures that the steps set forth in such procedures are followed and advice is provided to all parties as to how the procedure applies to the facts of the case being heard. Certification 14 of the Academic Senate (1984-1985) provides, among other things, that a grade review can and should be done no later than the semester following the academic session in which the grade is offered for which the grade is to be reviewed. This is an external and independent procedure to the Office and the role is to announce the rights contained therein, ensure that they are complied with and offer advice on them.

Some examples of conflicts in the Office of the Student Advocate are:

• Academics- classroom, grade reviews, grade changes, validations, degree application, degree exam, lack of academic integrity;

- Economic-financial aid, housing;
- Administrative- extensions, refunds, processes for grade changes, administrative leave, admissions,
- Interpersonal- security complaints, protective orders, sexual assault, violence.
- Any other issues that may involve students, whether with faculty, non-teaching staff, or other students.

Each case is dealt independently, following the informal scheme mentioned above. Each situation is followed up and communication is established between the Procurator and the visitor, which does not cease until the situation or problem is over.

# **Administrative Appellate Procedures**

Certification119 (2021-2022) Governing Board that repeals Certification 35 (2018-2019) and its amendments set out the procedures and instances to which University of Puerto Rico staff may appeal administrative decisions.

# **Academic Regulations**

The norms that apply to Graduate Program Academic Regulations are compiled in the RRP Academic Senate certification 95, 2019-2020.

# **Suspensions-Disciplinary Board**

Students suspended for academic deficiency may apply for readmission to any faculty at least one year after the date of suspension.

The dean of the relevant faculty will decide whether readmission is appropriate. If granted, the readmission will be conditional. During the probationary period, the faculty, in collaboration with the Office of the Dean of Students, is responsible for providing the student with general guidance.

After the first academic deficiency suspension, if suspended for a second time, the student must wait a minimum of five (5) years before being eligible for readmission. The studies carried out by these students during the period of suspension will not be considered by the Campus.

Students suspended due to academic deficiency from one of the units of the University System will be governed by the following rules when requesting readmission-transfer in the system:

- One year after the date of suspension, for the purpose of filing a request for readmission- transfer, the student has completed the period of suspension from the institution of origin.
- 2. A suspended student seeking readmission-transfer may apply if they obtain a written certification from the unit they wish to transfer to, confirming that the institution is able to receive and evaluate the case. This document will be included in the student's readmission-transfer application.
- 3. Requests for readmission-transfer may be based on reasons such as a change in vocation, residence, commitments, or new family responsibilities that prevent the student from returning to their original unit.
- 4. No unit may admit a suspended student if academically more qualified students have been denied admission due to lack of space.
- 5. Students suspended for disciplinary reasons may apply for readmission at the end of the suspension period for the following academic session. Admission will not be granted if additional violations of institutional standards occur during the student's inactivity. The Dean of the relevant faculty, based on the recommendation of the Dean of Students, will decide on readmission. University studies completed at other institutions during this period will not be credited.
- 6. Students suspended from a university-level institution due to administrative or disciplinary action may not be admitted to any unit within the University System for the duration of their suspension or until a final decision is made regarding the disciplinary matter.



# **Medical Qualifications**

New students, as well as those seeking readmission or transfer, must submit a medical certification from a Public Health Unit (or equivalent) or a private physician to the Department of Medical Services before enrollment, using the form provided by the department. Students who have been off-campus due to physical or mental health reasons and are applying for readmission must provide evidence that their condition has been resolved. The Department of Medical Services will then determine whether the applicant is eligible for consideration by the relevant faculty. University employees authorized to study at the University of Puerto Rico under current regulations are exempt from the medical examination requirement.

# **Supervision Of Research Projects and Theses**

The professor supervising students conducting research and thesis projects must give proper attention to their work. If the professor uses any research or findings from students in their own publications or conferences, they must provide explicit recognition of the students' contributions.

# **Approving Courses Through Non-Traditional Means**

The Río Piedras Campus has established mechanisms to authorize the approval of courses beyond the traditional methods of university teaching and thus promote greater educational opportunities for its students. These rules are broken down below:

- A. Accreditation of approved courses through advanced placement tests administered by the College Entrance Examination Board (CEEB). High school students who pass CEEB's advanced placement tests in Spanish, English, and Mathematics will receive college credit by equivalency to the corresponding college courses. Each department that offers the equivalent courses (or to be validated), will determine and submit for the approval of the Dean of Academic Affairs, the current minimum score (3.0), which will be valid for the admission process that begins in the following academic year.
- B. College-level courses taken prior to starting studies in the system—either at the recommendation of the home college or during the summer before enrollment—may be accredited if taken at an accredited or recognized institution. If approved, these courses will count for college credit and be recorded on the student's transcript after completing one semester of residence in the system. The awarding of credits is subject to the requirements set by the faculties as part of their academic programs. The corresponding credit hours will appear on the transcript. If a student receives an "A," that grade will be recorded automatically. If they receive a "B," the student can choose to have either the "B" or "P" (pass) displayed. If the student receives a "C," it will be recorded as "P" (pass).
- C. Accreditation of approved courses through achievement exams prepared and administered by the academic departments of the Campus. (Applies to graduate and



undergraduate students.) Active or inactive students of the Campus may request the academic departments to allow them to opt for achievement exams in those academic subjects that they determine can be evaluated through exams of this type. Departments shall determine and publish the list of courses, if any, that may be approved by these examinations. Only courses passed by means of an achievement exam, in which the student obtains a minimum grade of "B" (3.0 on the 4.0 scale), will be accredited.

### **Limit of Credits Granted**

In individual cases, it can only be accredited by means of achievement exams and other non-traditional methods up to one-fourth (1/4) of the credits for the baccalaureate or graduate-level program in which the student is enrolled. This same restriction will apply to the credits corresponding to the subjects of the academic concentration selected by the student.

# **Teaching Language**

Spanish is the language of instruction in most subjects, but students are required to have sufficient knowledge of the English language to be able to carry out their studies at the Campus.

#### Class Schedule

The names of the regular professors must appear in the class schedules from the time of pre-enrollment, although subject to change. If possible, and always observing the suitability of the teacher, the courses offered will not be limited to a single professor, in addition to the fact that they can be offered at alternate times.

#### Methodology

The methodology used in courses must not rely solely on oral reports by students. It should be diverse and align with modern approaches to teaching and learning.

## **Teaching Modalities in the Academic Offer**

Since 2019, the Middle States Commission on Higher Education (MSCHE) authorized the Río Piedras Campus to request a "substantive change" to use alternative educational methods (i.e. distance learning) within the scope of its institutional accreditation. This authorization allows the creation and offering of distance learning programs.

Currently, the Río Piedras Campus has five graduate programs to be offered remotely, duly approved by the Governing Board of the University of Puerto Rico and the Board of Postsecondary Institutions of Puerto Rico (JIP), these are: Master of Information Sciences, Master of Business Administration, Accelerated (Quarterly), Master's Degree in Orality in the Penal System (LL.M.), Master's Degree in Project Management (Quarterly) and Master's Degree in Nutrition and Dietetics with Supervised Learning Experience (ACEND Accreditation Candidacy, approved).



As part of the requirements of the accreditation and licensing agencies, professors who offer online or face-to-face courses in any of the non-face-to-face modalities (hybrid, distance or online), must have passed and kept up to date through the training certificates on the construction of virtual learning environments offered on campus by the Center for Academic Excellence (CEA) or by the Division of Continuing Education and Studies Professionals (DECEP). It is the responsibility of the dean or director to ensure that professors have the required training.

# Course Outline- Certification 125, 2023-2024 UPR Governing Board

It is the responsibility of each professor to prepare, distribute, and discuss with their students during the first week of classes an outline of the course, which may vary because of the dialogue. It will contain the following information:

- a. Header
- b. Title
- c. Course Coding
- d. Number of Hours/Credit
- e. Prerequisites, Corequisites, and Other Requirements
- f. Course Description
- g. Learning Objectives
- h. Main Course Textbook
- i. Outline of Content and Time Distribution
- j. Instructional Strategies
- k. Minimum Resources Available or Required
- l. Evaluation techniques
- m. Reasonable Modification (Reasonable Accommodation)
- n. Academic Integrity
- o. Policy and Procedure for the Handling of Situations of Discrimination by Sex or Gender at the University of Puerto Rico
- p. Contingency plan in case of an emergency or disruption of classes
- q. Grading System
- r. Bibliography

#### **Faculty Office Hours**

Office hours will be determined by the professor, considering the most convenient hours for students. This information will be provided to students at the beginning of the semester, either in the course syllabus or another accessible location. Each department will post a list of office hours for their professors for student reference.

# General Rules on Courses and Enrollment

#### **Enrollment**

The Registrar is the custodian of the documentation relating to the students and is the one who sets the enrolment procedure. All study programs must be approved in order to be valid. Students must select and pay for their courses on the days and times indicated by the Campus in the corresponding academic calendar. Except in exceptional cases where there is a recommendation from a dean, no student will be allowed to enroll after the third day of classes in the semester or the first day of summer.

The student must submit the forms given to them on the corresponding platform. All new students must submit the required documents in order to enroll.

The registration will remain incomplete and will have no official value until the student pays all required tuition fees and deposits at the Revenue Office.

#### **Student Classification**

Students at the Río Piedras Campus are classified into the following categories:

Full-time program students, those who have met the entry requirements, are candidates for a degree, and follow a regular program with a minimum of 12credits per semester at the undergraduate level or six credits as an evening student, 4 in the summer session and 6 per quarter (corresponding graduate program). In the same way, regular undergraduate students will be considered those enrolled in practical courses recognized by the Academic Senate, as equivalent to a full academic load.

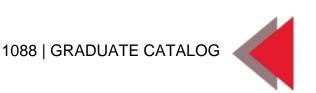
Part-time program students are those who meet the entry requirements, are candidates for a degree, and enroll in fewer than 12 credits per semester at the undergraduate level, fewer than 6 credits as evening students, or fewer than 4 credits during the summer session.

Auditory students, those who have or have not met the entry requirements, are not candidates for any degree and attend classes, with prior authorization from the director of the corresponding department and the Registrar. They do not receive official grading or credit for the work done in the courses they attend.

# **Academic Programs**

**Regular Academic Year.** The regular academic year consists of two semesters and one summer session: the first from August to December, and the second from January to May. The start and end dates of each semester are determined by the corresponding academic calendar. In the case of trimesters, academic periods are divided as follows: August to October, November to February, and March to May.

Students' academic programs typically consist of no more than 21 credits per semester at the undergraduate level. The number of credits per semester may be adjusted with the authorization of the dean of the relevant faculty, but under no circumstances may it exceed 21 credits. This rule also applies to students authorized to study at other colleges or universities.



All courses taught at the Río Piedras Campus may be credited as free electives for students who have passed them. However, this does not apply to courses that substantially repeat content covered in other courses within the student's specialty. Students may choose which courses to take as free electives.

**Summer Session.** The summer sessions are offered during the months of June and July, on the dates stipulated in the corresponding academic calendar. Applications to start university studies in the summer will not be accepted, except for those students from other universities who wish to study on campus as transient students.

The regular academic load during the summer sessions will not exceed three (3) courses with a maximum of seven (7) credits (per session). Candidates for summer graduation and students with honors are exempt from this rule. Such students may take up to a maximum of ten (10) credits. No abridged courses will be offered in the summer session. The credits authorized to students of the Río Piedras Campus who study during the summer at other colleges or universities will be governed by the rules established by the University of Puerto Rico for their summer session. The student's program will be subject to the approval of the dean of the appropriate faculty.

## **Program Changes**

Changes may be authorized to programs already approved by the deans and registered by the Registrar on the days indicated in the academic calendar, which will extend until no less than the first three days after the beginning of the semester and the second day after the beginning of the summer session. No program changes will be allowed after the dates indicated. They must be approved by the corresponding dean and the Registrar. All courses in which the student is enrolled will be recorded on his/her academic record.

## Withdrawals

The deadline for partial withdrawals of graduate students is the last day of classes in the academic calendar per term.

All students will have the right to file a full withdrawal at any time during the academic term or the corresponding summer session, up to the day before the start of the final exams. This agreement was approved by the Academic Senate through Certification number 21 of the 1995-1996 academic year.

If the withdrawal is duly authorized, the student will receive an official withdrawal grade (W) for the corresponding course. The Dean will notify the Registrar.

Throughout the academic term, withdrawals might be allowed in meritorious cases of illness or partial disability of the student duly certified by the Department of Medical Services of the Campus and authorized by the dean of the corresponding faculty.

Course Numbering System - Certification 125, 2023-2024 UPR Governing Board



All courses at the University are designated by a title containing letters and numbers indicating the subject and course. The first numeric digit indicates the level of the course as follows:

- 1. 00- Remedial. The material covered is considered pre-university, even when it is offered at the University.
- 2. Continuing Education (from 0100 to 0400) and High School and Middle School courses at the University of Puerto Rico (07xx onwards).
- 3. First level Technical Associate.
- 4. Technical Associate, second level.
- 5. Undergraduate, first level. First two years in the transfer and baccalaureate programs.
- 6. Undergraduate, second level. Next two or three years of high school programs.
- 7. Undergraduate, advanced level. Courses that can be taken for baccalaureate or master's degrees with the authorization of the Director of the Department.
- 8. Master's degree.
- 9. Doctorate, first professional level.
- 10. Doctorate in Philosophy and Letters, Doctorate in Education or Doctorate in Psychology.
- 11. Postdoctorate.

#### Attendance At Courses and Exams

Attendance at classes. Attendance at classes is mandatory. Professors have a duty to note their students' absences and report them to the Registrar along with the semester's grades. Frequent absences affect the final grade and may result in the total loss of course credits. In case of tardiness not notified by the professor, the student will wait fifteen (15) minutes from the start time of the class. According to a communication from the Vice Presidency for Student Affairs of the Central Administration, federal regulations (Standards for Participation in Title IV, HEA, Programs), require educational institutions to have procedures to evidence the attendance of their students. They must be able to determine and document when students stop attending, which in turn has an effect on students' eligibility for federal aid. To comply with this requirement, the mechanism of periodic verification of attendance was established, through lists of classes two per semester in which each professor must indicate those students who do not attend regularly, sign the list and return it to the Office of the Registrar, no later than the stipulated dates. The printed timetables will specify the length of each class period. To facilitate both the process of changing classrooms, as well as the movement of students from one part of the campus to another, teachers must begin their classes at the exact time indicated in their class schedule and end them ten minutes before the next class time. In other words, an hour of class will be understood as a real duration of fifty minutes. Classes of an hour and a half will last eighty minutes from the start time. The same pattern will be repeated in longer classes.

A professor who teaches classes of two or more hours in length may grant a break of five to ten minutes, depending on the period of the class.



#### **Review Period**

The review period is designated for students to adequately prepare for final exams and should not be used for other purposes. It will be specified in the academic calendar for the corresponding semester.

#### **Final Exams**

Final exams for all courses will be written, unless the nature of the subject requires a different format, or the dean of the relevant faculty authorizes an alternative type of examination. The professor will assess the student's work using the method deemed most appropriate, provided that there is clear evidence supporting the objectivity of the grading process.

Professors are required to adhere to the final exam schedule and grade submission deadlines set by the Office of the Registrar. This rule also applies to partial final exams. In exceptional, well-justified cases, an professor may alter the exam date only with prior regulatory authorization.

As a general rule, a student will not have to take more than two final exams on the same day. Professors will have five days from the exam period to submit final grades to the Registrar.

**Retention of exams and other equivalent work.** Final exams and other equivalent corrected work that have not been submitted to students must be retained by the professor for the term of one semester as evidence for any claim.

Attendance at final exams. Students who do not appear for a final exam duly announced by the Campus will receive a grade of Zero or F in said exam. If, in the week following the examination period, the student justifies their absence, the dean of the faculty may authorize submission to a new examination, which must be verified before the end of the next semester.

### **Grades**

**Unit of instruction.** One college credit is equivalent to one hour of class time or two to four lab hours a week for a semester. The semester consists of 15 weeks of classes and a period of final exams.

**Grades**. The grades at the Rio Piedras Campus are as follows: A - Outstanding; B - Okay; C - Satisfactory; D - Approved, but deficient; F - Failed; P - Passed, but not computed for the determination of the academic index; NP - Not passed and not computable for the determination of the academic index; W - Authorized and non-computable withdrawal for the determination of the academic index; F\* Withdrawal without authorization; I - Incomplete, must be completed by the end of the next semester; Rep - repeated course, this grade is not computable for the index; NG - No grade is carried.

**Provisional grades.** A student may receive a provisional grade accompanied by the indication of **incomplete** if the professor understands that for justified reasons the student



has not been able to meet all the requirements of the course. An "F" is awarded to the portion of the work not accomplished. Before the end of the following academic semester, the professor may change the provisional grade to a final grade and thus communicate this to the Registrar. The final grade will not be lower than the provisional grade. If the professor does not notify any change within this period, the provisional grade will be final

#### **Grade Claim**

Certification 118 of 2022-2023 of the Academic Senate and in accordance with the Campus Student Regulations in its article 2.12 recognizes "the right of every student to a fair and adequate review of his or her grade" so that it establishes the procedure and the general and uniform guidelines so that students can request the review of partial grades reported during the course of the semester, as well as, the review of their qualification already filed with the Office of the Registrar. This process is confidential in all its dimensions. "The student who is dissatisfied with the grade obtained in a course will talk to the professor about the evaluation of his or her work. If there is still disagreement with the student's application, the student will have the right to request, no later than the next semester, from the Head of Department, a review of the student's grade. The parties involved shall determine the procedure to be used for the appropriate resolution of the matter." The student must initiate the procedure if, in his/her opinion, the grade obtained (C-118 2022-2023 SA).

Academic Index. The academic index is the measure of a student's achievement. It is calculated by dividing the total number of honor points by the total number of credits accumulated in the subjects in which the student has received a final grade, including grades of "F" and "F\*". Honor points result from the value assigned to each grade, namely: A - 4; B-3; C-2; D -1; F -0; F\*-0. The academic index of 2.00 is considered satisfactory, at the undergraduate level, which represents a grade of "C". Courses graded D, F or Not Passed may be repeated without restriction. Courses with a grade of C may be repeated in special circumstances upon recommendation of the Academic Advisor or Department Chair. The student may request review of the officer's determination from the Dean of the Faculty. If a student repeats a course, only the highest grade will be counted toward their grade score, but the lowest grades must appear on their transcript. Subjects marked with a "W" will not be considered for the index. Grades obtained in the summer session are computed for the following year's academic index<sup>4</sup>.

Grades in expiring courses determined by the Campus - certification will not be counted in the general index and expiration will be noted in the transcript. When calculating the index for degrees, only grades in required courses will be considered as required or elective in the applicable program.

## **Academic Progress**

The institution evaluates student progress using a set of academic criteria that align with federal regulations under the United States Department of Education's Title IV Programs.

<sup>&</sup>lt;sup>4</sup> The Academic Senate of the Río Piedras Campus interprets the student's general academic index as approved at the institutional level but reserves the authority to approve the criteria for calculating the honor index.



These criteria assess how effectively students achieve their academic goals within a timeframe that does not exceed 150% of the standard duration for completing their program. This annual evaluation considers factors such as GPA, the number of credits enrolled and completed, and the fulfillment of program requirements. The goal is to ensure students meet the objectives of their academic program—whether it's a bachelor's, master's, doctoral, or law degree—within the allotted time.

This determination will be notified at the close of the academic year and those students who do not meet these requirements will be placed on probation and/or ineligible for financial aid during the next academic year. The Campus will establish and disclose appeal mechanisms under current regulations so that any student declared ineligible may request review of his or her status of non-academic progress, but this process will not alter their academic or financial responsibilities to the institution until a final decision is issued. For detailed information on Governing Board Certification No. 111, Series 2013-2014, please use the following link <a href="http://www.uprrp.edu/wp-">http://www.uprrp.edu/wp-</a> content/uploads/2016/09/111- 2013-2014.pdf

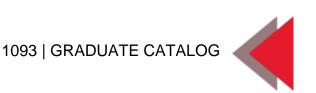
# GENERAL GRADUATION REQUIREMENTS - REFER TO RRP ACADEMIC SENATE CERTIFICATION 95, 2019-2020

Students should complete and submit the corresponding application to the Registrar. It must be submitted during the enrollment period of the semester in which the student must complete their academic requirements and in no case later than the dates indicated in the current academic calendar. A student's graduation request at the beginning of the academic year (August) will be valid until the end of the following summer. In the summer session, the application must be submitted on the day of enrolment. This fee is non- refundable.

- 1. Have no outstanding debts with the Institution.
- 2. Have been recommended for the degree to which they aspire by the faculty and by the governing bodies of the Institution.

# **Changes to Graduation Requirements**

The Campus reserves the right to make changes to the different programs and in the requirements for degrees, but as a rule, the student must graduate according to the program that is in effect at the time of admission to the Institution. However, students who do not meet the requirements of the degree within the time set for them in their programs and students who re-enter after a period of absence will be governed by the provisions applicable to the graduating class.



# **Tuition Fees and Payments**

# Tuition Rights<sup>5</sup>

In accordance with certification #163 2021-2022 of the Governing Board and circulars 22-01 and 22-02 of the Finance Office, an increase in tuition fees and other concepts related to services and obligations was ordered. There was an increase in the cost per credit to undergraduate and graduate students; There was an increase in technology and maintenance fees. While the cost of purchasing equipment and/or PC remained the same due to the fact that hybrid or distance courses would be offered.

The cost per credit was set at \$157.00 for the undergraduate level and \$215.00 for the PHD. The cost for the master's level was established according to the discipline: \$205.00 for the credit, \$215.00 for the Master of Architecture, \$305.00 for the Juris Doctor, and \$13,000.00 for the annual fee for LLM Law. Other related charges and fees the established cost was: DECEP courses \$157.00; technology fee \$50.00 for undergraduates and \$100.00 for graduate level; maintenance fee \$100.00 for undergraduate and \$200.00 for graduate level; Laboratory fee, up to a maximum of \$100.00 and thesis course fee \$67.00.

Because the increase in the cost of appropriations was set in a phased manner in previous years, other amounts are reflected.

# **Special Rights for Foreign and Non-Resident Students**

Non-resident students, who are U.S. citizens, will be charged an additional amount for tuition that corresponds to the minimum amount that would have to be paid by students residing in Puerto Rico studying at the state universities of the places where they come from. They will also pay other tuition fees. Non-resident students of foreign nationality enrolled full-time will pay a tuition fee of \$3,480 (current cost as of 2021-2022) per semester at the undergraduate level and other tuition fees.

In the case of students participating in exchange programs established between the University System and higher education centers abroad, the President of the University, on behalf of the Institution, may determine the tuition fees to be charged by virtue of the agreements or agreements signed by him. These fees will in no case be less than those paid by a resident student. (These fees are non-refundable.)

### **Regular Rights**

- 1. **Admission**. Students will pay \$30.00 for the admission procedure.
- 2. Medical Services. Medical services will be charged to all students who enroll in the different academic sessions in two or more credit-bearing courses, except for graduation candidates who must take advantage of the medical plan regardless of the number of courses in which they enroll. Students (auditors) and all students who present evidence of having a personal health plan are exempt from payment for medical services.



<sup>&</sup>lt;sup>5</sup> Tuition costs correspond to the 2018-2026 fiscal plan and may change without prior notice.

Students who have paid for medical services during the second semester will be covered by this policy until the day before the first day of school for the next semester, whether they have enrolled in the Summer Session.

# Special Fees (These Fees Are Non-Refundable).

- 1. Readmission: \$45.00 and late readmission \$52.50. Applications filed after the first period established in the academic calendar will pay one and a half times more than the established fee. This date is indicated in the current academic calendar.
- 2. Transfers from another institution \$50.00 and late application \$75.00
- 3. Authorization to change faculty on campus: \$20.00
- 4. Authorization to change from one program to another in the same faculty: \$20.00
- 5. ID Card: \$10.00
- 6. Late Tuition: \$20.00
- 7. Issuance of duplicate documents: \$5.00
- 8. Partial withdrawal per course \$10.00
- 9. Total Leave \$15.00
- 10. Course Repetition (for each course) \$20.00
- 11. Transfers: \$25.00

(All of these costs are subject to change without notice.)

## **Payment Rules**

**Dates**. All fees and general deposits for each semester will be paid on the day of the corresponding enrollment.

**Extensions**. Any student who proves that they lack sufficient resources to pay their tuition can apply for an extension. An extension may be granted to make the payment for entitlement to enrolled credits. Items charged to students in addition to credits will not be subject to extension.

Any student who requests and justifies their financial need may pay the tuition fee in the equivalent payments provided for each academic period in which they enroll. Any student who enjoys a full scholarship will not be eligible for the payment plan. This student is the one who has completed their scholarship award process and has it available for the payment of their tuition.

All payments must be paid in current U.S. currency by check, money order, or credit card, for the exact amount due and extended to the University of Puerto Rico.

Students who have not paid their debts to the University on or before the dates indicated will be considered as delinquent debtors.

**Suspension of services to delinquent debtors**. Students who have delinquent debts to the University will not be issued any official document related to their academic work, nor will they be granted an extension in the payment of tuition and other fees, nor will they be eligible to receive other university services with or without payment. Any services they are receiving



will be suspended upon written notice, while they have not covered their debts or are complying with a payment plan.

For the last-mentioned purposes, the address of the interested party must be notified in writing in the university registry; If you do not respond within five (5) business days, you will proceed as above.

### Refunds

CES Certification 11 1981-82 and Circular 83-7 of 1983-1984 of the President of the University of Puerto Rico establish that the refund of 50% of the tuition paid is authorized to students who withdraw in the first two weeks of an academic semester or in the first week of the summer session, excluding other regular and special charges. The 50% refund will be applied to total or partial cancellations managed in the period.

Failure to comply with this deadline cancels the right to a refund. Refunds of fees paid to students who have withdrawn due to lack of academic discipline will not be authorized. Students who receive a refund for total withdrawal will not be considered enrolled at the Rio Piedras Campus. To continue studying, you must subsequently apply for readmission on the dates indicated in the academic calendar.

#### **Honors**

The following students will be candidates for honors and will be exempt from the payment of credit fees:

- 1. Graduate-level students from the second year onwards will enjoy tuition waiver if their cumulative achievement in the program they are pursuing places them in the top five percent (5%) of their cohort and their GPA is 3.5 or higher.
- 2. Graduate-level students enrolled in the thesis course corresponding to their program of study who maintain an academic index of 3.5 or higher and that places them in the top five percent (5%) of their cohort.
- 3. Second-year and beyond students who have been readmitted after interrupting their studies for a semester or more are eligible for honors enrollment if they have an academic GPA of 3.50 or higher, are in the top five percent (5%) of their cohort, and have completed a minimum of 8 graduate-level credits.

In the last semester of study, the student who meets all the other requirements will be able to enjoy honors with a number of credits less than their regular academic load. This exception may only be used once at each academic level by the same student. The privilege of honors ceases if a student finishes any of the semesters with 8 credits in graduate studies.

# OTHER TYPES OF EXEMPTION

Students who are student representatives to the Governing Board and the University Board and those who participate in the Special Programs of the Dean's Office of Students are exempt by law from the payment of credits.

Students must meet the established requirements to receive these benefits. A number of special tuition exemptions have been granted by legislation to employees, spouses, and children of employees, among others. This policy was regulated by Certification 50 (2011-



2012) of the Board of Trustees, which in turn was amended by Certification 108 (2013-2014) of the Governing Board. The latter establishes the conditions and criteria for the enjoyment of the benefits, as well as their six-monthly evaluation mechanisms, time limit and specific conditions. For additional details on the enjoyment of these benefits by students, please refer to:

- Office of the Registrar for Honors and Veterans benefits (state and federal law).
- Dean of Students for other exemptions by student organizations.

For details on study benefits for faculty, non-teaching staff, children and spouses, please refer to the Campus Human Resources Office.

# Services of the Dean's Office of Students

# **Organizational Structure of the Dean of Students**

Mission

Our Mission is to support students in the achievement of their academic-professional project, making available a variety of services, programs and initiatives that allow both their integration and adaptability to the Institution as well as the development and strengthening of a set of competencies that contribute to their formation as a social, happy, productive and adaptable entity.

#### Vision

The Vision of the Dean's Office of Students is framed in the maximum development of the potential of the skills and abilities of each student to achieve their academic, professional and personal goals; and enrichment of their academic experience, and thus guarantee the social, psychological, and emotional well-being of future citizens in the service of the country.

#### Services of the Dean's Office of Students

The Dean's Office of Students of the Río Piedras Campus provides quality services to meet the needs of students, which will promote physical, emotional, social, recreational and academic well-being. In this way, the integral formation of a citizen who contributes to the development of society is promoted. Our vision states that the Dean of Students is the leading organization committed to a dynamic and changing student population. Our motto: "Serving our students with quality". The following are the Deanships, Programs and Service Units attached to the Dean's Office of Students.

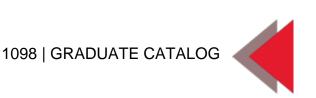
#### ATHLETIC DEPARTMENT

The Athletic Department is responsible for promoting student participation in intramural and intercollegiate sports programs. Their highest priority is to safeguard the physical and emotional well-being of student-athletes so that they can achieve their academic, social and athletic goals. In addition, it is responsible for complying with all the regulations of the bodies that govern university sports, whether it is the Intercollegiate Athletic League (LAI) or the National Collegiate Athletic Association (NCAA).

## **DEPARTMENT OF STUDENT DEVELOPMENT COUNSELING (DCODE)**

The Department of Counseling for Student Development offers counseling and psychotherapy services at the individual and group level in the educational, vocational, personal and family areas to the student, so that they can achieve their optimal development as a student and as a person. It has counselors, social workers, and psychologists, who help the student achieve a better adjustment to university life. It provides the following complementary services:

- Individual and group counseling.
- Individual and group psychotherapy.



- Support and psychoeducational groups.
- Career counseling.
- Administration and interpretation of inventories of vocational interests.
- Workshops on topics related to emotional well-being, academic strategies, life and career development.
- Specialized training.
- Consulting

# **Student Guidance Program**

The Student Guidance Program offers direct support to students so that they can better adapt to university life. In this way, they contribute to the achievement of their personal, social and academic goals. This management is carried out by a multidisciplinary team of professionals and by undergraduate students from different faculties and years of study, duly selected and trained. The focus of the Student Guidance Program is to meet the needs of adjustment and adaptation to university life of new students, through peer guidance and counseling, while facilitating training for the integral development of student counselors in small group meetings and socio-educational activities. It guarantees adaptation to university life, maximizes the development of each student counsellor and promotes the retention of all students who participate in the Program.

Through the program, the student's adjustment and adaptation process is facilitated, as well as the strengthening of personal, social and academic skills.

## Office Of Services for Students with Disabilities (OSEI)

The Office of Services for Students with Disabilities of the University of Puerto Rico ensures the faithful fulfillment of the rights of persons with disabilities, guaranteeing their equal participation and access to the services, programs, and activities available to the university community in general. The OSEI is the axis in the process of implementing systematic changes that tend to the integration and inclusion of students with disabilities in the university environment. Services offered:

- 1. Evaluate and coordinate reasonable accommodation or modification services for students with disabilities in the classroom.
- 2. Intercede in conflict situations regarding reasonable accommodations or modifications.
- 3. Coordinate early enrollment processes for students with disabilities.
- 4. Coordinate sign language readers, annotators, and interpreters.
- 5. Offer conferences, workshops and orientations to the university community on issues related to people with disabilities.
- 6. Refer students with disabilities for academic and vocational counseling or guidance.
- 7. Coordinate mechanisms so that students have access to keys to elevators in their schools.



# **University Center**

The University Center is the meeting point and geographic center of the University of Puerto Rico, Rio Piedras Campus. It was designed by architect Henry Klumb and opened in 1960.

It is the ideal institutional space to offer services and facilities for leisure, recreation and complement to academic life. It is also the right place to hold events that promote the socio-cultural development of our students. Among the main services found in this space are the Office of the Student Attorney, the General Student Council, the Office of Services for Students with Disabilities, the Department of Student Development Counseling, the Office of the Student Guidance Program, the Medical Services Clinic; as well as the Events Unit and the Tuna UPR. The building has covered outdoor terraces, conference rooms, multipurpose rooms and other specialized areas, such as a screening room. A large study and recreation room, dining areas and outdoor study are presented special and exclusive spaces for the Gallitos and Jerezanas. The building is the ideal place for academic and extracurricular activities. In this space, concerts, festivals, workshops, conferences and exhibitions have been held, among many other events.

#### **Id Cards**

The Office of the Dean of Students provides an identification card. The identification card is an essential requirement for the student to receive services in the libraries, sports complex, medical services, cashing of scholarship checks, cultural, social and recreational activities of the Campus. The ID Card unit makes duplicates of cards when students have lost them. Students applying for the card for the first time or duplicate of the card must present a photo ID. A tool was recently added that allows the student to view their ID in digital format.

#### **Associate Dean's Office of Students**

The Associate Dean's Office of Students aims to assist in the management of services of the Dean's Office of Students, and to support its Assistant Deanships, Departments, and Units. In the academic context, we provide support in matters related to student academic progress for financial aid purposes, Certification No. 55 (2016-2017) from the Governing Board of the University of Puerto Rico and Certification No. 108 (2018-2019) amending Certification No. 55.

## Social, Recreational and Institutional Events Unit

The Social, Recreational and Institutional Events Unit is the largest producer of activities at the Río Piedras Campus and is responsible for promoting the active participation of students in university life. Its mission is to promote, present, communicate and produce institutional, social and recreational projects that contribute to the enrichment, adaptation and strengthening of the university experience of the students of the Río Piedras Campus. This Unit organizes events such as: Welcome Event for new students, Open House, Graduation, Academic Distinctions Ceremony, Letter Delivery Ceremony, Interuniversity Jousts, concerts, karaoke, festivals and fairs. Likewise, it collaborates in the activities and events of other units and faculties and provides support to the Abanderadas, the UPR Dance Team and the Tuna UPR, as well as the musical student groups of the Department of Music.



## **Assistant Dean of International Relations- DARI**

The Assistant Dean of International Relations provides services to international students and exchange students. Its two main missions are to advance the international agenda of the Río Piedras Campus and to facilitate the mobility of its students. DARI operationalizes educational and cultural exchange opportunities with universities like ours in the Americas, Europe, Asia, Africa and Australia through bilateral and multilateral agreements (consortia). The DARI comprises two areas:

- Student Mobility Develops and strengthens student exchange projects with universities around the world. It offers excellent guidance services that result in an increase in both local students and U.S. institutions and foreigners, as well as foreign students at the Río Piedras Campus.
- Teaching Mobility– Advises, guides, coordinates and processes the different visa mechanisms or options that allow the execution of academic and cultural activities in which professors, researchers and international guests are involved in the Campus. It promotes, through guidance, the conditions for faculties to provide adequate accommodation for international visitors. It offers support, guidance and serves as a point of reference for visitors. It seeks to support the international activities of the faculties, as well as to promote the professionalization of the various people and instances that influence the process to make the visit of international visitors a reality. It also administers the Exchange Visitors Program (J) sponsored by the U.S. Department of State.
- Agreements, Bilateral Agreements and Consortia Student exchange and teacher mobility are part of the agreements that our Campus has signed with university institutions around the world.

The Río Piedras Campus is a member of the National Student Exchange (NSE) consortium, which facilitates exchange between universities in the United States, Canada, Puerto Rico, the Virgin Islands, Guam, and Hawaii. There are more than 180 available destinations. On the other hand, ISEP (International Student Exchange Program) is a consortium that offers study options at institutions around the world, including summer programs.

Exchange agreements give students the opportunity to study at any university abroad that is endorsed by the UPR. Spain is the top destination, as it holds the largest number of agreements. On our continent, the UPR also has partnerships with universities in countries like the United States, Mexico, Argentina, and the Dominican Republic, offering students a variety of enriching international experiences.

Likewise, the Río Piedras Campus receives students from the United States, Canada, France, Spain, Italy, Mexico, Asia and South America, who select our Campus as a study destination to complete an academic degree.

Bilateral agreements make it possible to adjust (adjust) the costs of studies. Both the students we send abroad and those we receive benefit from paying the costs of study at their home university while attending a prestigious university where the costs could be very high.

# **Assistant Dean of Student Services**

#### Financial assistance

It helps students with financial need by offering them various alternatives that help them achieve their educational goals. It offers guidance to the student on the use and management of the funds granted and guarantees the confidentiality of the information, protected by the Buckley Act and the HIPPA law. The Financial Aid program is the only office authorized to guide the student and distribute funds in accordance with institutional and federal standards.

The grants offered by the Program include the following scholarships:

- **Federal Pell Grant Program** This is a scholarship established by the Federal Department of Education for undergraduate students. It is the student's basic scholarship, which can determine if the student is eligible for other scholarships or other free aid programs.
- Supplemental Federal Grant Program (FSEOG) This federal program provides additional money in the form of a scholarship to assist undergraduate students. It is based on financial need and Pell Grant eligibility.
- Work-Study Program This program provides work for students with financial need, allowing them to earn money to pay for their study expenses. The program allows for community service and work related to students' studies. Remuneration is per hour, in accordance with the current federal minimum wage.
- Certification 47 (known as Certification 4) and Act 4 Institutional and State Scholarship Scholarships for students with financial need that was not covered by the Pell Grant. The amount of aid the student receives is set by the Institution, depending on the funds allocated from Pell Grants and tuition costs.
- The Federal Work-Study Program (FWSP) is designed to promote part-time employment for college students from low-income families who need financial support to cover their educational expenses. Available to both undergraduate and graduate students, the program offers job opportunities on campus or off-campus. The number of hours students can work each week is based on their financial need and class schedule.
- Grants from Private Funds These grants are provided in two ways: already
  designated to the participants, or through application and selection processes by
  committee. The Office of Economic Assistance collaborates in these processes
  when requested by the private entity. Such aid is administered according to the
  conditions set by the donors.

# **Federal Direct Loans**

- a) Subsidized Loan– The federal government pays interest during the period of study and for the first six (6) months after students leave school or graduate.
- b) UNSUBSIDIZED Loan- In this loan the student is responsible for the payment of interest from the moment he receives it. They can choose to pay the interest or let it accrue and capitalize (i.e., add it to the principal amount of the loan).
- c) Federal Plus Loan- This is a loan for parents with a good credit history that they wish

to take out to cover the costs of studying for their dependent children. The rate of interest rates is variable but never exceeds 9%. Generally, the first payment is made 60 days after receiving the last disbursement of the year.

# **Financial Assistance Program**

Assists students with financial need in reaching their educational goals. Among the grants offered by the Program we can name the following: Pell Grant, Federal Grants, Work-Study Program, Guaranteed Loans and Institutional Supplemental. For information on the Program on the Internet, please visit: <a href="https://estudiantes.uprrp.edu/asistencia-economica/">https://estudiantes.uprrp.edu/asistencia-economica/</a>

# **Eligibility And Requirements to Apply for Financial Aid**

- 1. Have been admitted to a unit of the UPR system.
- 2. Be enrolled in a program leading to an academic degree. The classification by enrolled credits is as follows:
  - a. or fewer credits Less than half-time student.
  - b. 6-8 credits Half-time student.
  - c. 9-11 credits student at three-quarter time.
  - d. 12 or more credits full-time student.
- 3. Present economic need, as defined by the Federal Department of Education.
- 4. Be a citizen of the United States or be classified as an eligible person non-citizen. Students with F1 and F2 Visas or J1 and J2 and Visas beginning with the G series will not be eligible to participate in the financial aid funds.
- 5. Maintain satisfactory academic progress, as defined to maintain eligibility y to be able to receive financial aid.

All students must meet the standards of academic progress established by their unit. To learn about the established rules, students can access the following link:

https://www.uprrp.edu/2021/08/progreso-academico-informacion-importante Veteran students or beneficiaries of the Veterans Programs will be able to enjoy benefits under these programs if they complete their programs of study in the regular time stipulated in the Catalog (four years). If they exceed it, they will lose their eligibility for these benefits under Title 38, although they will be able to receive financial assistance under Title IV programs (Pell Grant and others) if they maintain the corresponding eligibility requirements.

## **Housing Program**

The residences of the Housing Program are in the process of being remodeled.

# **Student Organizations**

This program serves as a facilitator to ensure compliance with the right of association, which is recognized by the Student Regulations of the Río Piedras Campus of the University of Puerto Rico. In addition, the office provides guidance services on enrollment processes to organizations. It sponsors and assists in the different areas of planning, coordination, development and evaluation of organizations.



# **Infant And Nursery Laboratory Program**

The Innovative **Model Project: Infant and Toddler Laboratory Classroom** at the UPR-Río Piedras Campus provides high-quality education, development, and care services to 18 infants and toddlers and their families. It operates Monday through Friday, from 8:00 a.m. to 4:00 p.m., serving the children of student parents at the Río Piedras Campus.

The project's main objectives include serving as a center for the observation of appropriate practices and hands-on experiences, developing training programs, supporting educational research and curriculum development, and providing guidance to service providers of ACUDEN (Administration for the Care and Integral Development of Children), as well as to professional programs.

#### **Medical Services**

The Department of Medical Services operates through the provision of Law 101 of the Department of Health for medical-hospital facilities, which defines us as a Diagnostic and Treatment Center. As a health facility, it has the responsibility to ensure that the university population receives clinical care in quantity, quality and excellence. This is achieved through the availability, continuity, and accessibility of the services offered.

The purpose of the Medical Services Department is to promote the good physical, mental and social health of the entire university community, as well as the achievement of the best lifestyles. To achieve this purpose, activities are carried out in the prevention, diagnosis and treatment phases of physical and emotional conditions through the different service units. The Department of Medical Services provides direct health care to members of the university community at the Rio Piedras Campus of the University of Puerto Rico, who voluntarily attend or are referred by internal and external support professionals to the university community to require and receive medical services or care, such as medical records, face-to-face and telemedical care, procedures related to the medical record and the liaison service with the student medical plan.

#### **Quality Of Life**

This Unit, attached to the Department of Medical Services, has the purpose of educating the community about wholeness, prevention of alcohol and other drug use, crime, and sexual harassment or assault. In addition, it is responsible for complying with federal regulations on Drug-Free Schools and Communities, and the Sexual Harassment and Assault Act. Among the services offered by the Quality-of-Life Office is: the FIESTA II Project, a proposal subsidized by the Traffic Safety Commission for the education and prevention of alcohol consumption and substance use for traffic and road safety.

The unit coordinates the work of COME UPI, a space dedicated to food security and other student needs. As part of their efforts, campaigns and guidelines on healthy eating are developed, and food purchases and necessities are delivered to students.

The unit also oversees and assists with compliance efforts with aspects related to laws and institutional policies related to campus safety, drugs, and alcohol. It is responsible for the preparation of the Biennial report on compliance with the Drugs and Alcohol policy at the Venue.



The unit also coordinates orientations, fairs and clinics related to the promotion of wellness and comprehensive health, sexually transmitted diseases, responsible sexuality, the use of opioids, comorbid diseases (diabetes, high blood pressure, other thyroid), vaccination, food safety and campus safety.

# **Assistant Dean for Programs and Initiatives**

The Assistant Dean's Office for Programs and Initiatives, part of the Dean's Office for Students, aims to offer services and coordinate initiatives, academic experiences, and programs that support students' holistic and professional development. Its objectives include fostering students' growth as creative leaders and active citizens in both local and global communities. Through its initiatives, the office emphasizes ethical and cooperative values while promoting civility, community service, and entrepreneurship at both the individual and collective levels.

Associated to the Assistant Dean's Office of Programs and Initiatives, the Student Recruitment, Retention, and Success Program (PRREE) focuses on providing services and orientation activities for high school and college-level students as they transition to the Río Piedras Campus. The program is dedicated to creating the conditions needed to support student retention, ensuring they successfully complete their studies while achieving holistic and professional development.

PRREE offers guidance in preparation for the job market, including job search processes, internships, and field experiences, helping students seamlessly transition into the workforce or pursue graduate studies. Additionally, the program serves as a bridge between high school students and the Río Piedras Campus, supporting them from recruitment through graduation, while also connecting students with potential employers.