

**INTER AMERICAN
UNIVERSITY
OF PUERTO RICO**

Graduate Catalog

2015-2017

Volume XXV August, 2015 Number I

Final Version

Published by Inter American University of Puerto Rico, PO Box 363255, San Juan, Puerto Rico 00936-3255.

This Catalog is published in Spanish and English. In the event of a conflict as to its interpretation, the Spanish version shall prevail.

The provisions of this Catalog do not constitute an irrevocable contract between students and the University.

The University will make all reasonable efforts to maintain up-to-date information in this Catalog. However, it reserves the right to revise or change rules, revise tuition fees, service charges, requirements for programs of study, the requirements for degrees and academic distinctions, course content and any other arrangements that might affect students whenever it deems necessary or desirable.

Students are responsible for reading and understanding the academic, administrative and disciplinary policies and regulations as well as the general requirements for the degree they hope to obtain, from the moment they register in the University. They are also responsible for meeting the major requirements once they declare said major. Students deciding to change their major will be responsible for complying with the requirements in effect at the time they declare the new major.

Graduation requirements as well as academic curricula and programs may change while students are registered at the University. These changes will not be applied retroactively, but students have the option of completing the new requirements. Nonetheless, when professional certifying or licensing agencies make requirement changes for the corresponding certification or license, the necessary changes to the curricula or programs will be applicable immediately. Students will have the responsible for deciding if they wish to take the new courses.

It is the University's policy to guarantee equal opportunity to all in all its educational programs, services and benefits. The University does not discriminate against anyone because of race, color, religion, sex, national origin, handicap, age, marital status, physical appearance, political affiliation or any other classification protected by the provisions of Title IX of the Amendments to the Education Act of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Handicaps Act of 1990 or any other applicable federal or state law or regulation.

<http://www.inter.edu>



Inter American University of Puerto Rico is Accredited by
the Commission of Higher Education of the Middle States Association
of Colleges and Schools
3624 Market Street, Philadelphia, PA 19104-2680
Tel. 215-662-5606 Fax 215-662-5501
www.msche.org

A Publication of the Vice Presidency for Academic and Student Affairs
and Systemic Planning
2015

Table of Contents

Page

Board of Trustees	11
Principal Officers of the University	13
Central Office	13
Academic Units	13
Directory	21
General Information	23
History of the University	23
Governance	23
Vision	23
Institutional Mission	24
Goals of the University	24
Religious Life Policy	24
Accreditations	26
Associations.....	27
Services for Veterans and Military Personnel	27
Academic-Administrative Calendars	27
Instructional Units	27
Academic Degrees	27
Language of Instruction	27
Publications	28
Alumni Association	28
Admission to Masters' and Doctoral Programs	28
Admission of Special Students	29
Admission of Audit Students	29
Admission of Foreign Students	29
Admission Requirements for Masters' Programs	29
Provisional Admission to Masters' Programs.....	30
Admission of Transfer Students to Masters' Programs	30
Provisional Admission of Transfer Students to Masters' Programs	30
Admission of Undergraduates to Masters' Degree Courses	31
Readmission to Masters' Programs	31
Academic Admission Requirements for Doctoral Programs	31
Provisional Admission to Doctoral Programs.....	31
Admission of Transfer Students to Doctoral Programs	32
Provisional Admission of Transfer Students to Doctoral Programs	32
Readmission to Doctoral Programs	32
Online Learning	33
Admission Requirements for Online Learning Students	33
Objectives of Online Learning.....	33
Technologies and Media Used in Online Learning	33
Interactive Videoconference	33
Courses On-Line.....	34
Video Courses	34
Email Courses.....	34
Proctored Evaluations.....	34
Teleconference Center.....	34
Tuition, Fees and Other Charges	35
Student Financial Aid	40
Federal Financial Aid Programs	40
Federal Direct Loans	40

Federal Work Study Program	40
Commonwealth Funds	40
State Financial Aid Program.....	40
Institutional Scholarship Program	40
General Institutional Scholarship.....	40
Institutional Graduate Assistantships.....	41
Study Benefit Time Limits for Veterans and Beneficiaries	41
Services Related to the Office of the Registrar	42
Intra-University Transfers	42
Registration, Program Changes and Partial Withdrawal	42
Audit Students	42
Withdrawal of a Course from the Class Schedule	43
University Policy Regarding Students and Alumni Directory	43
Solomon-Pombo Act	44
Student Records.....	44
Student Academic and Personal Files.....	44
Change of Address.....	45
Class Attendance	45
Withdrawal from the University	45
Undergraduate Prerequisites	45
Course Load.....	45
Repeating Courses	46
Grading System	46
Change of Grades Request.....	47
Administrative Action Symbols	47
Veterans Services	48
Support Services and Student Life.....	49
Academic Counseling.....	49
Professional Counseling	49
Audiovisual Center	49
Information Access Center (Library).....	49
Educational Resources System	49
Medical Services.....	49
Residence Halls - San Germán Campus	50
Student Activities	50
Religious Activities	50
Student Councils.....	50
Student Participation.....	50
Student Centers.....	51
Parking Service and Traffic Rules on Campuses.....	51
Study Modalities and Learning Experiences.....	52
Study by Contract	52
Portfolio.....	52
Special Topics	53
Experimental Courses.....	53
Internship Programs.....	53
Satisfactory Academic Progress Requirements for Professional Certificates, Masters & Doctoral Programs.	54
Academic Norms for Masters' Programs and Professional Certificates	57
Maintenance of Active Status in Masters' Degree Programs	57
Residency Requirements for Masters' Programs.....	57
Institutional Graduation Requirements for Master's Programs	57
Expiration Norm for Master's Level and Professional Certificate Courses.....	58
Academic Norms for Doctoral Programs	59

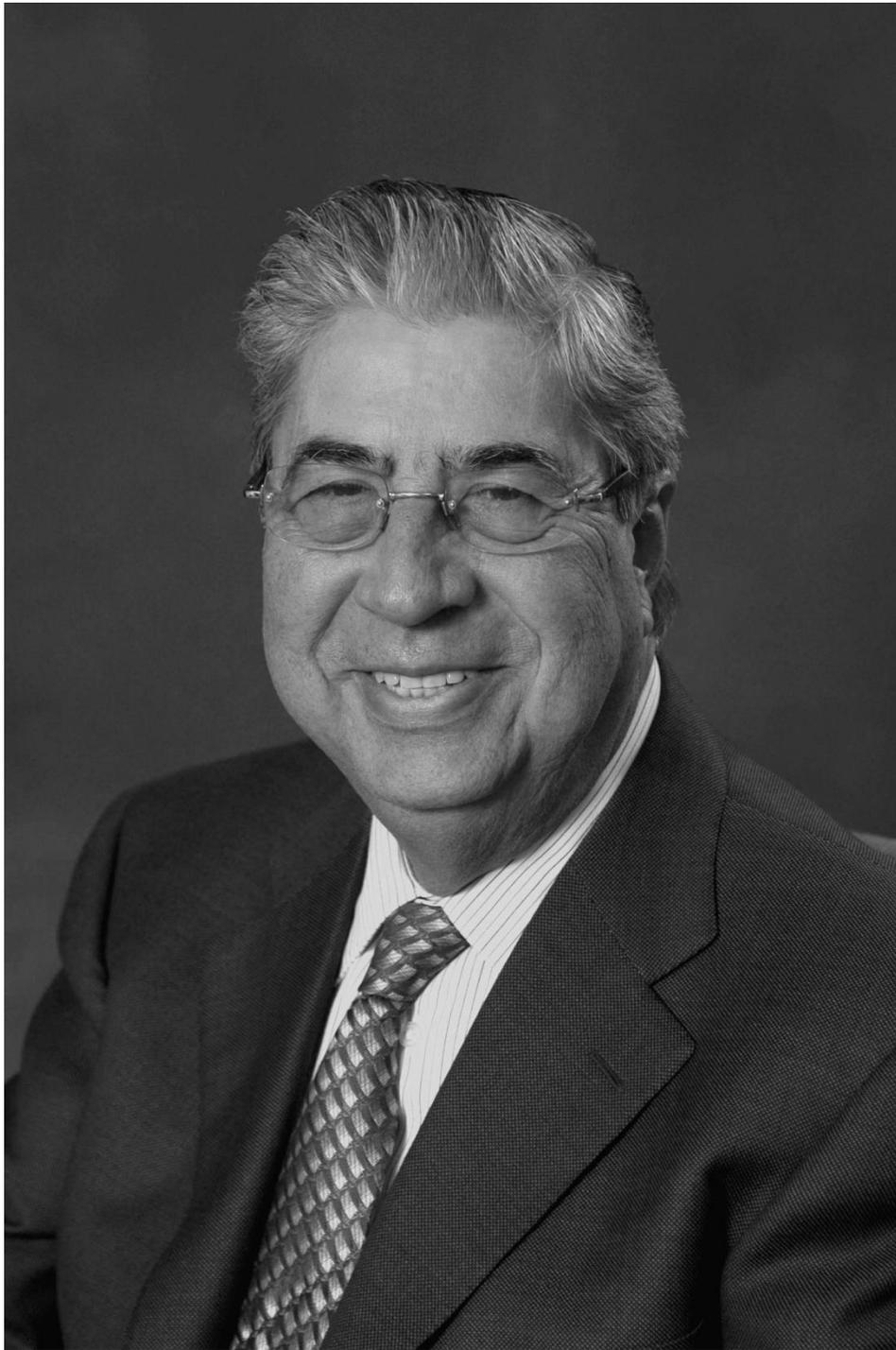
Maintenance of Active Status in Doctoral Programs.....	59
Residency Requirements for Doctoral Programs.....	59
Comprehensive Examination Requirements for Doctoral and Specialist Programs.....	59
Expiration Norm for for Doctoral Program Courses.....	59
Graduation and Diplomas.....	60
Application for Graduation.....	60
Diplomas.....	60
Posthumous Degree.....	60
Academic Norms of Compliance.....	61
Credit-Hours.....	61
Course Offerings and Scheduling.....	61
Special Requirements of Practice and Internship Centers.....	61
Compliance with Requirements of Regulated Professions and Employment.....	61
Responsible Conduct in Research Projects.....	62
Institutional Review Board (IRB).....	62
Responsible Conduct in Research Projects (RCR).....	62
Other Research Projects.....	62
Warning on Compliance with Copyright Laws and Regulations.....	62
Discontinuation of Academic Offerings.....	62
Graduate Academic Offerings.....	63
Institutional Codes y CIP Code.....	63
Subject Codes Used in Catalog and in the System.....	67
Course Codification System.....	68
Masters' and Doctoral Programs.....	69
Anesthesia (M.S.).....	69
Applied Mathematics (M.A.).....	70
Biology (M.S.).....	72
Specialization in Molecular Biotechnology (Biology).....	72
Specialization in Environmental and Ecological Sciences (Biology).....	73
Biotechnology (M.S.).....	73
Specialization in Biotechnology of Plants.....	75
Specialization in General Biotechnology.....	75
Business Administration (M.B.A.).....	75
Specialization in Accounting (M.B.A.).....	77
Specialization in Finance (M.B.A.).....	78
Specialization in Human Resources (M.B.A.).....	78
Specialization in Industrial Management (M.B.A.).....	78
Specialization in Managerial Information Systems (M.B.A.).....	78
Specialization in Marketing (M.B.A.).....	79
General Program (M.B.A.).....	79
Minor Specialization in Knowledge Management.....	80
Minor Specialization in Economic and Social Dimensions of Globalization.....	80
Business Administration for Executives (M.B.A.).....	80
Business Education (M.A.).....	81
Computer Science (M.S.).....	83
Computer Science with Specialization in Networks and Security (M.S.).....	84
Criminal Justice (M.A.).....	85
Teaching of Reading and Writing (M.A.).....	87
Education (M.A., M.Ed. and Ed.D.).....	87
Master of Arts Program in Education.....	87
Specialization in Counseling (M.A.).....	87
Specialization in Educational Management and Leadership (M.A.).....	88
Specialization in Physical Education (M.A.).....	90

Subspecialization in Teaching of Physical Education	92
Subspecialization in Sports Training and Performance	92
Specialization in Special Education (M.A.)	93
Specialization in the Teaching of Mathematics (M.A.)	94
Specialization in the Teaching of Science (M.A.)	95
Master in Education in Curriculum and Teaching (M.Ed.)	96
Specialization in Biology (M.Ed.)	98
Specialization in Chemistry (M.Ed.)	98
Specialization in English as Second Language (M.Ed.)	99
Specialization in History (M.Ed.)	99
Specialization in Mathematics (M.Ed.)	99
Specialization in Spanish (M.Ed.)	99
Masters in Education (M.Ed.)	100
Specialization in Bilingual Education (M.ED.)	100
Specialization in Interdisciplinary Special Education (M.Ed.)	101
Masters of Education (M.Ed.)	102
Specialization in Teaching at the Elementary Level (M.Ed.)	102
Specialization in Information Technology and Library Services (M.Ed.)	104
Masters of Education (M.Ed.)	105
Specialization in Teaching of Science and Mathematics at the Elementary Level (M.Ed.)	105
Doctor of Education Program (Ed.D.)	108
Specialization in Business Education (Ed.D.)	111
Specialization in Counseling (Ed.D.)	112
Specialization in Curriculum and Teaching (Ed.D.)	112
Specialization in Educational Management and Leadership (Ed.D.)	114
Specialization in Higher Education (Ed.D.)	115
Specialization in Special Education and Transition Services (Ed.D.)	115
Leadership and Instruction in Online Education (Ed. D.)	116
Education in Diabetes (Professional Post-Baccalaureate Certificate)	117
Educational Computing (M.A.)	118
Educational Neuroscience (M.A.)	120
English (Teaching of English as a Second Language) (M.A.)	120
Entrepreneurial and Managerial Development (Ph.D.)	122
Specialization in Human Resources (Ph.D.)	126
Specialization in Interregional and International Business (Ph.D.)	126
Environmental Science (M.S.)	127
Specialization in Environmental Biology (Environmental Sciences)	128
Specialization in Environmental Chemistry (Environmental Sciences)	128
Specialization in Water Resources and Unit Operations (Environmental Sciences)	128
Family Counseling (Post Master Professional Certificate)	129
Finance (D.B.A.)	130
Fine Arts (M.F.A.)	131
Specialization in Ceramics (Fine Arts)	134
Specialization in Drawing (Fine Arts)	134
Specialization in Painting (Fine Arts)	134
Specialization in Photography (Fine Arts)	134
Specialization in Printmaking (Fine Arts)	134
Specialization in Sculpture (Fine Arts)	134
History of the Americas (M.A., Ph.D. and Combined Program)	135
Master's Program (M.A.)	135
Doctoral Program (Ph.D.)	136
Information Security (M.S.)	138
International Business (M.I.B.)	140

Minor Specialization in International Marketing.....	141
Minor Specialization in International Relations	141
Minor Specialization in Economic and Social Dimensions of Globalization	142
International Business Administration (M.I.B.A.).....	142
Specialization in Accounting (M.I.B.A.)	144
Specialization in Finance (M.I.B.A.)	144
Specialization in Human Resources (M.I.B.A.)	144
Specialization in Marketing (M.I.B.A.)	144
Specialization in Global Logistics (M.I.B.A.)	144
Labor Relations (M.A.)	144
Minor Specialization in Economic and Social Dimensions of Globalization	145
Library and Information Sciences (M.L.S.).....	146
Mechanical Engineering (M.S and M.E.)	147
Specialization in Energy (Mechanical Engineering) (M.S.)	148
Specialization in Aerospace (Mechanical Engineering) (M.S.)	148
Specialization in Energy (Mechanical Engineering) (M.E.)	149
Specialization in Aerospace (Mechanical Engineering) (M.E.)	149
Music Education (M.A.) Metropolitan Campus	149
Music Education (M.A.) San Germán Campus	150
Nursing (M.S.N.).....	152
Specialization in Critical Care Nursing (M.S.N.)	154
Specialization in Medical-Surgical Nursing (M.S.N.)	154
Specialization in Maternal Child Nursing (M.S.N.)	154
Open Information Computer Systems (M.S.)	154
Professional Certificate in Technology and Administration of Data Banks	155
Psychological Counseling with Specialization in Family (M.S.)	156
Psychology (M.A. and Ph.D.).....	159
Master's Program in Psychology	159
Specialization in Psychological Counseling	160
Specialization in School Psychology	161
Specialization in Industrial/Organizational Psychology	161
Doctoral Program in Psychology	162
Ph.D. Program (Students with Bachelor's in Psychology)	168
Specialization (Industrial/Organizational Psychology) (students with Bachelor's).....	168
Specialization (Psychological Counseling) (students with Bachelor's Degree)	169
Specialization (School Psychology) (Ph.D. students with Bachelor's)	170
Religious Education (M.A.).....	170
Risk Management in Health Care (Professional Certificate in Management)	171
Social Work (M.S.W.)	172
Specialization in Administration in Social Work	174
Specialization in Direct Services (Social Work)	174
Post Masters Degree Professional Certificate in Clinical Social Work	175
Speech-Language Pathology (M.S.)	175
Theology (Ph.D.)	177
University Teaching (M.A.)	180
Course Descriptions.....	182
Courses in Accounting (ACCT)	182
Courses in Anesthesia (ANES).....	183
Courses in Bilingual Education (BLED)	186
Courses in Biology (BIOL)	186
Courses in Biotechnology (BIOT).....	191
Courses in Business Administration (BADM)	193
Courses in Business Education (BUED)	205

Courses in Chemistry (CHEM)	208
Courses in Computer Science (COMP)	209
Courses in Computer Science in Networks and Security (CSNS)	211
Courses in Criminal Justice (CJUS)	212
Courses in Economics (ECON)	215
Courses in Education (EDUC)	215
Courses in Education in Diabetes (DIAB)	240
Courses in Educational Computing (ECMP)	241
Courses in Educational Neuroscience (NEUR)	243
Courses in English (ENGL)	244
Courses in Environmental Sciences (EVSC)	247
Courses in Family Counseling (FACO)	250
Courses in Finance (FINA)	251
Courses in Fine Arts (ARTS)	252
Courses in Global Logistics (GLLO)	257
Courses in Geography (GEOG)	257
Courses in Health and Physical Education (HPER)	257
Courses in History (HIST)	260
Courses in Human Resources (HURS)	263
Courses in Information Security (INSE)	264
Courses in International Business (INBS)	266
Courses in International Business Administration (IBAD)	268
Courses in Interregional and International Business (INBU)	268
Courses in Labor Relations (LARE)	269
Courses in Leadership and Instruction in Online Education (LIDE)	271
Courses in Library and Information Sciences (LISC)	271
Courses in Linguistics (LING)	274
Courses in Marketing (MKTG)	274
Courses in Mathematics (MATH)	275
Courses in Mechanical Engineering (MECN)	278
Courses in Music (MUSI)	281
Courses in Music Education (MUED)	282
Courses in Music Technology (MUTE)	284
Courses in Nursing (NURS)	284
Courses in Open Information Computer Systems (COIS)	288
Courses in Physics (PHYS)	290
Courses in Psychology (PSYC)	290
Courses in Quality Organizational Design (QODS)	304
Courses in Religious Education (RELI)	305
Courses in Risk Management in Health Care (RMHC)	306
Courses in Social Work (SOWO)	307
Courses in Spanish (SPAN)	312
Courses in Speech-Language Pathology (SPLP)	313
Courses in Theology (THEO)	316
Faculty of the University	320
Central Office Administrators with Faculty Rank	320
Faculty of the Campuses	321
Faculty Aguadilla Campus	321
Faculty Arecibo Campus	321
Faculty Barranquitas Campus	322
Faculty Bayamón Campus	323
Faculty Fajardo Campus	323
Faculty Guayama Campus	324

Faculty Metropolitan Campus 324
Faculty Ponce Campus 328
Faculty San Germán Campus 330



Eng. Dennis W. Hernández Santiago
Chairman, Board of Trustees

Board of Trustees

August 2015

Officers

Dennis W. Hernández Santiago, B.S.C.E., M.S.C.E., Chairman, Contract Engineer; Resident of Dorado, Puerto Rico.
Felipe Piazza Vázquez, B.B.A., Vice Chairman, Minister, Businessman (Retired); Resident of Guaynabo, Puerto Rico.
Aída Nilda Molinary de la Cruz, J.D., Secretary, Judge of the Ethics Commission of the Supreme Court of Puerto Rico; Resident of San Juan, Puerto Rico.
Ramón Ayala Cuervos, J.D., Assistant Secretary, Attorney and Ordained Minister; (Retired); Resident of San Juan, Puerto Rico.
Jorge L. Fuentes Benejam, B.S.M.E., Treasurer, Contract Engineer; Resident of Dorado, Puerto Rico.
Antonio R. Pavía Bibiloni, B.B.A., Assistant Treasurer, Businessman; Resident of San Juan, Puerto Rico.

Other Members

Aurealis T. Báez Pizarro, Psy.D., M.P.H., Neuropsychologist; Resident of San Juan, Puerto Rico.
Jorge Farinacci Graziani, B.A., Businessman (Retired); Resident of Guaynabo, Puerto Rico.
Manuel J. Fernós López-Cepero, J.D., LL.M. President of the University; Resident of San Juan, Puerto Rico.
Amadeo I. D. Francis Smith, M.Sc., M.P.A., Public Servant; Resident of San Juan, Puerto Rico.
Juan G. Feliciano Valera, B.A., M.A., Ed.M., Ed.D., MDiv., Ordained Minister (Retired); Resident of Camuy, Puerto Rico.
Aníbal González Irizarry, B.B.A., J.D., Professor of Communications (Retired); Resident of Guaynabo, Puerto Rico.
Domingo Más Rivera, B.B.A., Certified Public Accountant; Resident of Mayagüez, Puerto Rico.
Pedro M. Mayol Serrano, M.D., FAAP, FCCP, Pediatric Pulmonologist (Retired); Resident of Guaynabo, Puerto Rico.
Pedro L. Meléndez Rosario, M.H.S.A., Service Manager of Health Systems; Resident of Aibonito, Puerto Rico.
José R. Muñoz Ávila, B.B.A., M.B.A., Senior Vice President of Oriental Bank; Resident of Guaynabo, Puerto Rico.
Juan José Pérez Alda, B.A., M.Th., , Minister (Retired), Resident of Bayamón, Puerto Rico.
Víctor Rivera Hernández, M.P.A., J.D., Attorney; Resident of San Juan, Puerto Rico.
Luis A. Rodríguez Pagán, B.B.A., Businessman; Resident of San Juan, Puerto Rico.
Antonio C. Rosario Soto, M.B.A., Vice Chairman, Businessman (Retired); Resident of San Juan, Puerto Rico.
Elba Sánchez González, B.B.A., J.D., Attorney and Certified Public Accountant; Resident of San Juan, Puerto Rico.
Gloria Santaella Parés de Figueroa, M.D., Anesthesiologist (Retired); Resident of San Juan, Puerto Rico.
Eneida Sierra Corredor, M.S., Consultant; Resident of Luquillo, Puerto Rico.
Enrique Sigas Santa Cruz, B.B.A., J.D., Secretary, Attorney; Resident of Bayamón, Puerto Rico.

Emeriti Trustees

Francisco A. Colón Cruz, M.S., LL.B., Attorney (Retired); Resident of Alexandria, Virginia.

Office of the Board of Trustees

* José Luis Colón González, M.P.A., Executive Director of the Office of the Board, San Juan, Puerto Rico.

*The Executive Director is not a Trustee of the Institution.



Manuel J. Fernós, Esq.
President of the University

Principal Officers of the University

Central Office

MANUEL J. FERNÓS, LL.M., President of the University
AGUSTÍN ECHEVARRÍA SANTIAGO, J.D. Vice President for Academic and Student Affairs and Systemic Planning
LUIS R. ESQUILÍN HERNÁNDEZ, J.D., M.B.A., Vice President for Financial Affairs, Administration and Services
NORBERTO DOMÍNGUEZ, M.Div., Vice President for Religious Affairs
DOMINIQUE A. GILORMINI DE GRACIA, J.D., M.A., Executive Assistant to the President
ZAIMA Y. NEGRÓN GUZMÁN, B.A., Director of the Office of Public Relations and Communications
EDUARDO LAMADRID AGUILAR, J.D., M.A.C., Institutional Director of the Office of Marketing and Promotion, Recruitment of Students and Alumni
LORRAINE JUARBE SANTOS, J.D., Director of the Juridical Adviser's Office
VLADIMIR ROMÁN ROSARIO, J.D., D.E.A. in Comparative Law, Executive Director Juridical Adviser and Chief Compliance Officer
ISAAC SANTIAGO NIEVES, Ph.D., Executive Director of the Evaluation and Systemic Research Office
JOSSIE SALGUERO PECUNIA, B.S. Executive Director of Information and Telecommunications
MAGGIE COLÓN ORELLANO, M.B.A. Executive Director of Human Resources

Academic Units

Aguadilla Campus

ELIE AURELIEN AGÉSILAS, Ph.D., Chancellor
NILSA M. ROMÁN FERRER, M.B.A., Dean of Academic Affairs
ISRAEL AYALA VALENTÍN, M.S., Dean of Administration
ANA C. MELÓN MAYORAL, M.A., Dean of Students
LUIS A. ACEVEDO MERCADO, Ed.D., Associate Dean of Academic Affairs
NAYDA L. SOTO VARGAS, M.A., Assistant Dean of Students
RAÚL J. RIVERA TORRES, M.B.A., Assistant Dean of Administration
RAÚL MENDOZA SALAMANCA, M.B.A., Executive Assistant to the Chancellor
MYRIAM MARCIAL FELICIANO, M.B.A., Manager of Registration Services
NARARLY CLAUDIO MACHADO, M.A., Director of Upward Bound Program (Science and Math)
MONSERRATE YULFO SOSA, M.S., Director of the Information Access Center
DARY I. ACEVEDO GONZÁLEZ, M.A., Director of the Guidance and Counseling Center
GLORIA CORTÉS RIVERA, B.A., Financial Aid Director
HANCY MUÑIZ VÁZQUEZ, B.B.A., Bursar
DORIS PÉREZ HERNÁNDEZ, M.B.A., Director of Admissions
MARÍA E. PÉREZ MEDINA, M.B.A., Registrar
NÉSTOR L. RAMÍREZ SOTO, M.B.A., Director of Promotion and Recruitment
YAMILETTE PRÓSPER DE LA CRUZ, M.A., Director of Education Program
PABLO ROJAS BANUCH, Ph.D., Director of the Office of University Chaplaincy
NEREIDA RAMOS MÉNDEZ, M.B.A., Director of the Non University Technical Certificate Program
JOSÉ R. AREIZAGA GARCÍA, M.B.A., Director of the Human Resources Office
IVONNE ACEVEDO ECHEVARRÍA, M.A., Director of the Educational Services Program
MAYRA ROZADA CAPELLA, M.A., Director of the Upward Bound Program
LISSETTE MORALES GARCÍA, M.A., Director of the Elementary and High School Atolina Vélez
SACHA M. RUIZ RODRÍGUEZ, M.Ed., Director of Development

Academic Departments

MAGDA E. RUIZ MONTES, M.A., Director of the Department of Economic and Administration Sciences
ROSA GONZÁLEZ, RIVERA, M.S., Director of the Department of Science and Technology
RAMONITA ROSA ROSARIO, M.A., Director of the Department of Education and Humanistic Studies
LOURDES OLAVARRÍA SOTO, Ph.D., Director of the Department of Health Sciences
ARIS ROMAN SILVA, Ph.D., Director of the Department of Graduate Studies
GERARDO LÓPEZ VIGO, M.A., Director of the Department of Social and Behavioral Sciences

Arecibo Campus

RAFAEL RAMÍREZ RIVERA, Ed.D., Chancellor
ANNETTE VEGA RODRÍGUEZ, Ed.D., Dean of Academic Affairs
WANDA BALSEIRO CHACÓN, M.A., Associate Dean of Academic Affairs
WANDA I. PÉREZ RAMÍREZ, B.B.A., Dean of Administration
ILVIS AGUIRRE FRANCO, M.A., Dean of Student Affairs
SARA GONZÁLEZ SANTIAGO, B.A., Assistant Director of Student Affairs
MINERVA RIVERA NIEVES, B.B.A., Associate Dean of Administration
SONIA VILLAIZÁN GOYAS, M.A., Assistant Dean of Administration
ENID ARBELO CRUZ, M.P., Executive Assistant to the Chancellor
CARMEN COSTA COLMENEROS, M.A.E., Executive Assistant for the Evening and Saturday Program
SARA ABREU VÉLEZ, M.L.S., Director of the Information Access Center
ABIGAÍL TORRES VILLANUEVA, M.A., Acting Director of the Guidance and Counseling Center
AMÍLCAR S. SOTO QUIJANO, M.A., Director of the Office of University Chaplaincy

Registration Services Management

CARMEN MONTALVO LÓPEZ, M.B.A., Manager of Student Services
CARMEN L. RODRÍGUEZ MARTÍNEZ, M.B.A., Registrar
RAMÓN O. DE JESÚS MARTÍNEZ, B.A., Financial Aid Director
VÍCTOR MALDONADO DELGADO, B.B.A., Bursar
PROVI MONTALVO BONILLA, M.A., Director of Admissions
REBECA ACEVEDO RIVERA, M.A., Director of Registration and Online Learning Services
JUAN C. RODRÍGUEZ RODRÍGUEZ, M.B.A., Director of Marketing and Student Promotion
BRENDA ROMÁN UBIÑAS, M.P.A., Director of the Adult Students Service Program (AVANCE)

Academic Departments

ELBA TORO DE DÍAZ, M.B.A., Director of the Department of Economic and Administrative Sciences
LOURDES CARRIÓN PAGÁN, Ph.D., Director of the Department of Social Sciences
LIZBETH ROMERO PÉREZ, Ph.D., Director of the Department of Sciences and Technology
AURIS M. MARTÍNEZ GUEVARA, Ph.D., Director of the Department of Education
FRANCES CORTÉS BELLO, Ed.D., M.S.N., Director of the Nursing Department
MARÍA L. DELGADO FERNÁNDEZ, M.Ed., Director of the Department of Humanistic Studies
JOSUÉ RAMOS GIRAUD, M.S., CRNA, Director of the Master Degree Program in Anesthesiology Science
RAMONITA DE LOURDES DÍAZ JIMÉNEZ, Ed.D. Director or the Graduate Program in Education

Barranquitas Campus

IRENE FERNÁNDEZ APONTE, Ph.D., Chancellor
PATRICIA ÁLVAREZ SWIHART, Ed.D., Dean of Academic Affairs

ARAMILDA CARTAGENA SANTIAGO, M.A., Dean of Students
JOSÉ E. ORTIZ ZAYAS, M.S., Dean of Administration
JOSÉ E. RODRÍGUEZ GARCÍA, M.A. Div., Director of the University Chaplaincy
ANA I. COLÓN ALONSO, B.S., Director of Promotion and Recruitment
MARIBEL LÓPEZ CARTEGENA, Ed.D., Director of Evaluation and Strategic Planning
AIXA SERRANO FEBO, M.B.A., Director of the Education Extension Program
MARÍA DEL C. RIVERA ZAYAS, M.L.S., Director of the Information Access Center
VÍCTOR SANTIAGO ROSADO, M.B.A., Director of Human Resources and Finance
ALEX ABRIL TORRES, M.S., Director of the Information System
ISRAEL RIVERA MONTESINO, M.A. Director of Extracurricular Activities

Registration Services Management

LYDIA ARCE RODRÍGUEZ, M.A., Manager of Registration Services
SANDRA MORALES RODRÍGUEZ, M.B.A., Registrar
EDGARDO CINTRÓN VEGA, B.A., Director of Admissions
EDUARDO FONTÁNEZ COLÓN, M.B.A., Financial Aid Director
ANTONIO J. ROSARIO RIVERA, M.B.A., Director of the Bursar's Office

Academic Departments

FILOMENA CINTRÓN SERRANO, Ph.D., Director of the Department of Education, Social Sciences and Humanistic Studies
JOSÉ PÉREZ MELÉNDEZ, M.S., Director of the Department of Sciences and Technology
OMAR GUERRERO DÍAZ, M.D., Director of the Department of Health Sciences
ALFREDO J. LEBRÓN KURI, Ph.D., Director of the Department of Business Administration

Bayamón Campus

JUAN MARTÍNEZ RODRÍGUEZ, M.E., Chancellor
CARLOS J. OLIVARES PACHECO, Ph.D. Dean of Academic Affairs
JUAN C. HERNÁNDEZ FERNÁNDEZ, M.B.A., Dean of Administration
GEMA C. TORRES SÁNCHEZ, J.D., Dean of Students
IRMA L. ALVARADO ZAYAS, Ph.D., Associate Dean of Academic Affairs
BERT RIVERA MARCHAND, Ph.D., Associate Dean of Academic Affairs (Research)
SERAFÍN RIVERA TORRES, M.A., Associate Dean of Administration
CARLOS N. ALICEA COLON, Assistant Dean of Academic Affairs
GRACE GÓMEZ DEL VALLE, M.A., Assistant Dean of Students
MIGDALIA ORTIZ RODRÍGUEZ, M.B.A., Director of Human Resources
JOSÉ A. FUENTES MELÉNDEZ, M.E., Director of Physical Plant and Conservation
LUIS E. ALCARAZ FUENTES, M.B.A., Director of International Relations
RAMÓN FERNÁNDEZ CAMAÑO, Ph.D., Executive Assistant to the Chancellor (Director of the Planning and Institutional Studies Office)
ANTONIO L. PANTOJA SERRANO, M.B.A., Executive Assistant to the Chancellor (Director Office of Integrated Communications),
EDWIN RIVERA CORDERO, B.S., Director of the Information and Telecommunications Center
SANDRA ROSA GÓMEZ, M.A., Director of the Information Access Center
CARMEN I. PÉREZ TORRES, M. Th. Div., Director of the Religious Life Office

Registration Services Management

IVETTE NIEVES AYALA, M.P.A., Manager of Registration Services
AURELIS BÁEZ PRIETO, M.B.A., Director of Student Services
EDDIE AYALA MÉNDEZ, M.A., Registrar
EDUARDO BERRÍOS MARTÍNEZ, B.B.A., B.A., Bursar

Schools and Academic Departments

Aeronautics School

JORGE CALAF CLOUTHIER, M.B.A., Dean

Engineering School

RUBÉN FLORES FLORES, M.S., Director of the Department of Electrical Engineering
HERIBERTO BARRIERA VIRUET, Ph.D., Director of the Department of Industrial Engineering
EDUARDO PÉREZ DÍAZ, Ph.D., Director of the Department of Mechanical Engineering

Academic Departments

FRANCISCO MONTALVO FIOL, D.M., Director of the Department of Business Administration
ISABEL GARAYTA MIYARES, Ph.D., Director of the Department of Humanistic Studies
JOSÉ A. RODRÍGUEZ ORTEGA, M.S., Director of the Department of Information
RAFAEL CANALS PASTRANA, Ph.D., Director of the Department of Natural Sciences and Mathematics
RUTH HERNÁNDEZ RÍOS, M.A. Director of the Department of Communications
SILVIA ROSADO VÉLEZ, Ed.D., Director of the Department of Health Sciences

Fajardo Campus

ISMAEL SUÁREZ HERRERO, Ed.D., Chancellor
PAULA SAGARDÍA OLIVERAS, Ed.D., Dean of Academic Affairs
LYDIA E. SANTIAGO ROSADO, M.B.A., Dean of Administration
JAVIER MARTÍNEZ ORTIZ, M.A., Ed.D., Dean of Students
NILSA E. MERCADO RODRÍGUEZ, M.A.Ed., Assistant Dean
ANGIE E. COLÓN PAGÁN, M.L.S., Director of the Information Access Center
HILDA L. ORTIZ BARBOSA, M.A., Director of Planning, Evaluation y External Resources
JOSÉ JAVIER COLÓN BARBOSA, M.B.A., Director of Promotion and Recruitment
RAFAEL HIRALDO, M. Div., Ph.D., Director of Chaplaincy
YOLANDA RAMOS ALVARADO, M.A., Director of the Continuing Education and Postsecondary Certificate Programs

Registration Services

GLENDIA DÍAZ, M.A., Manager of Registration Services
ARLENE PARRILLA ORTIZ, M.A., Registrar
ADA CARABALLO CARMONA, B.A., Director of Admissions
MARILYN MARTÍNEZ ALICEA, B.B.A., Financial Aid Director
PORFIRIO CRUZ CHONG, B.B.A., Bursar

Academic Departments

WILFREDO DEL VALLE, Ph. D., Director of the Department of Business Administration
IRMA L. MORALES VARGAS, M.A., Director of the Department of Sciences and Technology
LOURDES PÉREZ DEL VALLE, M.A., Director of the Department of Humanities
PORFIRIO MONTES OLMEDA, Ed.D., Director of the Department of Education and Social Sciences

Guayama Campus

CARLOS E. COLÓN RAMOS, M.A., Chancellor
ÁNGELA DE JESÚS ALICEA, Ph.D., Dean of Academic Affairs
MERLA RIVERA GARCÍA, M.PH., Associate Dean of Academic Affairs
NÉSTOR A. LEBRON TIRADO, M.A., Dean of Administration
ROSA J. MARTÍNEZ RAMOS, Psy.D., Dean of Students
CLARIBEL RODRÍGUEZ VERA, Director of the Office of Evaluation and Strategic Planning
ARNALDO CINTRÓN MIRANDA, M.Div. Director of the Office of University Chaplaincy
LUZ A. ORTIZ RAMÍREZ, M.B.A., Director of Student Marketing and Promotion
EDNY SANTIAGO FRANCESCHI, M.A. Ed., Director of the Information Access Center
CARMEN G. RIVERA DE JESÚS, J.D., Director of the Services Program for Adult Students
LUIS A. SOTO RIVERA, B.B.A., Registrar
EILEEN RIVERA RIVERA, M.B.A., Manager of Registration Services
LAURA E. FERRER SÁNCHEZ, M.A., Director of Admissions
JOSÉ A. VECHINI RODRÍGUEZ, M.B.A., Financial Aid Director
VACANTE, Director of Continuing Education Program

Academic Departments

RAY ROBLES TORRES, Ph.D., Director of the Department of Education and Social Sciences Sociales and Humanistic Studies
ROSALÍA MORALES COLÓN, Ed.D., Director of the Department of Business Administration and Entrepreneurial Development
MINERVA MULERO LÓPEZ, Ed.D., Director of the Department of Health Sciences
CARMEN J.TORRES TORRES M.S., Director of the Department of Natural Sciences and Technology
YAITZA RIVERA CARRIÓN, M.S.N., Associate Director of the Ryder Extension Project

Metropolitan Campus

MARILINA WAYLAND, M.S., Chancellor
MIGDALIA M. TEXIDOR, M.A., M.T. (ASCP) Dean of Academic Affairs
CARMEN A. OQUENDO, Ph.D., Dean of Students
JIMMY CANCEL, M.B.A., Dean of Administration
LUIS ENRIQUE RUIZ TROCHE, B.A., Manager of Registration Services
EDUARDO ORTIZ, M.S., Director of the Information and Telecommunications Center
REINALDO ROBLES, M.B.A., Director of Student Marketing and Promotion
LISETTE RIVERA, M.A., Registrar
BEATRICE RIVERA, M.A., Director of the University Guidance Program
LILLIAN CONCEPCIÓN COTTO, B.A., Financial Aid Director
CARMEN B. RIVERA, M.B.A., Bursar
JANIES OLIVIERI CAMPOS, M.B.A., Director of Admissions
MARÍA DE LOURDES RESTO, M.L.S., Director of the Information Access Center
ARELIS CARDONA, M. Div., Director of the University Chaplaincy Office
CARLOS J. RAMOS AYES, M.B.A., Director of Continuing Education

Academic Divisions

Division of Science and Technology

YOGANY GOVENDER, Ph.D., Dean
ARMANDO CARDONA, M.S., Director of the Department of Natural Sciences
MARTA ROSAS DE CANCIO, M.S., Director of the Department of Computer Science and Mathematics
IDA MEJÍAS, Ph.D., MT (ASCP), Director of Medical Technology
IVETTE CORA GONZÁLEZ, D.N.P., Director of the School of Nursing

Division of Economic and Administrative Sciences

FREDERIK VEGA LOZADA, LL.M., Dean
MYRNA M. REYES SOLERO, M.B.A., Director of the School of Economics
MILDRED SOTO GONZÁLEZ, M.A., Director of the School of Management

Division of Humanistic Studies

OSCAR CRUZ CUEVAS, Ph.D., Dean
JOSÉ EFRAÍN HERNÁNDEZ ACEVEDO, M.P.A., J.D., Director of the Liberal Arts and Social Sciences
Department
PEDRO GONZÁLEZ, Ph.D., Director of the History Department
MIGUEL CUBANO MERCADO, Ed.D., Director of the Department of Popular Music
ANGEL VÉLEZ, Ed.D., Ph.D., Director of the School of Theology

Division of Education and Behavioral Professions

CARMEN COLLAZO, Ph. D., Dean
MARÍA DELIA RUBERO, Ph.D., Director of the School of Education
LUIS A ACEVEDO RODRÍGUEZ, J.D., Director of the School of Criminal Justice
JAIME SANTIAGO, Ph.D., Director of the School of Psychology
ELIZABETH MIRANDA, Ph.D., Director of the School of Social Work

Ponce Campus

VILMA COLÓN, Ed.D., Chancellor
JACQUELINE ÁLVAREZ, Ph.D., Dean of Academic Affairs
VÍCTOR A. FELIBERTY, Ph.D., B.S.I.E., Dean of Administration
EDDA R. COSTAS, M.A., Dean of Students
OMAYRA CARABALLO, Ed.D., Associate Dean of Online Learning
YINAIRA SANTIAGO, Executive Assistant to the Chancellor
DIOSDADA COLÓN, M.A., Assistant Dean of Administration
DILIA RODRÍGUEZ, M.Ed., Assistant Dean to the Dean of Academic Affairs
EVELYN CASTILLO, M.H.R., Director of Continuing Education Program
WALESKA FLORES, M.B.A. Director of Human Resources and Finances
MARILYN OLIVERAS, M.A., Director of the Adult Student Service Program (AVANCE)
LILLIAM ZAPATA, C.P.L., M.Ed., Director of the Honors Program
IVONNE COLLAZO, M.B.A., Assistant Dean to the Dean of Academic Affairs
VANESSA P. PAGÁN, B.B.A., Director of Marketing and Student Promotion
LUCY I. ROSARIO, M.Div., Director of the Religious Life Office

HÉCTOR MARTÍNEZ, M.Ed., Director of Service Center for University Integration
MARÍA M. SILVESTRINI, M.L.S., Director of the Information Access Center
ALMA I. RÍOS, M.B.A., Assistant Dean to the Dean of Academic Affairs
HILDA V. STELLA, J.D., Director of External Resources
ANTONIO L. RAMOS, M.B.A., Director of the Information and Telecommunications Center
ISABEL ROSARIO, M.A. Executive Secretary of the Academic Senate

Registration Services Management

MIRIAM MARTÍNEZ CORREA, M.A., Manager of Registration
FRANCO L. DÍAZ, M.B.A., Director of Admissions
MARÍA DEL C. PÉREZ, M.A. Registrar
BRIAN HERNÁNDEZ, B.B.A., Bursar
DEBRA M. MARTÍNEZ, B.S., Financial Aid Director

Academic Service Management

RAFAEL SANTIAGO, M.B.A., Assistant Dean of the Management of Academic Services
SANTY CORREA BERNIER, M.A., Academic Director of Humanistic and Educational Studies
LIDIS JUSINO, J.D., Acting Academic Director of Social and Behavioral Sciences
HÉCTOR W. COLÓN, Ed.D., Acting Academic Director of the Department of Science and Technology
JOSÉ H.GARCÉS, Academic Coordinator of Radiological Sciences and Health Sciences
RAQUEL GONZÁLEZ, M.S., Academic Coordinator of Speech-Language Therapy
IRAIDA OQUENDO, MFCM, Academic Coordinator of Occupational Therapy
KATHERINE RIVERA, D.P.T., Academic Coordinator of Physical Therapy Assistant
ELBA RIVERA, Psy.D., Academic Coordinator of Nursing
ROLANDO MÉNDEZ, M.A., Academic Director of Online Studies
MARÍA A. VÉLEZ, M.A., Director of INTERTEC
JANET BERNARD, M.Ed., Coordinator of Educational Program- Health Sciences

San Germán Campus

AGNES MOJICA, M.A., Chancellor
NYVIA ALVARADO, Ph.D., Dean of Academic Affairs
FRANCES CARABALLO, M.B.A., Dean of Administration
RAÚL MEDINA, M.A., Dean of Student Affairs
MARÍA G. MARTÍNEZ, M.A., Manager of Registration and Student Services
EVELYN TORRES, Human Resources Officer
PABLO CARABALLO, M.Div., Director of Chaplaincy and Spiritual Welfare
ROGELIO TORO, M.B.A., Director of Information and Telecommunications Center
MARÍA MORALES, M.B.A., Director of Strategic Planning, Evaluation and Research
CARMEN I. RODRÍGUEZ, M.A., Director of InterAmerican San German School
ELBA T. IRIZARRY, Ed.D., Director of the Graduate Studies Center
VÍCTOR BONILLA, Director of Security
DORIS ASECIO, M.A.L.S., Director of the Information Access Center
MILDRED ORTIZ, M.A., Director of the Technical Studies Center
VACANT, Director of the Continuing Education Program
ENID CRUZ, M.A., Coordinator of the Adult Student Services Program
SYLVIA ROBLES, M.A., Director of the High School Equivalency Program (HEP)
MILDRED CAMACHO, M.A., Director of Admissions
MARÍA INÉS LUGO, B.B.A., Financial Aid Director
ARLEEN SANTANA, M.A., Registrar

CARLOS SEGARRA, B.A., Bursar
DAISY PÉREZ, M.A., Director of the Guidance and Counseling Center
CELIA GONZÁLEZ, M.B.A., Director of Promotion, Recruitment and Marketing

Academic Departments

SAMUEL ROSADO NAZARIO, M.S., Director of the Department of Fine Arts
ANGELA M. GONZÁLEZ, Ph.D., Director of the Department of Biology, Chemistry and Environmental Sciences
ILEANA ORTIZ M.S.N., Director of the Department of Health Sciences
MILSA MORALES, Ph.D., Director of the Department of Entrepreneurial and Management Sciences
FELIPE MARTÍNEZ, Ph.D., Director of the Department of Social Sciences and Liberal Arts
MIRIAM PADILLA, Ed.D., Director of the Education and Physical Education Department
MARÍA D. BODEGA, Ph.D., Director of the Department of Languages and Literature
YVONNE AVILÉS, M.S.E.E., Director of the Department of Mathematics and Applied Sciences

Directory

CENTRAL OFFICE

Inter American University
Urb. Jardines Metropolitanos
399 Calle Galileo
San Juan, Puerto Rico 00927-4517
*PO Box 363255
San Juan, Puerto Rico 00936-3255
Tel. (787) 766-1912
www.inter.edu

AGUADILLA CAMPUS

Inter American University
Barrio Corrales, Sector Calero
Aguadilla, Puerto Rico
*PO Box 20000
Aguadilla, Puerto Rico 00605-9001
Tel. (787) 891-0925
www.aguadilla.inter.edu

ARECIBO CAMPUS

Inter American University
Highway #2, Km. 80.4
Bo. San Daniel, Sector Las Canelas
Arecibo, Puerto Rico
*PO Box 144050
Arecibo, Puerto Rico 00614-4050
Tel. (787) 878-5475
www.arecibo.inter.edu

BARRANQUITAS CAMPUS

Inter American University
Barrio Helechal, Highway 156
Intersection 719
Barranquitas, Puerto Rico
*PO Box 517
Barranquitas, Puerto Rico 00794-0517
Tel. (787) 857-3600
www.br.inter.edu

BAYAMON CAMPUS

Inter American University
Bo. Cerro Gordo
*500 Highway John Will Harris
Bayamón, Puerto Rico 00957-6257
Tel. (787) 279-1912
<http://bc.inter.edu>

FAJARDO CAMPUS

Inter American University
Calle Unión-Batey Central
Highway 195
Fajardo, Puerto Rico
*PO Box 70003
Fajardo, Puerto Rico 00738-7003
Tel. (787) 863-2390
<http://fajardo.inter.edu>

GUAYAMA CAMPUS

Inter American University
Barrio Machete
Highway 744, Km. 1.2
Guayama, Puerto Rico
*PO Box 10004
Guayama, Puerto Rico 00785-4004
Tel. (787) 864-2222
<http://guayama.inter.edu>

METROPOLITAN CAMPUS

Inter American University
Highway 1, Km. 16.3
Corner Francisco Sein St.
Río Piedras, Puerto Rico
*PO Box 191293
San Juan, Puerto Rico 00919-1293
Tel. (787) 250-1912
www.metro.inter.edu

Inter American University Trimester Program in English

Highway 1, Km. 16.3
Corner Francisco Sein St.
Río Piedras, Puerto Rico
*PO Box 191293
San Juan, Puerto Rico 00919-1293
Tel. (787) 758-0837
www.metro.inter.edu

PONCE CAMPUS

Inter American University
Turpeaux Industrial Park
Mercedita, Puerto Rico
*Turpeaux Industrial Park
Mercedita, Puerto Rico 00715-1602
Tel. (787) 284-1912
<http://ponce.inter.edu>

School of Aeronautics
Inter American University
Fernando L. Rivas Dominicci Airport
Isla Grande, Puerto Rico
Tel. (787) 724-1912
<http://bc.inter.edu>

SCHOOL OF LAW
Inter American University
170 Federico Costa
Sector Tres Monjitas
Hato Rey, Puerto Rico
*PO Box 70351
San Juan, Puerto Rico 00936-8351
Tel. (787) 751-1912
<http://www.derecho.inter.edu>

SAN GERMÁN CAMPUS
Inter American University
*PO Box 5100
San Germán, Puerto Rico 00683-9801
Tel. (787) 264-1912
<http://www.sg.inter.edu>

SCHOOL OF OPTOMETRY
Inter American University
*500 Highway John Will Harris
Bayamón, Puerto Rico 00957
Tel. (787) 765-1915
<http://www.optonet.inter.edu>

*Mailing address

General Information

History of the University

Inter American University of Puerto Rico is a private institution with a Christian heritage and an ecumenical tradition. It is a non-profit organization that provides college instruction to youth of both sexes. It was originally founded in 1912 as the Polytechnic Institute of Puerto Rico by the Reverend J. William Harris and offered elementary and secondary education on the land occupied today by the San Germán Campus. The first college level courses were started in 1921 and in 1927, the first group of students graduated with Bachelors' degrees. In 1944, the Institution was accredited by the Middle States Association of Colleges and Schools. It was the first four-year liberal arts college to be so accredited outside the continental limits of the United States. This accreditation has been maintained since then. The University is approved to provide educational services to veterans intending to pursue studies under the norms of the Veterans' Administration. The programs of the University are authorized by the Puerto Rico Council on Education of the Commonwealth of Puerto Rico and by the Commonwealth's Department of Education, which certifies teachers for the public school system of Puerto Rico. Inter American University's School of Law is accredited by the American Bar Association and the School of Optometry, inaugurated in 1981, by the Council on Optometric Education. In March 1982, the first doctoral program was initiated.

Inter American University is the largest private university in Puerto Rico. Enrollment, in recent years, has been maintained at approximately 43,000 students. At the present time, about 21 percent of all the Island's college students and 35 percent of the students who go to the Island's private colleges attend Inter American University.

Inter American University's tradition of public service, the geographical location of its instructional units and its continuing attention to student needs make it especially attractive and accessible to students from all the municipalities of Puerto Rico. The increasing availability of both Federal and Commonwealth funds for student financial aid has enabled many students, who otherwise would not have been able to do so, to get a college education.

Governance

The highest governing body of Inter American University is a self-perpetuating Board of Trustees, whose members are elected by the Board itself without any outside intervention or tutelage of any kind.

The President is the chief executive and academic officer of the Institution. The Managerial Systemic Council is composed of the President of the University, Vice-Presidents, Chancellors, the Deans of the Schools of Law and Optometry, an Executive Secretary appointed by the President, the Executive Director of the Information System, the Executive Director of the Office of the Juridical Advisor, the Executive Director of the Office of Evaluation and Systemic Research, the Executive Director of the Human Resources Office, the Executive Director of the Office of Promotion and Recruitment. In addition, when affairs relevant to their functions are being considered by the Council, the following persons will attend as advisors: the President of the University Council, and the Director of Planning and Systemic Development of Physical Plant.

Subject to the approval of the President of the University and of the Board of Trustees, the administration and the faculties of the School of Law and of the School of Optometry are responsible for their own academic programs and standards. Nevertheless, in all other respects, these professional schools are also subject to university-wide policies, norms and procedures.

The Academic Senates of the instructional units and the University Council, heirs of the Academic Senate created in 1966 and succeeded by the University Senate in 1973, are primarily concerned with the academic well-being of the University through the process of academic articulation among the campuses. The Academic Senates establish academic norms subject to the ratification of the University Council and the concurrence of the President. Both bodies formulate recommendations on affairs related to educational, administrative and research policy.

Vision

Inter American University of Puerto Rico is a top quality higher education institution in search of academic excellence, with emphasis on the formation of people with democratic and ethical values, framed in an ecumenical Christian context.

Institutional Mission

Inter American University of Puerto Rico has the mission to offer post-secondary and higher education in the arts and sciences, by means of teaching, research and community service, within an ecumenical Christian context. In addition, it offers educational programs at the pre-school, elementary and secondary levels.

The University, also, contributes to society, by educating people that come from different socioeconomic sectors, within and outside Puerto Rico. It incorporates in its offerings and services, innovating study modalities supported by informatics and telecommunications. The University aims to prepare its graduates to be responsible and cultured citizens, with democratic and Christian values, who are conscious of their social and environmental obligation, and are able to perform competently and exercise leadership in an occupational or professional context.

The University aims to maximize the educational potential of students in an environment without discrimination, in compliance with the law, the accreditation regulations and standards, and in harmony with the search for academic excellence. It, also, aims to make the best use of this environment to develop critical thinking, scientific knowledge, sensitivity towards the arts, ethical responsibility and the skills of social coexistence.

Goals of the University

The University faculty and the administration strive to achieve the following institutional goals:

1. To promote, in the university community, an environment oriented towards a culture of peace, based on ethical, democratic and institutional Christian-ecumenical values, directed to the integral development of the student.
2. To promote an integral education that leads to the formation of an educated person, well-versed in the different fields of the human knowledge, by means of the development of the capacity for critical thinking, the adequate use of the communication skills in Spanish and English, ethical and civic responsibility, environmental awareness, skills of social integration, and the knowledge of science, the arts and religious education within a Christian-ecumenical context.
3. To respond to the needs of the student population and society by offering a variety of both presential and online learning programs, within and outside Puerto Rico, at the different educational levels.
4. To foment academic excellence by means of the continuous development of the teaching staff in the mastery of their discipline, as well as in the application of techniques, modalities and teaching methods, in harmony with the nature of the student population.
5. To foment the development of knowledge through research and creative activities in the academic community.
6. To promote efficiency and effectiveness in the teaching, administrative and student processes and services, in harmony with the provisions in the applicable laws and regulations, as well as in the standards of the accrediting agencies.
7. To cultivate leadership of the university community so that it may contribute to social and cultural enrichment of our country and to its economic development, by means of participation in communitarian, business and professional projects.

Religious Life Policy

Inter American University of Puerto Rico is an ecumenically oriented institution, but does not adhere to any one particular theology or ecclesiastical body. Founded by Dr. John William Harris, a minister of the Presbyterian Church, Inter American University maintains a historic, friendly and enriching association with that communion as well as with other Christian groups in accordance with its ecumenical spirit.

Inter American University of Puerto Rico is a community of higher education dedicated to a comprehensive search for truth within an environment of responsible freedom and through the encouragement of a mature academic life which guarantees true freedom of investigation. Within this context, religion is studied in the University as an academic discipline designed to engage in fruitful dialog with other university disciplines.

In affirming its commitment to the Christian ecumenical ideal, the University dedicates itself to the renewal and reaffirmation not only of its own Christian heritage, but also the culture within which it is situated and which it serves. This does not oblige the acceptance of all the details of our Christian past nor of all the elements of modern Christianity. Nevertheless, the University has fostered and will continue to foster the convergence of all Christians in the one faith centered about the person of Jesus Christ as He is made known to us in the apostolic tradition of the Scriptures as the

One whom Christians regard as decisive, definite and normative in man's relations with God and his fellow men and society. The University affirms its conviction that to be a Christian today implies, on the one hand, knowledge of and obedience to the Gospel and, on the other, identification with the Universal church by means of an individual commitment to a particular Christian communion.

The ecumenical posture of the University involves openness to society, science, technology and a plurality of faiths; it involves an integral education of each individual so he or she may exercise a vocation within his or her community in a responsible and productive way; it involves a commitment to serve though not to dominate society; and it involves the development of friendliness, fellowship and understanding to bridge human barriers.

The University promotes the following Christian-ecumenical values:

WE BELIEVE IN GOD AS A SUPREME BEING

God is the Supreme Being who created all that exists. His power and presence are revealed in the person of his Son Jesus, the Savior, and in the Holy Spirit, that guides the community of faith.

WE BELIEVE IN JESUS

We accept that the apostolic tradition of the Scriptures recognizes and accepts Jesus as decisive, definite and normative for humans' relations with God, their fellow men, family and society. Since He is the Savior and Mediator of Humanity, it is our commitment to continue fostering the convergence of all Christians through the one faith around the person of Jesus.

WE BELIEVE IN LIFE

We affirm that life is a gift of God. We foment that all human beings value their life so they may be able to give their best to the country, family and society. We promote the preservation of life, and therefore promote a Christian consciousness in education.

WE BELIEVE IN THE FAMILY

We believe that the family is the essential social nucleus where the initial values that shape the person are developed. We commit ourselves to reinforce these values, from their Biblical foundation, that help each human being to achieve the complete life and make it extensive to others.

WE BELIEVE IN SERVICE

We affirm our ecumenical Christian ideal and devote our efforts to renew and reaffirm service to our country, society, family and fellow men.

WE BELIEVE IN THE IDENTITY OF THE CHRISTIAN COMMUNITY OF FAITH

We affirm that the conviction of being Christian implies knowledge of and obedience to the Word of God and, also, identification and commitment to the Church and to the person's particular Christian community.

WE BELIEVE IN INTEGRAL EDUCATION

Our Christian ecumenical position provides openness to society, science and technology, with an integral mentality, an attitude of respect and a moral conduct in harmony with our values.

We foment the integral education of each person for carrying out his vocation in a responsible way and with a moral conduct and a productive performance in his community.

We are a community of higher education in an integral search of the truth, within an environment of freedom, through the encouragement of a mature academic life that guarantees the true freedom of investigation.

WE BELIEVE IN THE COMMITMENT WITH OUR FELLOW MEN

We believe that to be Christian it is to have and show a commitment of service to others based on love and not on the dominion of society, but rather on promoting friendship, solidarity, tolerance and understanding to bridge human barrier.

WE BELIEVE IN THE STUDY OF THE CHRISTIAN RELIGION

We promote the study of the Christian religion as an academic discipline in which a fruitful dialog with the other academic disciplines is maintained.

We will continue to strengthen the development of the religion studies program by providing all students the opportunity to acquire an understanding of the Christian faith and its implications for our culture.

To achieve this, Inter American University of Puerto Rico will continue and strengthen the development of its programs of religious studies and will provide to all its students an opportunity to understand the Christian faith and its implications for our culture; the University will furnish information about the most important aspects of the world's major religions to its students and will encourage them to appreciate these religions within their historic, theological and philosophic context. In this way, the search for faith and for the means to humanize mankind may be seen as a relevant option in a world striving for greater understanding and happiness.

The commitment of Inter American University to its Christian Heritage, as well as to its academic mission, will manifest itself through the development of an ecumenical program of religious life.

In accordance with this basic religious philosophy for the academic study of religion and for the development of religious activities, Inter American University, by its act and works, will:

1. Encourage the expression of the Christian principles here set forth,
2. Require the academic study of fundamentals of the Christian faith,
3. Require each instructional unit to establish an Office of Religious Life, which will serve the entire University community.

Accreditations

The eleven academic units of Inter American University of Puerto Rico are authorized by the Council on Education of Puerto Rico and accredited by the Middle States Commission on Higher Education to offer university studies of the undergraduate, graduate and professional levels, as the case may be. Likewise, the University is committed to the professional accreditation of its academic programs. For this reason, some academic units have programs accredited by organizations, such as:

- 1) Accreditation Board for Engineering and Technology (ABET)
 - Bayamón Campus
- 2) Accreditation Council on Optometric Education (ACOE)
 - School of Optometry
- 3) American Bar Association (ABA)
 - School of Law
- 4) Council on Accreditation of Nurse Anesthesia Educational Programs (COA)
 - Arecibo Campus
- 5) Council on Social Work Education (CSWE)
 - Arecibo and Fajardo campuses (BA)
 - Metropolitan Campus (BA, MSW)
- 6) International Association for Continuing Education and Training (IACET)
 - Aguadilla, Arecibo, Barranquitas, Bayamón, Fajardo, Guayama, Metropolitan, Ponce and San Germán campuses
 - School of Law
 - School of Optometry
- 7) Joint Review Committee on Education in Radiologic Technology (JRCERT)
 - San Germán Campus (AAS, BS)
- 8) National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
 - Metropolitan and San Germán campuses (BS, Professional Certificate)
- 9) Accreditation Commission for Education in Nursing (ACEN)
 - Aguadilla and Arecibo campuses (BSN)
 - Recinto Metropolitan (AAS, BSN)
- 10) Network of International Business Schools (NIBS)
 - Metropolitan Campus (Division of Economic and Administrative Sciences)
- 11) Teacher Education Accreditation Council (TEAC)

- Arecibo, Barranquitas, Fajardo, Guayama, Metropolitan, Ponce and San Germán campuses (Teacher Education Program)

Associations

Inter American University is member of the following professional organizations:

American Council on Education (ACE)
 American Institute of Certified Public Accountants (AICPA)
 Asociación de Colegios y Universidades Privadas de Puerto Rico (ACUP)
 Asociación de Industriales de Puerto Rico
 Association of American Colleges & Universities (AACU)
 Association of Governing Boards of Universities and Colleges (AGB)
 Association of Presbyterian College and Universities (APCU)
 Broadcast Music, Inc.(BMI)
 College Board
 Council of Graduate Schools (CGS)
 Hispanic Association of Colleges and Universities (HACU)
 Hispanic Educational Telecommunications System(HETS)
 National Association of College and University Attorneys (NACUA)
 National Association of Independent Colleges and Universities (NAICU)
 National Association of Student Financial Aid Administrators (NASFAA)
 Organización Universitaria Interamericana (OUI)

Services for Veterans and Military Personnel

Graduate programs at this University are available to veterans, eligible dependents and military personnel, including DOD/CIV (Department of Defense/Civilians).

Detailed information may be obtained from the Office of the Registrar of the Campus in which they desire admission. This office coordinates services to veterans and military personnel and serves as liaison between the University and government agencies concerned with Veterans' Affairs.

Academic-Administrative Calendars

The calendars for the academic terms are available on the website of each of the campuses and professional schools.

Instructional Units

Inter American University offers academic programs in the following eleven instructional units: The Aguadilla, Arecibo, Barranquitas, Bayamón, Fajardo, Guayama, Metropolitan, Ponce and San Germán campuses; and in two professional schools: Law and Optometry.

Academic Degrees

Inter American University offers pre-university, undergraduate, graduate and professional academic programs for obtaining certificates and Associate, Bachelors, Masters and Doctoral degrees in subject matters normally offered by institutions of higher education of a nature, educational mission and goals similar to those of this University. The School of Law of Inter American University grants the Juris Doctor degree and the School of Optometry, the Doctor of Optometry degree.

Language of Instruction

Graduate courses may be taught in either Spanish or English.

Publications

Inter American University has a variety of publications to facilitate communication within the University community, with alumni and with other academics and academic communities.

Interamericana is the official publication of Inter American University. It is published four times a year and its approximately 30,000 copies are distributed to students, faculty, administration, alumni and friends of the Institution. This publication covers activities from all instructional units and features special interviews and current events affecting education or the development of the Institution as well as general information regarding the faculty and administration.

Videoenlace Interactivo is a publication of the Vice-Presidency for Academic and Student Affairs and Systemic Planning. Its objective is to share the experiences of professors and students in the field of online learning. It serves as forum for dialog and the exchange of ideas in the use of technology in the educational process.

The *Law Review*, edited by students, is the official publication of the School of Law. Its articles are written by professors and students from the School of Law, judges and practicing lawyers. Because of the careful selection of its articles, the *Law Review* of Inter American University's School of Law is highly esteemed in the field of law.

Homines is published by the Metropolitan Campus. It contains critical analyses of current thoughts and events relevant to national and international affairs in the vast field of the social sciences. It is published twice a year.

Prisma is published annually by the Arecibo Campus. It has an interdisciplinary focus for the purpose of fomenting research and literary creativity in the University community. Essays, critiques, poems and short stories are published.

Surisla is published annually by the Ponce Campus. It transmits the literary works of the University community as well as the extramural contributions through an interdisciplinary focus.

Alumni Association

The Alumni Association Poly- Inter is an organization of graduates and former students who attended Inter American University or Polytechnic Institute. The Association keeps its members informed of University activities and involves them in its development. The Association is governed by a Board of Directors composed of 29 members, nine of which correspond to the alumni chapters of the different campuses and two members to the professional schools. In addition, the Association is represented on the Board of Trustees of the University by an Alumni Trustee. Each year the Alumni Association holds two primary activities: the celebration of Founders Day and the honoring of distinguished alumni.

Admission to Masters' and Doctoral Programs

All candidates for admission to the masters program, doctoral program or who are interested in taking graduate courses, must comply with the admission procedures. They must present documents that credit their identity for authentication aims purposes (identification with photo such as a passport or current driver's license). The applicants must send the admission forms to the units in which they are interested in studying. For their information the addresses of each unit are included below:

Director of Admissions
Aguadilla Campus
Inter American University
PO Box 20000
Aguadilla, Puerto Rico 00605-2000

Director of Admissions
Arecibo Campus
Inter American University
PO Box 144050
Arecibo, Puerto Rico 00614-4050

Director of Admissions
Guayama Campus
Inter American University
PO Box 10004
Guayama, Puerto Rico 00785-4004

Director of Admissions
Metropolitan Campus
Inter American University
PO Box 191293
San Juan, Puerto Rico 00919-1293

Director of Admissions
Barranquitas Campus
Inter American University
PO Box 517
Barranquitas, Puerto Rico 00794-0517

Director de Admisiones
Ponce Campus
104 Turpeaux Industrial Park
Mercedita, Puerto Rico 00715-1602

Director of Admissions
Bayamón Campus
Inter American University
Bo. Cerro Gordo
500 Highway 830
Bayamón, Puerto Rico 00957-6257

Director of Graduate Studies
San Germán Campus
Inter American University
PO Box 5100
San Germán, Puerto Rico 00683-9801

For information regarding the campuses authorized to offer the different masters programs consult this Catalog under their respective descriptions. This information is found before the presentation of the program requirements.

Applicants for Master's degrees should request that the registrars of colleges previously attended send transcripts directly to the appropriate Department Chairperson of the Campus at which they wish to enroll or to the Admissions Office, whichever applies. Requests by doctoral students should be sent to the Admissions Committee for Doctoral Studies at the appropriate aforementioned addresses. Transcripts and the applications for admission should be received by the appropriate Campus at least one month prior to the applicant's registration date. If a student is also applying for a graduate assistantship, all supporting papers for admission to the University should be received no later than April 30 for the first semester and September 30 for the second semester.

Admission of Special Students

Students from other institutions of higher education may take courses at this University to satisfy their home institution requirements if they have the proper authorization. These students must present evidence of registration in their home institution. Persons interested in taking courses for personal or professional improvement may also be admitted. Such persons should submit evidence of the academic preparation that qualifies them to take the courses.

Special students may take a maximum of twelve (12) credits.

Students, who later decide to continue their studies toward a degree, must have a minimum grade point index of 3.00 upon completion of twelve (12) graduate credits and must comply with admission procedures.

Admission of Audit Students

Students wishing to enroll in courses for audit must do so during the official registration period of the academic term or during the official period for changing courses. Such students must pay the course fee for auditing. Students who have not applied for admission should do so before registering as audit students.

Admission of Foreign Students

Foreign students should direct their inquiries to the campus they plan to attend. Generally, they are not admitted without a personal interview. University personnel will interview applicants in nearby countries where the number of applicants justifies the expense. If this arrangement is not justified, applicants are required to come to Puerto Rico on a tourist visa for an interview at their own expense. If an interview is necessary for online learning students studying outside Puerto Rico, the interview may be conducted through means available to the student. The interview will be supervised by a proctor from the student's locality, as determined by the University.

If the applicants are approved for admission, the Admissions Office fills out the I-20 Form A from the Immigration and Naturalization Service which enables them to obtain student visas. This Form will not be filled out for students admitted to study outside Puerto Rico through one of the online learning modalities.

Admission Requirements for Masters' Programs

To be considered for admission, students must:

1. Have a bachelor's degree from an accredited institution.
2. Have a grade point index of 2.50 or above in the last sixty credit hours of academic work at the undergraduate or graduate level or a combination of both levels, at students' discretion. Although generally these credits will be at the bachelor's level, students with graduate credits from an accredited university may combine these graduate credits with the last credits approved at the bachelor's level until completing the 60 stipulated credits. Applicants for admission to graduate programs who do not meet the required grade point index may count the grades of courses repeated after graduation for the admission index instead of the original grades.
3. Demonstrate, through an examination or other appropriate means as determined by the academic department or division, the ability to interpret professional material, both in Spanish and English, and the ability to express themselves correctly in writing in one of these languages.
4. Request an evaluation of their transcript by a specialized agency or by the academic unit where they are applying if their bachelor's degree or equivalent is from an accredited university that uses a grading system different from that in effect at this University.
5. Meet the test results of any test established by the program you are applying to.
6. Meet the admission criteria of the programs to which they are requesting admission. These criteria shall be established by the Department or Graduate Program and have prior approval of the Vice President for Academic and Student Affairs and Systemic Planning.

Provisional Admission to Masters' Programs

Students who have not met the baccalaureate course requirements for admission to a master's program may be provisionally admitted. Such students must complete these requirements, with a minimum grade of C or as determined by the program to which they have been admitted, before or during the term in which they pass their first 12 masters' credits. If students have not completed all the required bachelor level courses upon completion of their first 12 master level courses, they will be evaluated by the Department Director to determine if they may receive an extension of one academic term to continue with their graduate studies.

In addition, they will have until the beginning of the next registration period to comply with the other documents required in their provisional admission.

In case students have difficulty in obtaining the graduation certification or other official documents required by the Institution, they may be considered for provisional admission, if they meet the admission requirements and can submit a copy of the required documents or an electronically accessed version. Students may be admitted and granted a term of up to 30 days to submit the required documentation. The chief executive of the unit may extend that period for just cause. If students do not comply with the requirements by the end of the extension, they will be dropped from the University.

Admission of Transfer Students to Masters' Programs

Candidates for admission as transfer students to masters' programs will be considered if they meet the conditions presented in the section "Admission Requirements for Masters' Programs." Candidates must request that their university of origin send their official transcript to the officer or office indicated in the section of "Admissions Procedures for Masters' and Doctoral Programs" so that the credits to be granted for masters' level studies already taken may be determined.

Students that have begun studies for a master's degree in another accredited university may have up to 33% of the credits, of the requirements of the program to which they request transfer, accepted. Courses passed with grades of A or B may be considered for acceptance if they are equivalent to the corresponding courses offered by the master's program of Inter American University.

No academic work with credit taken earlier than 10 years or more before will be considered for acceptance. The expiration norm for masters' courses will be applied to such courses.

Provisional Admission of Transfer Students to Masters' Programs

Students who have not met the baccalaureate or masters course requirements for admission to a master's program may be provisionally admitted. Such students must complete these requirements, with a minimum grade of B, before or during the term in which they pass their first 12 masters' credits.

When students cannot provide some of official documents required by the University to complete the admission by transfer process, they will be admitted provisionally, if they provide a copy with these documents.

Student admitted provisionally will have thirty (30) calendar days from the date of admission to submit the required documents. The chief executive officer of the unit may extend that period for just cause. Students that do not comply with this requirement by the end of the extension will be dropped.

Admission of Undergraduates to Masters' Degree Courses

Undergraduate students at Inter American University who have a grade point index of 3.00 or higher and are within 30 credits of graduation may apply to the appropriate Department Chairperson for permission to enroll in Master's level courses. Undergraduate students with such permission are required at the time of enrollment to declare whether the credits obtained in such courses are to be applied toward an undergraduate or a graduate degree. The standard graduate tuition rate for those credits shall apply. Students receiving a grade of A or B in courses designated to be applied toward a graduate degree may request credit for those courses when applying for admission to the graduate program.

Readmission to Masters' Programs

Students previously enrolled in Masters' Degree Programs at this University and have not registered during the previous thirteen months, must apply for readmission through the Office of the Registrar of the campus to which they desire to continue their studies. Every application for readmission must be received at least three weeks before the first day of registration of the term in which students wish to resume their studies. An official transcript of any work taken while students were not enrolled at Inter American University should be submitted. Before being readmitted, students must receive an academic evaluation and orientation by the corresponding Program Director.

Readmitted students will be governed by the Graduate Catalog and other norms and regulations in effect at the time of their readmission.

Academic Admission Requirements for Doctoral Programs

To be considered for admission to doctoral programs, students, at least, must:

1. Have reasonable proficiency in Spanish and English.
2. Have taken one of the following tests, within five years immediately preceding the requested admission date and have received a score acceptable to the University if this test is an admission requirement of the specific program:
 - a. Graduate Record Examination (GRE).
 - b. Miller Analogy Test (MAT).
 - c. Examen de Admisión a Estudios de Posgrado (EXADEP)
 - d. Graduate Management Admission Test (GMAT)
3. Have requested that three letters of recommendation be sent to the University.
4. Be interviewed by the Admissions Committee of the program and have received a favorable recommendation.
5. Meet the admission requirements of the doctoral program for which admission is requested.

Provisional Admission to Doctoral Programs

Students who have not met the bachelors' or masters' course requirements for admission to a doctoral program may be provisionally admitted. Such students must complete these requirements, with a minimum grade of B, before or during the term in which they pass their first 12 doctoral credits.

In addition, they will have until the beginning of the next registration period to comply with the other documents required in their provisional admission.

In case students have difficulty in obtaining the graduation certification or other official documents required by the Institution, they may be considered for provisional admission, if they meet the admission requirements and can submit a copy of the required documents or an electronically accessed version. Students may be admitted and granted a term of up to 30 days to submit the required documentation. The chief executive of the unit may extend that period for just cause. If students do not comply with the requirements by the end of the extension, they will be dropped from the University.

Admission of Transfer Students to Doctoral Programs

Candidates for admission as transfer students to doctoral programs will be considered if they meet the conditions presented in the section "Admission Requirements for Doctoral Programs." Candidates must request that their university of origin send their official transcript to the officer or office indicated in the section of "Admissions Procedures for Masters' and Doctoral Programs" so that the credits to be granted for doctoral level studies already taken may be determined.

Students that have begun studies for a doctoral degree in another accredited university may have up to 33% of the credits, of the requirements of the program to which they request transfer, accepted. Courses passed with grades of A or B may be considered for acceptance if they are equivalent to the corresponding courses offered by the doctoral program of Inter American University.

No academic work with credit taken earlier than 10 years or more before will be considered for acceptance. The expiration norm for doctoral courses will be applied to such courses.

Provisional Admission of Transfer Students to Doctoral Programs

Students who have not met the bachelors' or masters' level course requirements for admission to a doctoral program may be provisionally admitted. Such students must complete these requirements, with a minimum grade of B, before or during the term in which they pass their first 12 doctoral credits.

When students cannot provide some of official documents required by the University to complete the admission by transfer process, they will be admitted provisionally, if they provide a copy with these documents.

Student admitted provisionally will have thirty (30) calendar days from the date of admission to submit the required documents. The chief executive officer of the unit may extend that period for just cause. Students that do not comply with this requirement by the end of the extension will be dropped.

Readmission to Doctoral Programs

Students who have registered previously in the Inter American University doctoral program, but have not completed their course requirements and have not attended class during a period of 13 months must apply for readmission through the Office of the Registrar of the Campus to which they desire to be readmitted. Every application for readmission must be received at least three weeks before the first day of registration of the term in which students wish to resume their studies. An official transcript of any work taken while students were not enrolled at Inter American University should be submitted. Before being readmitted, students must receive an academic evaluation and orientation by the corresponding Program Director.

Readmitted students will be governed by the Graduate Catalog and other norms and regulations in effect at the time of their readmission.

Online Learning

Inter American University of Puerto Rico recognizes that technology and information systems are essential in the transformation of experiences that promote learning. Likewise, they are strategic components of the institutional infrastructure for supporting academic development and facilitating management. In harmony with Vision 2012, Inter American University is moving toward the transformation of the teaching and learning processes by developing new educational emphases through the incorporation of technology. Students will assume more responsibility for their learning, the faculty will become facilitating agents and the curriculum will be made more flexible with multiple modalities.

In this way, the Institution increases the extent of its academic offering, maximizes its resources, reaches beyond the limits of the traditional classroom and promotes and provides new alternatives for continuous learning.

Online learning is conceived as formal educational process in which the major part of the instruction occurs when the student and the instructor are not in the same place at the same time. This is a planned experience in which the variety of synchronic and asynchronic technologies such as: email, videoconferences, interactive videoconference in audio and in video, and other modalities to promote learning when the student is at a different location from that of the professor. These experiences are designed to stimulate interaction and verification of learning.

Admission Requirements for Online Learning Students

The admission requirements for online learning students, including transfer and foreign students are explained in the corresponding sections of this Catalog applicable to students interested in studying by regular modalities.

Objectives of Online Learning

1. To utilize technology as an instrument to increase and strengthen the University Mission in its global context.
2. To develop new approaches so that students may assume greater responsibility for their learning and faculty may become better facilitating agents of the learning process.
3. To share and maximize academic offerings and institutional resources beyond the limits of the campuses.
4. To promote equal opportunity for information access beyond the limits of time and space.
5. To increase the student population to which Inter American University offers academic programs.
6. To facilitate the establishment of collaborative agreements and consortia with other educational institutions in an outside Puerto Rico with the purpose of strengthening and sharing academic offerings.
7. To strengthen and enrich developmental programs and professional update.
8. To meet the particular needs of students with disabilities.
9. To meet the multiple needs of a heterogeneous student population.
10. To meet the particular needs of the adult population.
11. To extend institutional services beyond geographic frontiers.

Technologies and Media Used in Online Learning

Online learning uses diverse technologies for the transmission of video, voice and data; thus, making possible a teaching and learning process beyond the limits of time and space. There are a variety of courses using these technologies as the basis for the learning experience, for example, interactive video conference courses, televised courses, radio courses, video courses, online courses, courses recorded on CD-ROM, desktop conferencing and courses in Internet. All courses differ in the means used to achieve teaching objectives: the teaching process for promoting the development of concepts and skills, the degree of interaction between faculty-student and student-student, the assessment and certification of learning.

Inter American University has incorporated the following technologies and media into its teaching and learning process.

Interactive Videoconference

These are courses offered by the synchronic modality that consists in interactive transmission of video, voice and data. The course originates in one place with participating students in remote localities. The faculty-student and student-student interaction occurs in a simultaneous or synchronic manner. The instructor may make use of electronic presentations and other computerized materials, as well as segments of video and other educational materials. This implies previous and extensive planning and development of such materials. In addition, the prior sending of materials for each session by means of fax, Web, or Internet is required. Also, the presence of a facilitator or official in charge of the discipline (for example, a teaching assistant or graduate student in an internship) and compatible videoconference equipment are required at the remote sites.

Courses On-Line

Courses are offered through the World Wide Web. Students have computers with access to Internet where they will receive materials and send their assignments and other work. The communication and interactivity between faculty-student and student-student is attained primarily through Internet, telephone and fax. This modality requires the development of all materials and their inclusion in a Web server prior to the initiation of the course offering. If students desire to access the courses from outside the University, the Institution guarantees them remote access to information resources but students are responsible for having their own computers.

Video Courses

These are courses prerecorded in video for loan, rent or sale to online learning students. The faculty-student interaction is accomplished by telephone, fax, Internet or other means designated by the faculty.

Email Courses

These are courses for which students are given the course syllabus, course materials and an e-mail account. Students have computers with access to Internet to communicate with the instructor. The communication and interactivity between faculty-student and student-student is attained primarily by e-mail. If students desire to have access to Internet from outside the University, the Institution guarantees them remote access to information resources but it will be the responsibility of the students to have their own computer.

In summary, the combination of media and technology and their complementary use in the traditional classroom promise to enrich learning experiences at the University.

Proctored Evaluations

This refers to the evaluations administered by authorized personnel other than the course professor in the online learning modality. The evaluations are administered in a locality accessible to the student.

Each campus will establish the rules and procedures for the administration of proctored evaluations in online courses.

Teleconference Center

The University has a Teleconference Center whose mission is the systemic coordination of the application of telecommunication tools as well as those of interactive videoconferences in online learning. This Center promotes faculty competence and interactive online learning through courses, teleconferences, meetings, seminars, and conferences. The Center provides simultaneous interaction with video, voice and data, which permits complete interaction between faculty members and students located at distant sites. At present, the Central Office of the System, as well as the Arecibo, Barranquitas, Bayamón (including the School of Aeronautics), Guayama, Metropolitan, Ponce and San Germán campuses have videoconference rooms equipped with advanced telecommunications technology which permits the integration of multimedia.

Tuition, Fees and Other Charges

(Master's and Doctoral Programs)

APPLICATION FOR ADMISSION

Masters Degree Students (except exchange students)	\$31.00 with application
Masters Degree Students in Law	\$63.00 with application
Doctoral Students	\$75.00 with application
Doctor of Optometry Students	\$31.00 with application

TUITION

Master Degree Courses	\$207.00 per credit
Master of Law	\$650.00 per credit
Doctoral Courses (except in Entrepreneurial and Managerial Development and in Finance)	\$302.00 per credit
Doctoral Courses in Entrepreneurial and Managerial Development and in Finance	\$417.00 per credit
Doctor in Optometry, first year students	\$26,500 annually (two semesters)
Doctor in Optometry, second year students	\$26,250 annually (two semesters)
Doctor in Optometry, third year students	\$26,000 annually (two semesters)
Doctor in Optometry, fourth year students	\$25,750 annually (two semesters)
Summer Students (Doctor of Optometry)	\$1,500.00 per credit
Special Students (Doctor of Optometry)	\$1,500.00 per credit
Auditing Courses (except Optometry)	50% of the regular cost per credit
Auditing Courses (Optometry)	50% of the regular cost per credit for special students

Fees	Semester	Trimester	Bimester	Summer Session
General Fee	\$60.00	\$40.00	\$32.00	\$28.00
Fees for Goods and Services				
Full-time Students	\$55.00	\$37.00	\$28.00	\$28.00
Part-time Students	\$38.00	\$25.00	\$19.00	\$19.00
General Fee (Law)	\$60.00	N/A	N/A	\$60.00
General Fee (Optometry)	\$60.00	N/A	N/A	\$50.00
Student Center*	\$19.00	\$13.00	\$10.00	\$6.00
First Aid Center*	\$15.00	\$10.00	\$9.00	\$6.00
Student Activities and Council*	\$14.00	\$10.00	\$8.00	N/A
Student Activities and Council (Law)	\$20.00	N/A	N/A	N/A
Student Activities and Council (Optometry)	\$37.00	N/A	N/A	N/A
Fee Doctoral Program DELIED (Ponce)	\$340.00	\$225.00	\$170.00	\$170.00
Bar Fee (Juris Doctor –English Program)	\$595.00	N/A	N/A	N/A
Information Access Center	\$40.00	\$27.00	\$20.00	\$12.00
Infrastructure Fee: Masters and Doctorate	\$79.00	\$57.00	\$47.00	\$40.00
Construction, Improvements and Maintenance Fee: Masters and Doctorate	\$63.00	\$44.00	\$35.00	\$31.00
Construction, Improvements and Maintenance Fee: (Law)	\$125.00	N/A	N/A	\$63.00
Doctoral Fee in Entrepreneurial and Managerial Development and in Finance	\$350.00	\$235.00	\$175.00	\$175.00

***Does not apply to online learning students who reside outside Puerto Rico in this particular academic term. The fee for the student center is charged in the academic units that have a center.**

Fee for access, transit and parking of vehicles

	<i>Semester</i>	<i>Trimester</i>	<i>Bimester</i>	<i>Summer Session</i>
Aguadilla Campus	\$20.00	\$14.00	N/A	\$10.00
Arecibo Campus **(Students that want to pay for 2 semesters or 2 consecutive trimesters that run within a semester).	\$40.00	\$40.00	\$1.00/diario	\$1.00/diario
Barranquitas Campus	\$15.00	\$10.00	\$10.00	\$10.00
Bayamón Campus	\$30.00	\$20.00	N/A	\$10.00
Fajardo Campus	\$13.00	\$7.00	N/A	\$7.00
Guayama Campus	\$20.00	\$14.00	N/A	\$10.00
Ponce Campus	\$30.00	\$20.00	N/A	\$10.00
School of Law	\$30.00	N/A	N/A	\$10.00
School of Optometry	\$30.00	N/A	N/A	N/A
Metropolitan Campus - parking multifoors and other facilities, for each use	\$1.00	\$1.00	\$1.00	\$1.00
San Germán Campus	\$20.00	\$14.00	\$14.00	\$10.00

OTHER FEES

Fee for Application of Evaluation of Minor Certification of Studies	\$10.00 with each application
Late Registration	\$2.00 with each application
Withdrawal from Courses –partial or total (charged only during refund period)	\$50.00 upon registration
Course Additions or Changes	\$6.00 upon change or withdrawal
Deferred Payment Arrangement	\$6.00 upon change
Late Payment of Deferred Payment	\$6.00 upon arrangement
Laboratory, all disciplines requiring it except Open labs (Optometry not included)	5% of principal owed, upon the occurrence
Laboratory (only Optometry)	\$90.00 for lab hour
Open Laboratory	\$38.00 per course
Transcript of Credits	\$30.00 per course
Graduation, School of Optometry	\$6.00 per request
Graduation, All other units	\$200.00 with application
Practice Teaching or Internship (not applicable to Law or Optometry)	\$100.00 with application
Clinic Fee (only Optometry) first and second year	\$19.00 per credit
Clinic Fee (only Optometry) third and fourth year	\$38.00 per course
Masters degree in Biology (only Bayamón)	\$200.00 per course
Program fee for the Masters in Business Administration for Executives (only Metropolitan Campus)	\$50.00 per hour, per advanced semester
Music Program, (only Metropolitan and San Germán) for one course	\$300.00 per bimester
for two or more courses	\$63.00 per semester
Law Review (only Law School)	\$125.00 per semester
Late Final Examination (not applicable to Law School)	\$15.00 once a year, upon registration
Comprehensive Examination (not applicable to Law and Optometry)	\$19.00 per examination
Removal of Administrative Action Symbol “I” (Incomplete) and related academic work	\$25.00 upon application
Completion of dissertation course in doctoral program	\$19.00 per course, upon application
Returned Check	\$235.00 per credit
	\$26.00 for each returned check

Maintenance of Active Status:	
Masters Program	\$25.00 per semester or trimester
Doctoral Program	\$31.00 per semester or trimester
Maintenance of active status for exchange students who pay at the host institution	\$50.00 per academic term of exchange
Identification Card Replacement	\$7.00 each time requested

Applicable only to San Germán Campus

Room

Eunice White Harris and Dr. Angel Archilla Cabrera Residences	
Room per person (4 occupants)	\$600.00 per semester
	\$200.00 per summer session
Lodging	\$10.00 per day

The cost for room is refundable if requested 25 University workdays before the start of classes for each semester or seven University workdays before the first day of classes for the summer sessions.

Residence Room Reservation	\$25.00 with application
----------------------------	--------------------------

The deposit for the Residence Room Reservation is applicable to the Room Fee: this is refundable if not admitted to the residence.

Loss of room key	Depending on the cost of lock replacement
Meals - 5 days per week	\$750.00 per semester

This includes three meals daily Monday through Friday, beginning on the first day of classes until the last day of final examinations. It does not include official University Holidays nor Saturdays or Sundays.

Room and Board: *When a student makes a total withdrawal from the academic term in which he registered in room and board, the student will be entitled to a prorated adjustment from the date of the withdrawal for the percent corresponding to the date of the refund of federal funds. This occurs if the date of withdrawal is within 60% of the term in which the student is enrolled. The student will be responsible for the room and board debt, in agreement with the adjustment performed.*

CHANGES IN TUITION AND FEES

The University reserves the right to change tuition fees and other charges when:

1. There is an increase in educational and general fees or mandatory transfers.
2. Budget projections indicate a possible increase in these costs.
3. After careful analysis of any particular situation, the University administration determines that such changes are reasonable and justified.

PAYMENTS

The total cost of tuition fees and other charges is payable at the time of registration.

The difference between the total cost of tuition, fees and other charges and the total amount of financial aid a student receives (except aid received under the Federal Work-Study Program) is payable at the time of registration.

Payments may be made by means of money orders, checks drawn to the order of Inter American University of Puerto Rico or in cash. Payment may also be made by MasterCard, Visa, American Express, Discover and ATH debit cards. In addition, payments may be made through Banco Popular de Puerto Rico by telepago.

Deferred Payment Arrangements

The University grants students the privilege of a deferred payment for 75% of the total cost of registration per semester, trimester or bimester upon signing the deferred payment document 'Pagaré Único.' To be eligible for deferred payment, students must have liquidated any debts from previous academic terms. In no case shall the total amount deferred exceed the balance of the debt after discounting the financial aid benefits or loans.

The chief executive officers of the academic units may, in exceptional cases, increase the percentage of the deferral if it is understood to be beneficial for the Institution after an analysis that indicates, with a reasonable degree of assurance, that the debt will be paid.

The payment of the deferred total cost of tuition, fees and other charges becomes due seventy-five (75) days after the first day of class in a semester calendar, forty-five (45) days in a trimester calendar, and thirty (30) days in a bimester calendar. The deferred amount for semesters is due in a maximum of three equal installments, two payments in the case of trimesters, and one payment in the case of bimesters.

The award of a deferred payment carries a fee to cover part of the administrative expenses of this service. There will be a charge of 5% on an installment that is not paid by its due date.

It is the responsibility of each student to know when payments are due and make arrangements accordingly.

Students who do not meet their financial commitments by the due date may be suspended and will not receive a grade in courses in which they have enrolled. Students who have not met their financial commitment will lose their rights to receive University service until their debts are removed in accordance with the Federal and Puerto Rican regulations.

THERE IS NO DEFERRED PAYMENT PLAN DURING THE SUMMER SESSIONS except by authorization of the Vice-President for Financial Affairs, Administration and Services. This deferred amount must be paid within thirty (30) days from the last day of classes of the summer session in which the aid was awarded.

Debts for other Reasons

When students or former students of the University are in debt to the University for any cause other than that of a deferred payment as explained in the current Catalog, independently of any payment plan granted or any collection procedure that may be initiated or has been initiated, they lose their rights to receive University services until the debt is paid in full.

Students transferred from another educational institution who have debts with any of the federal financial aid programs will not be eligible for financial aid at this University.

ADJUSTMENTS AND REIMBURSEMENTS

Partial Withdrawal (except Law and Optometry)

Per Semester, Trimester and Bimester:

100% of the cost of the credits and laboratory fees (not including other fees) that are dropped before classes begin.

75% of the cost of the credits and laboratory fees (not including other fees) dropped during the first week of classes. In Law and Optometry this applies only from the first to the third day of classes.

50% of the cost of the credits and laboratory fees (not including other fees) dropped during the second week of classes. In Law and Optometry this applies only from the fourth to the fifth day of classes.

THERE WILL BE NO REIMBURSEMENT AFTER THE SECOND WEEK OF CLASSES. IN LAW AND OPTOMETRY: AFTER THE FIFTH DAY OF CLASSES.

These adjustments will apply to students that pay the total cost of registration in CASH.

FEES AND OTHER CHARGES ARE NOT REFUNDABLE AFTER THE BEGINNING OF CLASSES.

Per Summer Session:

100% of the cost of the credits and laboratory fees (not including other fees) that are dropped before classes begin.

75% of the cost of the credits and laboratory fees (not including other fees) dropped during the first and second day of classes.

50% of the cost of the credits and laboratory fees (not including other fees) dropped during the third and fourth day of classes.

THERE WILL BE NO RETURN OF FUNDS AFTER THE FOURTH DAY OF CLASSES

These adjustments will apply to students that pay the total cost of registration in CASH.

FEES AND OTHER CHARGES ARE NOT REFUNDABLE AFTER THE BEGINNING OF CLASSES.

Student Financial Aid

Federal Financial Aid Programs

Interested students should submit the Free Application Form (FAFSA) for federal financial aid in the year preceding the year for which the request is made.

Students from their home or in the campus of their preference will request the FSA ID. This is the password that will allow them to process the request of Federal Financial Aid FAFSA. In order to acquire this identification students must enter the Internet page WWW.FSAID.GOV or through the <https://fafsa.ed.gov/> page and select link FSA ID.

After acquiring their identification, students will complete the request of Federal Financial aid FAFSA through the page of Internet <https://fafsa.ed.gov/>. During the process they will select the code of the Inter American University campus in which they will study. The University will electronically receive the information about the eligibility of the applicant, will produce the “Institutional Student Information Record” (ISIR) and will communicate with the applicant. This form is advantageous because the process is made agile, errors are avoided and the applicant does not have to wait for the mail. Normally the answer is received in Inter American University within 72 work hours after the request is transmitted.

Federal Direct Loans

The Federal Direct Loan Program offers unsubsidized loans. An unsubsidized loan is not awarded on the basis of need and interest will be charged to the borrower from the moment of disbursement until it is paid in full.

Unsubsidized Federal Direct Loans must be requested directly to the University. The student can borrow up to \$20,500.00 each academic year.

The total amount that a student can borrow may not exceed \$138,500.

Students are required to complete an orientation on loans in the electronic page of the University and submit the certification with the required documents to the Financial Aid Office.

Federal Work Study Program

The funds provided by the Federal Government to this Program are supplemented by funds contributed by Inter American University. Participants are assigned employment for which they receive compensation and which will permit them to pay part of their educational expenses. When possible, students are assigned employment related to their field of studies.

Commonwealth Funds

State Financial Aid Program

The Commonwealth of Puerto Rico has created several programs of financial aid for students at the Graduate level. These are: the Program of Additional Graduate Financial Aid and the Program of Specific Academic Areas. The state is protected by the federal law for the granting of these aid. Therefore the completion of the federal request FAFSA is required to participate in these programs. The Financial Aid Office of each campus is prepared to provide information on the eligibility requirements for these programs.

Institutional Scholarship Program

Inter American University allocates funds for scholarships each year according to student needs.

General Institutional Scholarship

This is a scholarship with basic eligibility criteria that have the purpose of taking care of students' financial needs.

Institutional Graduate Assistantships

A limited number of assistantships are available each semester for students in both the Masters' and Doctoral programs. Applications for these should be submitted to the chairperson of the department from which the assistantship is desired by April 30 for the first semester and by September 30 for the second semester.

At the Master's level, the assistantships provide a stipend and tuition benefits for a maximum of six (6) credits per semester and four credits per trimester.

At the Doctoral level, the assistantships provide a stipend equivalent to the pay for teaching three (3) credits.

Study Benefit Time Limits for Veterans and Beneficiaries

The beneficiaries of educational services for veterans, including eligible family relatives, have the right to enjoy these benefits only for the required period of study to complete their academic degree as established in this Catalog and by the applicable legislation and regulations.

Services Related to the Office of the Registrar

The Office of the Registrar is responsible for the registration, and maintenance of all official academic records of students, the issuance of transcripts and certification of studies and certification that students have met graduation requirements. It also issues study certification upon student request. There is an Office of the Registrar at each University campus. Forms requesting services of the Registrar are also available through Internet.

Intra-University Transfers

All graduate students who wish to transfer from one campus to another must meet the admission norms of the program that they are applying to. Student will notify their intention to the Office of the Registrar of the campus to which they wish to transfer. This office will verify that the student does not have restrictions in the system, such as debts, incomplete documents or others. In case of having restrictions these will be referred to the corresponding department for its evaluation and recommendation, so that the transfer process may be completed.

Registration, Program Changes and Partial Withdrawal

Students will register on the day and time designated for this purpose. After registration, a designated period will be given on the Academic Calendar to make changes in program schedule, to add or drop courses or to change course sections.

1. Program modifications during the period of changes:
To add or drop a course or change a course section during the period of change designated on the Academic Calendar, the student should complete a change of program form. The student will then pay the fee set by the Business Office and will present the form to the Registrar's Office to be processed.
2. After the period of change of program has ended, a student will be able to drop one or more courses (partial withdrawal or total withdrawal). For partial withdrawal, the student will first consult the professor of the course and will present a completed partial withdrawal form to the Registrar's Office. When the professor is not available, the director of the department will sign the partial withdrawal form. After dropping the course, the student will be able to continue attending the course with the instructor's permission. For total withdrawal from the University, please consult the section "Withdrawal from the University" of this Catalog. A student who drops a course or completely withdraws from the University during the period designated on the academic calendar will receive a grade of W. The periods for partial or total withdrawal from courses will be:
 - a. Semester: last day of class.
 - b. Trimester: last day of class.
 - c. Summer: last day of class.
3. When a student stops attending a course, (see the definition of UW en the section of Administrative Action Symbols) and does not qualify for the grade of Incomplete or F, the professor will enter the symbol UW in the column "Grade" and will indicate the student's last date of class attendance or the student's last activity related to the course in the column "Last Attend Date", following the format of the BANNER System: DD/MM/YYYY (day, month, year).
4. All students, who have not attended class or participated in an academic activity related to the course during the first weeks of class, according to the stipulated date in the appropriate academic administrative calendar, will receive, from the professor, the administrative annotation AW. (Refer to the section Class Attendance of this Catalog).

Audit Students

Students who wish to register in courses as audit students must do this during the registration or the class program change periods.

Withdrawal of a Course from the Class Schedule

The University will make every reasonable effort to offer courses as announced, but it reserves the right to withdraw a course from the schedule, when it deems it necessary.

University Policy Regarding Students and Alumni Directory

The University, in compliance with federal law “Family Educational Rights and Privacy Act (FERPA), provides students and alumni access to their academic files, the right to request that the information contained in those files be amended and certain control over the disclosure of academic information.

1. Students and alumni have the right to inspect and review their academic files. They may request this in writing to the file custodian and indicate the file they wish to review. The file custodian will make the necessary arrangements so that the student or alumni may review the files within a period of time no greater than 45 days from the date in which the student or alumni presented the written request. If the person receiving the request from the student or alumni does not have the file, this person will indicate the correct place for the request to be presented.
2. Students and alumni have the right to request that incorrect information contained in their academic files be corrected. Interested students or alumni must present a written request to the University official in charge of the file, indicate the part of the file to be corrected and explain the mistake. If the University decides not to correct the file, the student or alumni will be notified of this decision in writing and the person will be informed of the right to request an informal hearing.
3. Students or alumni have the right to prevent the University from disclosing personal information found in the academic files, except in those cases where FERPA authorizes disclosure. These cases include the following:
 - a) Disclosure of information to Institution officials. Institutional officials are taken to mean administrative or teaching employees, persons contacted by the University, members of the Board of Trustees and student members of special committees.
 - b) Disclosure of Directory information. The University has designated the following data as Directory information: student or alumni name, address, major and year of study.

Students and alumni have the right to prevent the University from disclosing Directory information to third parties. The disclosure to third parties includes the release of information to the Armed Forces. If students or alumni wish to prevent their information from being disclosed to the United States Armed Forces, it is necessary that they express their desire that no information be disclosed to third parties.

To prevent information from being disclosed to third parties, it is necessary that students or alumni submit their request to this effect, in writing, to the Office of the Registrar of their academic unit. In order for the request to be effective for the academic year, it is important that students submit the request in or on September 1st of that year.

- c) Information to other universities. The University will release student or alumni information to those universities to which they request admission.
- d) Exceptional circumstances. The University will disclose student or alumni information if they are economically dependent upon their parents. The University assumes undergraduate students and alumni are economically dependent upon their parents; therefore, in some cases it may disclose information without the consent of the student or alumni to parents that request it. Undergraduate students or alumni who are not economically dependent upon their parents must present this evidence to the Office of the Registrar to prevent information from being released to their parents. Information on graduate students or alumni will not be given to parents without their consent.
- e) Emergency cases. These are cases in which the health or security of a student, alumni or other person is in danger.
- f) Immigration and Naturalization Service. The University is obliged to give information to Immigration Service regarding certain foreign students or alumni.

If students or alumni believe that the University has not complied with these obligations, they have the right to file a claim to Department of Federal Education, Family Policy Compliance Officer, 400 Maryland Avenue SW, Washington D.C. 20202-4605.

Solomon-Pombo Act

Inter American University established its institutional policy regarding the student and alumni directory for the academic year 1999-2000. This measure was adopted to incorporate the new changes in the federal laws known as the Solomon-Pombo Act. This federal law permits third parties to request from the Institution all personal data that is included by the University as Directory information.

Inter American University establishes the following data as Directory information:

1. Name
2. Major
3. Address
4. Year of study

The University exhorts all students not in agreement that these data be included in the Directory to contact the Dean of Academic Affairs of their Campus.

Student Records

Students requiring information concerning records or issuance of transcripts should contact the Office of the Registrar in the unit where they were registered.

At the end of each academic term, the Registrars will mail grade reports to their respective students. Students who believe there are errors in these reports should notify the appropriate Registrar, in writing. The deadline to submit these claims is the date established for withdrawal with the administrative action symbol of W for the following academic term of the same type. A student who does not receive a grade report should contact the corresponding Office of the Registrar.

Student Academic and Personal Files

Student academic and personal files are confidential and the release or handling of information contained in them is limited to certain faculty and administrative personnel who, in the regular exercise of their functions, have to work with these files. Students have the right to examine their academic or personnel file at any moment in the presence of an official of the Office of the Registrar. They may not make copies of the documents contained in their files, except in the cases explained below.

The information contained in the academic or personal files may be released to parents of dependent students. Parents must present evidence of their condition as father or mother, as well as the dependency of the student through the presentation of relevant documentation. The information contained in the academic or personal files may not be released to students' parents in any other cases.

The release of information contained in the academic or personal files of students to third parties, to any type of institution, to government or judicial agencies will only be made with written authorization from the student or in compliance with an order to this effect issued by the competent authority.

Transcripts, study certification and certification of degrees are available to students who may obtain them in the Office of the Registrar. The cost of each transcript is \$3.00.

Transcripts requested for transfer to another educational institution, for continuing graduates studies, completing the requirements of certifying agencies or for the purpose of employment are sent directly to the address provided by the student in the request. In no case will transcripts requested for these purposes be delivered to the student.

The request for transcripts by students whose files are active will be processed within a reasonable time that under normal circumstances should not exceed ten days from the date on which the request was received in the Office of the Registrar. The requests for transcription of students whose files are inactive require a longer time to be processed.

Change of Address

At the moment of registration it is required that students submit their mailing address to the Office of the registrar. If a change of address is required, students must visit this office or they will make the change by using the self-service of BANNER (Inter Web). If they do not maintain this address updated, the University will not be responsible for the notifications sent to the students.

Any notice, official or otherwise, mailed to a student's address as it appears on the records shall be deemed sufficient notice.

Class Attendance

Regular class attendance and meeting the requirements established for courses offered by non-traditional modalities are considered by the University as essential elements of the educational process. For this reason, class attendance is required of every student registered in courses requiring their presence and in online learning courses. Class attendance is defined as the presence of the student by means of an official communication with the professor, as has been determined, to carry out an academic activity related with the course. In the same manner, the fulfillment of requirements is compulsory for all courses offered by non-traditional modalities. Student participation in institutional activities will be considered a valid excuse for not attending class. Students are responsible for completing course requirements as stipulated in the course syllabus.

Students, who during the period established in the academic calendar, have never attended a course, will be dropped administratively. This includes courses offered by nontraditional modalities. The professor will identify in final grade in the electronic registry, the students who have never attended or participated in an activity academically related to the course. The annotation AW will be used to identify these students. For administrative purposes, these administrative drops will be considered the same as withdrawals requested by the student, as established in the Adjustments and the Reimbursements section. Inter American University requires its faculty to report the last day of attendance, or of any other course-related activity of students who stop attending class in each academic term. For this, the faculty must keep a record of class attendance of the students, or of their participation in the other activities of the course. The faculty will access the list of students in their courses in Inter Web and will assign UW to every student that has stopped attending class and will write the date of the student's last day of attendance or his last academic activity of the course, without having withdrawn officially, see the section of Administrative Action Symbols, UW.

The last date of class attendance will be used to determine the applicable refund for students who stop attending class without officially withdrawing. This arrangement is established in harmony with University regulations.

Withdrawal from the University

Students wishing to withdraw from the University must report to a professional advisor or to the person designated by the Chief Executive Office of the academic unit. Then, they should report to the Office of the Registrar to fill out the withdrawal form and proceed as directed. For withdrawal from the University by students who are completely online learning students or for withdrawals not requested in person, students should inform their desire to withdraw by regular or electronic mail to the Registrar of the academic unit. When a student withdraws from the University, the criteria for determining grades will be those outlined in "Registration and Program Changes."

Undergraduate Prerequisites

Undergraduate course prerequisites may be taken concurrently with graduate courses if the Department Chairperson gives permission.

Course Load

A normal course load of a regular graduate student is from eight (8) to twelve (12) credits per semester or be registered in a thesis or dissertation course. In order to take more than twelve (12) credits; students must have special permission recommended by the appropriate Department Chairperson and the approval of the Dean of Academic Affairs.

In the case of a trimester program a normal course load is from six (6) to nine (9) credits or be registered in a thesis or dissertation course. In order to take more than nine (9) credits; students must have special permission recommended by the appropriate Department Chairperson and the approval of the Dean of Academic Affairs.

Students are classified as fulltime or part-time according to the number of credits they are enrolled in. Under the semester, trimester and bimester calendars these classifications are as follows:

- Fulltime - six or more credits
- Three-fourth-time - from four to five credits
- Half-time - from two to three credits
- Less than half-time - one credit

Thesis or dissertation courses will be considered as a full-time academic load.

Repeating Courses

Students will have the right to repeat courses when not satisfied with their grades. In case a course is no longer offered by the University, students may substitute it with an equivalent course approved by the Vice President for Academic and Student Affairs and Systemic Planning. The highest grade and its corresponding credit will remain on the student's transcript and the lower grade will be changed to an R (repeated course). The administration action symbol, R, and its corresponding credits will not be considered in determining if a student has satisfied the graduation requirements. Courses repeated after graduation are not considered in the computation of the graduation grade point index.

Grading System

In harmony with the score obtained by students in each course they take, Inter American University of Puerto Rico normally uses the following scale to award their grades:

Score	Grade
100-90	A
89-80	B
79-70	C
69-0	F

There are other grading scales for certain academic programs and for certain courses.

Course grades indicate the degree of a student's achievement in any given course. The University has established a quality point system to be used in accumulating and summarizing these grades. This quality point system is used to determine the minimum degree of general competence for graduation and for continuing in the Program at any level and to assign special honors to students who excel. Grades are reported in accordance with the following grading system:

- A-** Superior academic achievement; 4 honor points per credit hour.
- B-** Above average academic achievement; 3 honor points per credit hour.
- C-** Average academic achievement; 2 honor points per credit hour.
- F-** Failure in academic achievement; no honor point per credit hour.
- P-** Passing; this grade is assigned to students satisfying the requirements in courses taken by proficiency examinations and for courses in which such a grade is required. This grade is not included in the computation of the grade point index.
- NP-** Not passing; this grade is assigned to students who fail in the courses indicated under the grade P. This grade is not included in the computation of the grade point index.
- DP-** Dissertation in progress
- PP** Project in progress. This grade is assigned to students that continue a research project after the term in which they were registered.
- TP-** Thesis in progress

Only courses completed at Inter American University are included in the computation of the grade point index. The grade point index is determined by dividing the total number of honor quality points by the total number of credits completed with grades A, B, C, or F. The grade of D is not given at the graduate level.

Change of Grades Request

Students who believe that their final grade in a course is erroneous must notify this, in writing, to the course instructor, with a copy to the proper department chairman. This faculty member will be responsible for discussing the evaluations with the student and if necessary will submit an amendment to the student's final grade according to the process established by the Institution.

If students are not satisfied with the attention given to grade change request, they may resort to the procedure established in Article 2, Part A, number 8, of the General Student Regulations.

The deadline for requesting a change of grade will be the deadline for withdrawal with a grade of W of the academic term following the term of the same type in which the grade was given.

Administrative Action Symbols

The following symbols are used to indicate administrative action taken in regard to student status in courses for which they registered:

- W-** Course Withdrawal: Assigned when the student withdraws from a course after the end of the period for class changes and no later than the date established on the academic calendar for withdrawals with W.
- DC-** Course Withdrawal: Assigned when the student withdraws from a course before the end of the period for class changes. This symbol does not appear on the student transcript.
- AD-** Administrative Drop: Assigned when the University drops the student for reasons such as death, suspension or other situations warranting a drop.
- AW-** Assigned in the electronic register when the professor informs, no later than the date established in the academic administrative calendar, that the student never attended the course or any related academic activity. The courses to which the annotation is assigned do not form part of the academic record of the student.
- MW-** Symbol used to indicate total withdrawal for military reasons
- I-** Incomplete: When students have not completed a course requirement and present valid reasons for it, the professor may assign the symbol "I" (Incomplete). Together with the symbol "I", the professor will include a provisional grade, after assigning zero for the unfinished work. When faculty members assign an "I", they shall report to their immediate supervisor the grade that the student has earned up to that time, the evaluation criteria and a description of the unfinished work if applicable. A student who receives an "I" must remove it by the date specified on the Academic Calendar. The responsibility for removing the "Incomplete" rests on the student. If the "Incomplete" is not removed within the time specified, the student will receive the informed provisional grade. This policy will apply whether or not the student is enrolled at the University for the following semester. The School of Law and the School of Optometry will adapt this norm to their respective needs.
- UW-** Assigned in the electronic registry on the date to inform the grades, as established in the academic administrative calendar, when the student:
 1. Has stopped attending classes for at least three consecutive weeks in a semester or its equivalent in other academic terms, without presenting a justification to the professor or dean of students.
 2. Has not participated in any academic activity related to the course (including the final examination) after the time period established in number one above.
 3. Does not qualify for the grade of incomplete or (F).

When the annotation UW is given, the professor will inform the last date of attendance or participation in an academic activity related to the course.

This annotation will form part of the academic record of the student.

- AU-** Symbol used to indicate on student transcripts that the course was audited. No honor points or University credit are awarded.

- R-** Symbol used to indicate the course was repeated.
- T-** Symbol used to indicate the course was transferred from another institution.

Veterans Services

The services for veteran students are explained in the General Information section.

Support Services and Student Life

Academic Counseling

The University offers academic counseling services to all students. Once students have selected their specialization, the academic advisor assigned will guide them in the process of maximizing their potential for study.

Students should meet with their academic advisors to plan their program of studies during the semester/trimester. The responsibility for planning the program of studies rests on the student.

Professional Counseling

The professional counseling services facilitate the adjustment of students to the university environment through professional counselors. These services include academic guidance and counseling and vocational and personal counseling. Help is provided to students in the development of educational, vocational and personal goals and in the achievement of a greater integration and participation in the university community.

Audiovisual Center

Each Center offers a variety of audiovisual services to assist in the teaching-learning process. These use the most modern technological resources available. The Audiovisual Center has two main functions: the production of audiovisual and related materials to complement the educational process and the offering of direct services to faculty and students.

The Centers design and produce their materials in facilities for sound and television recordings and for photography and the graphic arts. Projection services for individuals and groups as well as exhibitions are offered.

In general, these Centers gear their efforts towards facilitating the imparting of knowledge. The Centers contain collections of current materials in all curricular areas.

Information Access Center (Library)

Each academic unit has an adequately staffed and equipped Information Access Center. These Centers are organized to function as a coordinated system. An on-line catalog provides access to all University bibliographical resources as well as to other resources that are made available for computer based research.

The Centers provide remote access to the electronic databases to University students, faculty and administrators through Internet.

Each Information Access Center has developed as an integral part of the University programs in which a number of activities take place, including bibliographical literacy, which is used to provide students with orientation on the educational resources and the facilities and services available.

The system collection contains more than one million volumes of printed and non-printed materials in microform and audiovisual items.

Educational Resources System

The University stresses the importance of developing educational resources that complement the teaching function. As a result, several programs have been implemented to integrate the latest technological advances to the University's educational services.

Medical Services

The academic units, except the School of Optometry, have a First Aid Center that offers first aid and offers guidance on the health care.

Residence Halls - San Germán Campus

At the San Germán Campus, there are separate but equal dormitory facilities for men and women. A deposit of \$25.00 for a room in one of the residence halls should be made at the time the student applies for admission. The \$25.00 deposit will be reimbursed in full upon request if the student is not accepted for admission. Application for a room should be filed as early as possible because accommodations are limited.

The application form, as well as further information about dormitories, can be obtained from the Office of the Dean of Student Affairs at the San Germán Campus.

Rooms will be reserved until the day the student is scheduled to register. If the room is not claimed by that day, the reservation will be canceled.

When students are accepted, they receive a copy of the dormitory regulations. It is their responsibility to read such regulations carefully and to follow them for their own welfare and that of other students residing at the dormitories. Students who violate dormitory rules may be required to vacate the residence or, in the case of serious violation, may be suspended or expelled from the University.

Student Activities

During the academic year, the University and the Student Council of the various instructional units sponsor a variety of cultural, social and recreational activities in which all students and the University community are invited to participate. Such participation fosters personal growth and provides leadership training by encouraging mutual understanding and cooperation and by emphasizing the ideals of service, good citizenship and respect for human values. The University, within the limits of its resources, endeavors to provide such activities.

There are many clubs and organizations at the instructional units. These organizations may be academic, professional, cultural, recreational, social, sports or religious in nature. The Office of the Dean of Student Affairs at the various instructional units will provide, upon request, up-to-date information on clubs and organizations and their current officers and membership.

Religious Activities

Reflecting the commitment of the University to its Christian roots, each campus has a Religious Life Office that responds to the Institutional Pastoral Plan promoting faith experiences from an ecumenical and Christian perspective. Each instructional unit also offers pastoral care services, spiritual enhancement and reflective experiences, in addition to the established celebrations during the liturgical year. The participation of the University community is encouraged in the different events, but is completely voluntary.

Student Councils

Student councils, as provided by the General Student Regulations, may be organized at all the instructional units of the University. Their members are elected from the student bodies according to the established procedures. These procedures provide for direct participation of the largest number of students possible from all the units.

Only full-time students in good standing are eligible to hold office in student organizations. The Student Council is given funds for organizing activities promoting student life and the academic endeavors of the unit. Students on disciplinary probation are not eligible to hold posts in the Student Council.

Through the Student Council the wide-concerns of students are canalized. This body meets regularly with university authorities and receives relevant information about the University development.

Student Participation

The University advocates student participation at all levels and in various forms. A total of 39 students with voice and vote participate in the Academic Senates of the individual campuses. Three students, one graduate and two undergraduate, participate in the University Council. All of these students are elected by the student bodies of their respective instructional units. The procedures for the election of these students provide for direct participation of the greatest number of students possible from all the units.

Student Centers

The instructional units have student centers that meet the needs of the University community: students, faculty, administration, alumni, parents and friends. These centers provide appropriate areas for social, educational, artistic, cultural and recreational activities.

Parking Service and Traffic Rules on Campuses

The Traffic Laws of Puerto Rico are complimented by the Campus' internal rules related to on-campus traffic. All students interested in access to the campuses with a motor vehicle must obtain a permit to these effects. The permit and the payment for parking should not be interpreted as a guarantee of a parking space.

Students are responsible for observing traffic rules and driving properly. The University is not responsible for damage that vehicles parked on the premises may suffer or for articles left inside the vehicles. Any personal or property damage caused by students while driving inside University installations will be their responsibility.

Study Modalities and Learning Experiences

Study by Contract

This option offers students the opportunity of taking courses through a written agreement with a professor which specifies the manner in which students will complete course objectives and content. The agreement stipulates the learning activities that students promise to carry out on an individual basis. Faculty members serve as facilitators in the learning process, evaluate the accomplishments and certify completion of course requirements.

To qualify for a course by contract graduate students must abide by the following guidelines:

1. This modality is available to students taking the course for the first time and who have completed 50% of the total credits required for the graduate degree with a general grade point average of no lower than 3.30.
2. Only those courses whose very nature will permit it can be offered through contract. Laboratories, conference /laboratories, practicums, and courses similar to these cannot be offered by contract. The faculty of the specialization of each Campus will decide which courses may be offered by this modality. In the case of shared programs, the specialized faculty will meet to reach an agreement as to which courses may be offered by this modality.
3. The contract between the student and the professor will require the endorsement of the Department Director.
4. The agreement between the student and the professor will require the approval of the Dean of the Division or the Dean of Academic Affairs.

The Department should abide by the following norms:

1. The Study by Contract modality can not be used to repeat a course.
2. Faculty, who have been assigned Study by Contract courses, should have additional office hours reserved for their students.
3. Students in a Master's Program will be able to complete a maximum of two required courses for the degree in the contract modality. The Department Director, for valid reasons, may authorize additional courses to be taken by contract.

Portfolio

Graduate students have the option of completing a course by using the Portfolio course of study modality. In this modality graduate students present evidence of their experience and achievements which are equivalent to the skills and competencies to be offered in the university course. Candidates offer evidence of their experience and achievements in their Portfolios in such a way that they identify, organize, and establish evidence to support course accreditation.

1. This modality will be available to all students at any moment according to the specifications of the Program.
2. The faculty of each graduate program will determine the courses to be accredited through the Portfolio Modality. Laboratories, Conference/laboratories, practicums and other similar courses will not be offered in this modality.
3. The Dean of the Division or Dean of Academic Affairs will approve all students' requests for Portfolio courses, and will ratify a signed agreement between the student and the professor.
4. "Accreditation of Learning Experiences through Portfolio" will be recorded on the official transcript to complete the administrative process.

Graduate students will be allowed to take one third of the total credits of the graduate program in these non-traditional study modalities.

Special Topics

Special topics permit the offering of courses that enrich the student's academic development. These offerings may be made when special circumstances or rare events occur or when an outstanding specialist in the field is available for teaching the course.

Special Topics are governed by the following norms:

1. Special Topics may be offered with a value of from 1 to 6 credits per course.
2. The course must be authorized by the Department Chairperson, Division Dean and, finally, by the Dean of Academic Affairs.
3. The title of the course will appear on student transcripts.
4. Special Topics in all disciplines are identified by the combination 597 or 797 in the first three digits (597 Master's degrees; 797 Doctoral degrees).
5. Regular courses described in this catalog may not be taken as Special Topics.

Experimental Courses

Designating courses as "Experimental" permits the temporary offering of new courses not appearing on the official course lists of the University, thus making it possible for these courses to be offered experimentally while being evaluated. Experimental courses may be offered in accord with the following norms:

1. Experimental courses may be offered with a value of from 1 to 6 credits per course.
2. Experimental courses must be authorized by the director of the department, the dean of faculty, if applicable, the the Dean of Academic Affairs.
3. After an experimental course has been offered for two academic years, the course must be evaluated by the department, dean of faculty, if applicable, and by the Dean of Academic Affairs.
4. If the recommendation is favorable to include this course as a regular one, the resolution to this effect will be sent to the Academic Senate.
5. The title of experimental courses will appear on student transcripts.

Internship Programs

Students that have approved 12 credits or more and are interested in applying and enriching what they have learned in the classroom through real work experiences related to their specialization may apply to participate in internship programs if they qualify. University credits may be received for the internship according to the criteria established by the program of study faculty.

The faculty of the program or specialization will recommend the credits to be awarded. This experience does not replace the Internship required by the program of studies

Information on internship programs may be obtained from the Dean of Students or the Dean of Academic Affairs of each campus

Satisfactory Academic Progress Requirements for Professional Certificates, Masters & Doctoral Programs

Inter American University of Puerto Rico requires that all graduate level students demonstrate satisfactory academic progress throughout their study program. The eligibility to receive federal, state and institutional financial aid, will depend on this academic progress.

Requirements to Achieve Satisfactory Academic Progress

The requirements to achieve satisfactory academic progress are divided into two components: qualitative and quantitative.

A. Qualitative Component

The general academic index that students who are studying a Post-Baccalaureate Professional Certificate or a master's degree must achieve is:

- a. a minimum of 2.50 in the credits approved in the first year of study, and
- b. 3.00 in the credits approved in the remaining years until they finish their study program.

Students who study a Post-Masters Professional Certificate or a program at the doctoral level must attain an academic index of 3.00 or more in the credits approved while they are in their study program.

B. Quantitative Component

1. Approval of Tempo Requirements: relation between approved credits and attempted credits

Students, who are in a Post-Baccalaureate Professional Certificate or a program at the master's level, must approve 50% of the credits attempted in their first year of studies and 66.67% in the remaining years.

Students, who are in a Post-Master's Professional Certificate or a program at the doctoral level, must approve 66.67% of the credits attempted in the study program beginning with their first year of studies.

2. Maximum Period of Eligibility Requirements

Students, who are in a Post-Baccalaureate Professional Certificate program, will have a maximum of two calendar years to complete the program, while for the master's level programs they will have a maximum of seven calendar years to complete the degree requirements, from the date on which they begin to take their first graduate course.

Students, who are in a Post-Master's Professional Certificate program will have a maximum of two calendar years to complete the program, while for the doctoral level programs, they will have a minimum of four academic sessions and a maximum of eight calendar years to complete the requirements of their program, from the date on which they begin to take their first course at the doctoral level.

Students of the post-baccalaureate and graduate levels accumulate time of study for transferred credits. This accumulates at the rate of one year of studies for each sixteen transferred credits. If students do not complete their study program within the established maximum time, they may be evaluated to determine if they can continue with their studies. If an extension of time is granted to finish their studies, these students must present an Appeal Request to determine if they may be eligible to receive financial aid.

Probationary Period and Requirements to Maintain Eligibility for Federal and State Financial Aid

All students who do not fulfill the requirements of the qualitative or quantitative components will not be achieving satisfactory academic progress, therefore they will be placed under a first academic probationary period of two semesters, three trimesters or four bimesters, during which they will be able to register in courses. Students in academic probation or suspension are not eligible to receive federal and state financial aid. However, they may initiate an appeal process to restore their eligibility.

Appeal Process to Restore Financial Aid

Students interested in appealing the loss of eligibility to receive financial aid must submit an Appeals Request to the Dean of Academic Affairs or the person that the dean designates, after having received the notification of their loss of eligibility. The students must base their appeal on a worthy cause and must indicate at the time of presenting the appeal how their circumstances, which have changed, will allow them to achieve satisfactory academic progress. Among the justified causes to request an appeal are the following, without being limited to them:

1. the suffering of a serious and severe illness,
2. the death of a member of the familiar nucleus,
3. the death of the spouse or
4. a military assignment.

The student's request will be referred to the Appeals Committee, a work party designated by the chief executive officer, comprised of the Dean of Academic Affairs or his representative, the director or coordinator of the graduate program, a professional adviser and the director of financial aid or his representative. This last person will participate in the committee, in case the eligibility to receive financial aid is evaluated. The committee will deal with all appeal requests of graduate level students. When evaluating the request, the committee will determine if the student will be able to obtain the required academic progress upon finishing the next academic term or when concluding the academic probationary period.

If the committee concludes that the student will be able to achieve satisfactory academic progress, his appeal will be approved, and a financial aid probationary period will be granted to him during the next academic term in which he registers.

Evaluation of Students in Academic Probation

Students in the first academic probation will be evaluated in all terms in which they register, and at the end of the probationary period. If at the end of one of the terms under the first academic probation, students manage to attain satisfactory academic progress, they will be considered to be in compliance with this norm, and, therefore, will regain their eligibility to receive federal and state financial aid. In case students do not attain satisfactory academic progress, their academic performance in the term will be evaluated and if they manage to obtain an academic index of 3.00 and an approval tempo of 66.67% in this term, they will maintain their classification in first academic probation. However, they must present an Appeal Request to determine if they may be eligible to receive financial aid.

If, at the conclusion of all terms of the first academic probationary period, students do not manage to attain satisfactory academic progress, they will be suspended academically for the first time. The first academic suspension will last six months. Students may appeal this determination and if the appeal is approved they will be granted a second academic probation for two semesters, three trimesters or four bimesters. Students who do not appeal the academic suspension may resume their studies in the University when the six-month suspension period ends and they will be granted a second academic probation for two semesters, three trimesters or four bimesters.

Students in the second academic probation will be evaluated in all terms in which they register, and at the end of the probationary period. If at the end of one of the terms under the academic probationary period, students manage to attain satisfactory academic progress, they will be considered to be in compliance with this norm, and, therefore, will regain their eligibility to receive federal and state financial aid. In case students do not attain satisfactory academic progress, their academic performance in the term will be evaluated and if they manage to obtain an academic index of 3.00 and an approval tempo of 66.67% in this term, they will maintain their classification in second academic

probation. However, they must present an Appeal Request to determine if they may be eligible to receive financial aid.

If, at the conclusion of all terms of the second academic probation, students do not manage to attain satisfactory academic progress, they will be suspended academically for the second time. The second academic suspension will last for one year and the student may not appeal this determination.

Other Provisions of the Satisfactory Academic Progress Norm

1. The University will evaluate all graduate level students at the end of the academic year. The evaluation will include all the terms that the student has studied.
2. For students classified in academic probation, progress will be measured at the end of each academic term until the probationary period concludes.
3. The University will notify students, by means of a letter or e-mail, their academic status and their eligibility to receive federal and state financial aid.
4. The credits of the courses in which grades and annotations of A, B, C, F, P, NP, AD, W, UW or T are obtained will be considered as attempted credits.
5. The credits of courses in which grades of A, B, C, P, or T are obtained will be considered as approved credits.
6. The academic load of students in academic probation will be limited to nine credits per semester, six per trimester or three per bimester. The Dean of Academic Affairs will evaluate the exceptions to this provision considering the merits of each case.
7. The evaluation to determine the academic progress of students will not consider the courses in which students have received the annotation of incomplete (I), dissertation in progress (DP), thesis in progress (TP), and project in progress (PP), until this annotation has been removed.
8. After graduation, the transcript will not reflect the student's probationary and suspension periods.
9. Students suspended for the second time in their study program may request readmission to the institution in another academic program different from the one they were studying. The Dean of Academic Affairs will evaluate the exceptions to this provision considering the merits of each case.
10. Students may not obtain a financial aid probation for the same circumstances in more than one occasion.

Academic Norms for Masters' Programs and Professional Certificates

Maintenance of Active Status in Masters' Degree Programs

Students, who have completed all requirements for a Master's Degree, except the comprehensive examinations or the other options and /or thesis must pay each semester, a fee established by the Administration in order to maintain their ties with the University between the completion of course requirements and the awarding of the degree within the established seven-year period.

Residency Requirements for Masters' Programs

A minimum of twenty-one (21) of the required credits for a Master's Degree must be earned in residence at Inter American University.

Institutional Graduation Requirements for Master's Programs

The University establishes as an academic policy that all students demonstrate the capacity to integrate the developed competencies and to apply them to their specialization area as a requirement to obtain the Master's Degree. The University recognizes different ways through which students can demonstrate the mastery of the competencies of their discipline as part of the graduation requirements: thesis, comprehensive examination, integration seminar, research project, creative work and graduation average.

For this reason all master's candidates, of a program that does not require Thesis, must pass one of the following four (4) modalities, as determined by their academic program:

1. Comprehensive Examination

The comprehensive examination will be the option available for those academic programs whose accrediting agencies require this modality. If this is not the case, the academic program will determine if this option will be available for its students.

The comprehensive examination consists of two parts, when applicable. One part will include general material related to the field of studies and the other will examine specific material related to the specialization or program areas. All master level students must be evaluated by the Director of the Graduate Program to determine their eligibility to take the comprehensive examination. The specific number of credits as well as the courses students must have passed will be established according to the requirements of each graduate program. Students will take the entire examination on the first occasion. The minimum passing grade is 75% in each part, when applicable. A student that passes only one of the parts must repeat the part that was failed.

2. Integration Seminar

Three-credit interdisciplinary Integration Seminar (SEMI 697_), in the program specialization, in which general and specific material required for the degree will be presented proportionally to their composition of the totality of credits required for the degree.. If the academic program has an equivalent Integration Seminar, it may be used instead of SEMI 697_. Students will receive a final grade of Pass (P) or Not Pass (NP).

3. Research Project

Students will take a three-credit (3) course where they will carry out a Research Project. Throughout this Project, students will demonstrate their capability to interpret and integrate theoretical concepts for the practical solution of problems related to their field of studies. Students will have up to one consecutive academic year to complete their Project. The student will receive a final grade of Pass (P) or Not Pass (NP) or Project in Progress (PP).

4. Creative work

Students will take a three-credit (3) course where they will have to carry out a creative work that demonstrates their mastery of the competencies developed in their specialization area. They will receive a final grade of Pass (A) or Not Pass (NP).

The options of Integration Seminar, Research Project and Creative Work are equivalent to three (3) additional credits for those students whose academic program does not include such options as part of the courses required for the degree.

All students requesting eligibility to fulfill the requirement for the granting of the master's degree must be evaluated before starting the modality required by the program. The number of credits passed as a requisite to become eligible will be established by each specialization.

If students fail in the first attempt to complete this requirement, they will have two (2) additional opportunities to repeat the same option or take another of the available ones. All students interested in more than one specialization within a degree program and who wish that these be certified on their transcript, must take the option chosen in every area for which certification is requested.

The different options will be offered in agreement with the norms in effect for the academic program. In those cases in which the norms of the academic program do not specify the options available, the academic units will determine which they will offer in agreement with their needs.

All applications for one of the options herein described should be made within the time limit stipulated by the academic program to which the student belongs.

The general average to complete the master's degree will be that established in the norms of the academic program. In case the program does not specify this, the average will be that minimum established by University, which is 3.00.

All students must complete their degree within the period of time established for each academic program. In case the program does not specify this, the maximum time will be that established by the University.

Graduation Requirements for Masters' Programs and Professional Certificates

Students will graduate under the program and the norms established in the Graduate Catalog of the University under which they were admitted or in any subsequent Graduate Catalog at the student's request, but never in a combination of catalogs. Re-admitted students will graduate under the rules of the program in the Graduate Catalog in effect at the time of their readmission or under any subsequent Graduate Catalog.

Graduation Requirements for the Master's Degree and Professional Certificates

In order to satisfy the Graduation Requirements of the Master's Degree at Inter American University, students must:

1. Be regular students.
2. Have completed the program required courses established in the Graduate Catalog.
3. Obtain a general academic index of 3.00 or more.
4. Obtain an academic index of 3.00 or more in the courses required for their degree.

Expiration Norm for Master's Level and Professional Certificate Courses

All work with academic credit will be valid for a period of ten (10) years. Courses to which the expiration norm is applied will appear in the student's academic record, but they will not be considered for the general grade point index.

Academic Norms for Doctoral Programs

Maintenance of Active Status in Doctoral Programs

Doctoral students completing the course requirements before passing the comprehensive examination or completing their dissertation must enroll each academic term in the corresponding Dissertation or Continuation of Dissertation course, until the dissertation has been approved.

Residency Requirements for Doctoral Programs

Students in doctoral programs, except those in psychology or education, must complete at least fifteen (15) credits of the corresponding doctoral program in two successive academic terms (two terms or one term and the two summer sessions) at Inter American University. For the doctoral program in psychology, students must complete a minimum of 60 percent of their courses at Inter American University. They must also complete one year of residence as full-time students or its equivalent. The doctoral degree in education does not have a residency requirement.

Comprehensive Examination Requirements for Doctoral and Specialist Programs

All doctoral students must pass a comprehensive examination after having passed at least 30 credits (9 credits must be basic required courses and 21 credits in specialization courses) in the selected doctoral program to be admitted to degree candidacy or in the case of the Specialist Program to meet the requirements for the diploma.

Expiration Norm for for Doctoral Program Courses

No work for academic credits realized more than ten (10) years before, will be considered for the purpose of obtaining the doctoral degree. The courses to which this expiration norm is applied will appear in students' academic records, but they will not be considered for the grade point index.

Graduation and Diplomas

Application for Graduation

Application for graduation should be made and the graduation fee paid when candidates for a masters or doctoral degree have completed three fourths of the credits required in their program. This application will be made no later than the date specified on the Academic Calendar. The application forms may be obtained at the Office of the Registrar and should be returned to that Office after they have been filled out and stamped by the Business Office showing that the non-refundable graduation fee has been paid. Failure to comply with this procedure may result in the postponement of the granting of the diploma.

The payment of graduation fees of any kind, the listing of the students as candidates for graduation in any document and/or invitation either to the graduation ceremonies or to any other activity related to graduation exercises shall not be interpreted as an offer to graduate or a covenant to that effect. Only the completion of all requirements listed in this catalog or in any other official University directive entitles a student to graduation irrespective of any representation of any kind made by any official of this University.

Candidacy for graduation will be attained when the Office of the Registrar has determined that the student has met the requirements for graduation.

Any student who does not complete the requirements to obtain his academic degree and interrupts his studies, but has paid his graduation fee, will have the right for this to remain in effect for the next the two (2) academic years from the last academic term in which he studied. Once this period has passed, the student will pay the difference, if there is a difference, of the cost of the current graduation fee.

Any alleged error in the evaluation of the application for graduation should be reported to the appropriate Registrar within five calendar days after the receipt of the evaluation.

Candidates for graduation must meet the current regulations and laws to practice their profession.

Diplomas

Diplomas must be claimed by graduates at the Office of the Registrar no later than one year following graduation. The University will not be responsible for diplomas after that date.

Posthumous Degree

In case of death of a student who has fulfilled the graduation requirements, such student may be considered by the appropriate university authorities for the granting of a posthumous degree.

Academic Norms of Compliance

Credit-Hours

The University defines one (1) credit for an academic term, as indicated below:

- 1) 15 hours of presential contact and 30 hours of academic, course related activities, which the student carries out outside the classroom; or their equivalent in academic, online activities
- 2) 15 hours of presential contact in the integrated modality of lecture-lab and a minimum of 30 hours of academic, course related activities, which the student carries out outside the classroom; or their equivalent in academic, online activities
- 3) 30-45 hours in a presential or virtual, closed laboratory
- 4) 45-60 hours of supervised practice

Course Offerings and Scheduling

This Catalog includes the courses that comprise the academic offerings authorized for Inter American University by the Council on Education of Puerto Rico. However, for reasons of enrollment a course may not be offered in one campus, but offered in another. Students have the option of taking courses that form part of their academic program or authorized equivalent courses in another campus that has them scheduled for the academic term of their interest. In addition, there are academic programs that include a component of “Prescribed Distributive Requirements” that, generally, require students to select courses from among a list of courses or options. In these cases, students will select from among those courses that the campus has scheduled. However, students also have the option of taking Prescribed Distributive courses in another campus that has scheduled the courses of their interest in accord with the requirements of their study program.

Special Requirements of Practice and Internship Centers

Some academic programs of the University require students to complete a practice or internship in a real work scenario as part of the degree requirements. These external centers may be state and federal agencies, hospitals, and nongovernmental organizations, among others.

It is students’ responsibility to comply with the external center’s requirements in order to complete their practice or internship. Depending on the practice center, these requirements may be doping tests, HIV tests, an immunization certificate against hepatitis, a health certificate, a negative criminal record, or any other requirement that the institution or practice center may stipulate. If students refuse or are not able to meet any of the requirements, they will be unable to complete their practice or internship and, therefore, will not pass the practice or internship course or meet the graduation requirements of their academic program.

Compliance with Requirements of Regulated Professions and Employment

Some professions have licensing, certification, or professional association requirements or a combination of these in order for a person to practice the profession. Therefore, students and graduates who hope to practice a regulated profession must meet the current requirements of the organization that confers the license, certification, professional association or combination of these before initiating the corresponding proceedings with the agency or organization that applies to their profession. The licensing, certification, professional association requirements or a combination of these may vary from one jurisdiction to another. Therefore, compliance with the requirements in one area does not imply that the student also complies with the requirements of another region. Students are forewarned that the agencies that regulate the professions may change the requirements to practice these at any time.

Some employers of the private sector or government agencies have revalidation, examination or test requirements in order to choose a job. It is for this reason that, in these cases, students or graduates applying for work must meet the additional requirements beyond the studies or diplomas that Inter American University of Puerto Rico offers and confers.

Responsible Conduct in Research Projects

Any student registered in courses that require carrying out research projects or who works in a research project must comply with the laws, regulation and policies applicable to that activity. The student must take the training required by the Institution and by the applicable state and federal regulations, in harmony with the type of research project.

Institutional Review Board (IRB)

The IRB is responsible for seeing to it that the University complies with the state and federal laws and regulations, as well as with the applicable institutional norms and procedures for the protection and rights of the human beings who participate in these projects.

Once a student completes the required training, and before beginning research activities with human beings, such as their identification, recruitment, or the acquisition of information about the participants, and before contacting them and requiring their participation in the project, the student must obtain the approval of the Institutional Review Board (IRB).

Responsible Conduct in Research Projects (RCR)

Any student who works in research projects supported with external resources, or who collaborates as a research assistant to a professor in charge of a research project supported with external funds, must take the training related to responsible conduct in research required by the University and the applicable federal regulations. In addition, the student must provide evidence of having approved these trainings.

Other Research Projects

Research projects that do not involve human beings must also present evidence of compliance with institutional norms and the applicable state and federal regulations.

Warning on Compliance with Copyright Laws and Regulations

The unauthorized distribution or reproduction, by any means, of material protected by the copyright laws and regulations may entail the imposition of civil and criminal sanctions. The *General Student Regulations* contains provisions on academic honesty that cover the protection of this type of material and the breach of the provision may lead to the imposition of disciplinary sanctions.

There are legitimate ways to obtain and distribute protected materials. For more information, click here www.educase.edu/legalcontest.

Discontinuation of Academic Offerings

The University is committed to the renewal of its academic offerings, which includes the expansion, review, modification or discontinuation of academic programs offerings authorized by the Council on Education of Puerto Rico. In case any academic unit of the University decides not to continue offering some academic program, students will have options available to them to complete the degree requirements. Courses on line, study by contract, independent study tutoring or other nontraditional modalities may be among the options.

Graduate Academic Offerings

Institutional Codes y CIP Code

The following table presents the graduate programs authorized by the Council of Education of Puerto Rico (CEPR) with the code assigned by the University to identify the academic program and the minor specializations. It also includes the Classification of Instructional Programs or CIP Code, according to the taxonomic scheme of the U.S. Department of Education.

Academic Program	IAUPR Code	CIP Code
Masters, Doctorates and Minor Specializations		
Anesthesia (M.S.)	363	51.3804
Applied Mathematics (M.A.)	381	27.0301
Biology (M.S.)		
Molecular Biotechnology	412	260.204
Ecological and Environmental Science	413	26.1305
Biotechnology (M.S.)		
Plants Biotechnology	423	26.1201
Biotechnology General	424	26.1201
Business Administration (M.B.A.)		
Accounting	315	52.0301
Finance	314	52.0801
General	316	52.0201
Industrial Management	328	52.0299
Marketing	312	52.1401
Human Resources	327	52.1001
Managerial Information Systems	361	52.1201
Minor in Knowledge Management	316M	52.0201
Business Administration and Law (M.B.A. / J.D.) Consortium with the School of Law	501	22.0101
Business Administration for Executives (M.B.A.)	414	52.0201
Business Education (M.A.)	339	13.1303
Computer Science (M.S.)	406	11.0701
Computer Science with Specialization in Network and Security (M.S.)	409	11.0901
Criminal Justice (M.A.)	302	43.0199
Criminal Justice and Law (M.A. / J.D.) Consortium with the School of Law	504	22.0101
Education (Ed.D.)		
Business Education	587	13.1303
Counseling	530C	13.1101
Curriculum and Teaching	540C	13.0301
Special Education and Transition Services	589	13.1099
Education Management and Leadership	520C	13.0401
Higher Education	525	13.0406

Academic Program	IAUPR Code	CIP Code
Education (M.A.)		
Educational Management and Leadership	402	13.0401
Counseling	309A	13.1101
Occupational Education	357	13.9999
Physical Education		
Teaching of Physical Education	401	13.1314
Sport Training and Performance	400	13.1314
Special Education	329	13.1001
Teaching of Mathematics	376	13.1311
Teaching of Science	343	13.1316
Education (M.Ed.)		
Bilingual Education	417	13.0201
Interdisciplinary Special Education	416	13.1099
Teaching at the Elementary Level	395	13.1202
Teaching of Science and Mathematics at the Elementary Level	427	13.1399
Information and Library Science Technology	411	25.0101
Education in Curriculum and Teaching (M.Ed.)		
Biology	386	13.1322
Chemistry	387	13.1323
English as a Second Language	383	13.1401
History	384	13.1328
Mathematics	385	13.1311
Spanish	382	13.1320
Educational Computing (M.A.)	355	13.0501
Educational Neuroscience (M.A.)	410	13.9999
Entrepreneurial and Managerial Development (Ph.D.)		
Human Resources	580	52.1101
Interregional and International Business	581	52.1101
Environmental Evaluation and Protection (M.S.)	378	03.0104
Environmental Sciences (M.S.)		
Environmental Biology	362A	03.0104
Environmental Chemistry	362B	03.0104
Water Resources and Unit Operation	362C	03.0104
Finance (D.B.A.)	588	52.0801
Fine Arts (M.F.A.)		
Ceramics	372	50.0711
Drawing	368	50.0705
Painting	370	50.0708
Photography	373	50.0605
Printmaking	369	50.0710
Sculpture	371	50.0709
History (M.A.)	336	54.0101
History of America (Ph.D.)	586	54.0102

Academic Program	IAUPR Code	CIP Code
International Business (M.I.B.)	377	52.1101
Minor Specialization in International Marketing	377B	52.1101
Minor Specialization in International Relations	377A	52.1101
International Business and Law (M.I.B. / J.D.) Consortium with the School of Law	502	22.0101
International Business Administration (M.I.B.A.)		
International Accounting	396	52.0301
International Finance	397	52.0806
International Human Resources	399	52.1001
International Marketing	398	52.1403
Labor Relations (M.A.)	322	52.1002
Labor Relations and Law (M.A. / J.D.) Consortium with the School of Law	503	22.0101
Library and Information Sciences (M.L.S.)	342	25.9999
Mechanical Engineering (M.S., M.E.)		
Energy (M.S.)	419	14.9999
Aerospace (M.S.)	420	14.0201
Energy (M.E.)	421	14.9999
Aerospace (M.E.)	422	14.0201
Medical Technology (M.S.)		
Clinical Laboratory Administration	349	51.1005
Molecular Microbiology	350	51.1005
Music Education (M.A.) (Metropolitan Campus)	394M	50.0903
Music Education (M.A.) (San Germán Campus)	393	50.0903
Nursing (M.S.N.)		
Critical Care Nursing	407	51.3814
Maternal Child Nursing	425	51.3806
Medical-Surgical Nursing	408	51.3812
Open Information Computer Systems (M.S.)	364	11.0802
Psychological Counseling in Family (M.S.)	405	42.2803
Psychology (M.A.)		
Industrial /Organizational Psychology	359	42.2804
Psychological Counseling	323	42.2803
School Psychology	324	42.2805
Psychology (Ph.D.)		
Industrial /Organizational Psychology	585	42.2804
Psychological Counseling	583	42.2803
School Psychology	584	42.2805
Religious Education	426	39.0401
Social Work (M.S.W.)		
Administration in Social Work (Regular)	351	44.0799
Administration in Social Work (Advanced)	351A	44.0799
Direct Services (Regular)	390	44.0701

Academic Program	IAUPR Code	CIP Code
Direct Services (Advanced)	390A	44.0701
Speech Pathology (M.S.)	429	51.0203
Teaching English as a Second Language (M.A.)	300	13.1401
Teaching of Reading and Writing (M.A.)	418	13.9999
Theology	577	39.0601
Professional Certificates		
Bilingual Education (Post Baccalaureate)	417C	13.0201
Clinical Social Work (Post Masters)	675	51.1503
Database Technology and Administration (Post Baccalaureate)	365	11.0802
Education in Diabetes (Post Baccalaureate)	061C	51.0001
Family Counseling (Post Masters)	676	
Risk Management in Health Care (Post Masters)	655	51.0701
Online Learning: Masters and Doctoral Programs		
Business Administration (M.B.A.)		
Accounting	315D	52.0301
Finance	314D	52.0801
General	316	52.0201
Human Resources	327D	52.1001
Managerial Information Systems	361D	52.1201
Computer Science (M.S.)	406D	11.0701
Computer Science with Specialization in Networks and Security (M.S.)	409D	11.0901
Criminal Justice (M.A.)	302D	43.0199
Education in Curriculum and Teaching (M.Ed.)		
Biology	386A	13.1322
English as a Second Language	383A	13.1401
History	384A	13.1328
Mathematics	385A	13.1311
Spanish	382A	13.1320
Educational Computing (M.A.)	355	13.0501
Information Security (M.S.)	440D	11.1003
International Business Administration (M.I.B.A.)		
Global Logistics	430D	52.0203
International Accounting	396D	52.0301
International Finance	397D	52.0806
International Human Resources	399D	52.1001
International Marketing	398D	52.1403
Leadership and Instruction in Online Education (Ed.D.)	521D	13.9999
University Teaching (M.A.)	404	13.0406

Subject Codes Used in Catalog and in the System

<i>Subject</i>	<i>Subject Codes</i>
Accounting	ACCT
Anesthesia.....	ANES
Bilingual Education	BLED
Biology	BIOL
Biotechnology.....	BIOT
Business Administration.....	BADM
Business Education.....	BUED
Chemistry	CHEM
Computer Science in Networks and Security	CSNS
Criminal Justice	CJUS
Economics	ECON
Education.....	EDUC
Education in Diabetes	DIAB
Educational Computing	ECMP
Educational Neuroscience	NEUR
English.....	ENGL
Environmental Science	EVSC
Family Counseling.....	FACO
Finance	FINA
Fine Arts	ARTS
Geography	GEOG
Global Logistics.....	GLLO
Health, Physical Education and Recreation	HPER
History	HIST
Human Resources	HURS
Information Security.....	INSE
International Business Administration.....	IBAD
International Businesses	INBS
Interregional and International Businesses	INBU
Leadership and Instruction in Online Education	LIDE
Labor Relations	LARE
Library and Information Sciences.....	LISC
Linguistics	LING
Marketing	MKTG
Mathematics	MATH
Mechanical Engineering	MECN
Music	MUSI
Music Education	MUED
Music Technology	MUTE
Nursing	NURS
Open Information Computer Systems	COIS
Physics.....	PHYS
Psychology	PSYC
Quality Organizational Design	QODS
Religious Education.....	RELI
Risk Management in Health Care	RMHC
Social Work	SOWO
Spanish	SPAN
Speech-Language Pathology	SPLP
Theological Studies	THEO

Course Codification System

This system consists of a four letter alphabetical section that identifies the discipline, and a four digit numerical section that identifies the course level, the course itself and the course sequence if such exists.

The first digit indicates the level of complexity of the course. This is closely associated with the year of university studies in which students would normally take the course. The digits from 5 to 8 are used to identify the complexity of the graduate courses as follows:

5 - Foundation or introductory courses at the Master's level.

6 - Advanced Master's Degree courses.

7 - Foundation or introductory courses at the Doctoral level.

8 - Advanced Doctoral level courses.

The second and third digits are used to identify courses within the same level.

The fourth digit indicates the course sequence of two courses within the same level or indicates that no sequence exists. Sequence is indicated by the digits 1 and 2.

In addition to the meaning ascribed to individual digits, combinations in the first three digits indicate a special type of course as explained below:

a. Master's Degree

1. The combination 597 is used to identify Special Topics in all disciplines.
2. The combination 691 is used to identify supervised practicums or internships.
3. The combination 697 is used to identify Seminars whose titles are not specified in the catalog.
4. The combination 699 is used to identify the Thesis in all disciplines.

b. Doctoral Degree

1. The combination 797 is used to identify Special Topics in all disciplines.
2. The combination 891 is used to identify supervised practicums or internships.
3. The combination 899 is used to identify the Thesis in all disciplines.

Masters' and Doctoral Programs

Anesthesia (M.S.)

The program for the Master of Science Degree in Anesthesia has as its goal the preparation of a professional in nursing in anesthesia who will be able to perform activities related to the administration of anesthesia under the supervision of a physician for all types of surgical procedures.

The program aims to develop a professional in anesthesia that will be able to:

1. Acquire knowledge and skills inherent in the specialty that allow the performance of quality anesthesia care.
2. Acquire attitudes, communication and interpersonal relationship skills that facilitate the intervention with the patient, the family and the health team.
3. Utilize the nursing process in problem solving and decision making in the practice of nurse anesthesia.
4. Utilize the results of scientific research to strengthen the quality of anesthesia service.

Admission Requirements

Candidates for admission must:

1. Meet the requirements established in the section "Admission Requirements for Masters' Programs" of this Catalog.
2. Have a Bachelor's Degree in Nursing from an accredited institution.
3. Have a grade point index of 3.00 or above in the last sixty (60) credit hours of academic work.
4. Have a professional license and membership in a professional nursing association.
5. Have at least one (1) year's experience in a critical care setting.
6. Send two (2) letters of recommendation from individuals who have supervised the candidate in the work setting.
7. Be interviewed by an Admissions Committee.
8. Present the following documents:
 - a) A health certificate.
 - b) Vaccination certificates Hepatitis B.
 - c) A Good Conduct Certificate issued by the Puerto Rico Police Department.
 - d) A copy of a professional license and current professional association.
 - e) Updated resume of professional experience.
9. Present in writing a commitment to take the National Certification Examination (NCE) within 120 days after having completed the graduation requirements established in the Graduate Catalog.
10. Pass a test in anatomy and physiology with a minimum of 75%.
11. Pass a test in English with a minimum of 75%.
12. In the case of not obtaining the required minimum score for each test, the student will have to pass the following courses according to each case:
 - a) BIOL 3106: Anatomy and Physiology
 - b) ENGL 397E: Special Topic course in the English area.
13. Have passed a three or more credit course with laboratory in chemistry.

Time Limit to Complete the Degree

Full-time Students	28 months
Part-time students	40 months

Comprehensive Examination

Students may take the comprehensive examination upon completion of at least thirty six (36) credits in specialization courses with a minimum average of 3.00 or after having completed their next to last semester of studies. Candidates that request the examination will be evaluated and authorized by the evaluation committee for the dates established in the academic calendar.

Graduation Requirements:

1. Complete the graduation requirements for a Master's Degree established in the Graduate Catalog.
2. Present official evidence of having administered anesthesia in six hundred (600) surgeries in different specialties.

The Arecibo Campus is authorized to offer this Program. The Program is accredited by the "Council on Accreditation of Nurse Anesthesia Educational Programs" (<http://home.coa.us.com>).

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN ANESTHESIA

Specialization Requirements

52 credits

Specialization Requirements - 52 credits

ANES	5105	Biochemistry and Physics	3
ANES	5110	Introduction to Anesthesia	2
ANES	5111	Pathophysiology I: Cellular and Circulatory	3
ANES	5112	Pathophysiology II: Blood, Cardiovascular, Respiratory and Renal	3
ANES	5113	Advanced Pathophysiology	3
ANES	5121	Principles of Anesthesia I	2
ANES	5122	Clinical Practice I:Advanced Assessment of Health in Anesthesia	1
ANES	5131	Pharmacology Anesthetics I	3
ANES	5132	Advanced Pharmacology Anesthetics II	3
ANES	5221	Principles of Anesthesia II	2
ANES	5222	Clinical Practice on Principles of Anesthesia II	2
ANES	5307	Regional Anesthesia	2
ANES	5331	Principles of Anesthesia III: Obstetrics and Pediatrics	2
ANES	5332	Clinical Practice on Principles of Anesthesia III	2
ANES	5431	Principles of Anesthesia IV: Cardiothoracic and Neurological	2
ANES	5432	Clinical Practice on Principles of Anesthesia IV	2
ANES	5497	Trends and Controversies in Anesthesiology	2
ANES	6390	Clinical Analysis	1
ANES	6395	Research Process	3
ANES	6397	Administration and Supervision	2
ANES	6911	Integrated Supervised Practice I	2
ANES	6912	Integrated Supervised Practice II	2
ANES	6970	Seminar	3

Applied Mathematics (M.A.)

The Master of Arts in Applied Mathematics Program develops professional mathematicians in the theoretical base and in applications of the main areas of this discipline to assist them fulfill their goal of becoming more creative and articulate in the performance of their societal functions. The Program prepares students for employment in industry, the government and in commerce, in areas such as statistics, scientific computation, insurance, investments, and in the formulation of mathematical and other models.

The course of study of this Program includes a core component consisting of calculus, algebra, discrete mathematics, probability and mathematical computation and another component of elective courses in one or several of the areas of applied mathematics such as computer science, mathematical models of science, statistics, operational research, economics and insurance mathematics. A total of 33 credits is required. The program is accessible to students of any major who have approved courses equivalent to Calculus II, Linear Algebra and Structured Programming at the baccalaureate level with a minimum grade of "C".

Admission Requirements

To be admitted to the Master of Arts Program in Applied Mathematics, students must meet the admission requirements for Graduate Programs as established in the Graduate Catalog in effect at the moment of admission. In addition they must:

1. Present the results of the “Examen de Admisión a Estudios de Posgrado (EXADEP)” or the Graduate Examination Record (GRE).
2. Have passed the following courses or their equivalent at the baccalaureate level in a recognized university, with a minimum grade of “ C”:

Calculus II
 Linear Algebra
 Structured Programming

Graduation Requirements

All students who aspire to obtain the Master of Arts degree in Applied Mathematics, in addition to meeting all the requirements of Comprehensive Examinations and Other Options that appear in the current Graduate Catalog, must satisfy the following specific requirement:

1. Pass the comprehensive examinations or develop satisfactorily a Creative Project, as outlined in the course MATH 6900.

The San Germán Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN APPLIED MATHEMATICS

Core Course Requirements		18 credits
Prescribed Distributive Requirements		12 credits
Degree Project (Optional)		<u>3 credits</u>
Total		30 or 33

Core Course Requirements - 18 credits

MATH	5100	Intermediate Calculus	3
MATH	5200	Computational Mathematics	3
MATH	5400	Probability	3
MATH	5500	Advanced Discrete Mathematics	3
MATH	5800	Topics in Abstract Algebra	3
MATH	6400	Advanced Mathematical Statistics	3

Prescribed Distributive Requirements - 12 credits

Four (4) courses selected from the following:

MATH	5900	Mathematical Logic and Applications	3
MATH	6100	Introduction to Real Analysis	3
MATH	6150	Mathematical Models for the Sciences	3
MATH	6200	Graphs and Applications	3
MATH	6300	Actuarial Mathematics and Risk Theory	3
MATH	6350	Mathematical Methods in Research	3
MATH	6600	Econometrics and Finance Models	3
MATH	6800	Cryptography	3
MATH	6810	Information Theory and Codification	3

Optional requirement of Graduation

Biology (M.S.)

The Master of Science Degree in Biology offers two specializations: Molecular Biotechnology and Environmental and Ecological Sciences. The emphasis of the Program is to present an interdisciplinary curriculum focused on scientific reasoning to prepare students for work in the field of Biology dealing with the molecular aspects of biotechnology, ecology or the environmental sciences.

Graduates of this program will be able to emit technical and scientific judgments related to their area of specialization and to general aspects of Biology. They will obtain experience in the use and application of available technologies to understand and to answer questions of a scientific nature. The program will reinforce ethical aspects in research and will promote the development of an integral knowledge of biological sciences on which the student's specialization is based.

Admission Requirements

In addition to meeting the admission requirements established in this Catalog, students must:

1. Have a Bachelor's degree in Natural Sciences or related areas.
2. Have passed the bachelor's level, a minimum of three (3) credits in each of the following courses or equivalents:
 - a. Cellular-Molecular Biology
 - b. Statistics
 - c. Calculus
3. Present two (2) letters de recommendation, preferably from Natural Science professors.
4. Present evidence of the results of the Graduate Record Examination (GRE) or the Examen de Admisión a Estudios de Posgrado (EXADEP).

The Bayamón Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN BIOLOGY

Core Course Requirements	11 credits
Specialization Requirements	12 credits
Prescribed Distributive Requirements	<u>12</u> credits
Total	35

Core Course Requirements - 11 credits

BIOL	5001	Integrated Biology I	3
BIOL	5002	Integrated Biology II	3
BIOL	6971	Seminar I	1
BIOL	6972	Seminar II	1
EVSC	5020	Biostatistics	3

Specialization in Molecular Biotechnology (Biology)

Requirements for the Specialization in Molecular Biotechnology - 12 credits

Required Courses

BIOL	6005	Biotechnology and Bioinformatics	3
BIOL	6006	Biomolecular Techniques Laboratory	3

Select two (2) courses from the following:

BIOL	6003	Molecular Immunology	3
BIOL	6004	Molecular Genetics	3
BIOL	6007	Plant Biotechnology	3
BIOL	6008	Advanced Virology	3
BIOL	6009	Bioremediation	3
BIOL	6010	Protozoology	3
BIOL	6013	Environmental Microbiology	3
BIOL	6014	Bacterial Diagnosis	3
BIOL	6016	Evolutionary Processes	3

Specialization in Environmental and Ecological Sciences (Biology)

Requirements for the Specialization in Environmental and Ecological Sciences - 12 credits

Required Courses

BIOL	6102	Environmental and Ecological Sciences	3
BIOL	6204	Research Methods in Ecology	3

Select two (2) courses from the following:

BIOL	6006	Biomolecular Techniques Laboratory	3
BIOL	6007	Biotechnology in Plants	3
BIOL	6009	Bioremediation	3
BIOL	6012	Biology and Conservation of Marine Mammals	3
BIOL	6013	Environmental Microbiology	3
BIOL	6016	Evolutionary Processes	3
BIOL	6103	Tropical Ecology of Islands	3
BIOL	6105	Island Biogeography	3
BIOL	6107	Pollution and Ecological Systems	3
BIOL	6108	Environmental Physiology of Animal	3
EVSC	5105	Geographic Information Systems and Applications in Environmental Science	3

Prescribed Distributive Requirements - 12 credits

Students will have two (2) options to complete the 12 credits of Prescribed Distributive Courses.

Option A: with a Research Project (Thesis)

Students must pass 12 credits in courses BIOL 6991, 6992 and 6993.

Option B: without Research Project (Thesis)

The student will approve course BIOL 6990 Scientific Writing and 9 additional credits of this program; six (6) of which will be in courses of their own specialization.

Biotechnology (M.S.)

The Master of Science Program in Biotechnology with Specializations in Biotechnology of Plants and General Biotechnology has as its goal the formation of professionals who possess the knowledge, skills, attitudes and the social commitment, which allow them to make responsible contributions to the scientific development for our society and to the advancement of biotechnology. It aims to facilitate the development of graduates that can handle the basic technologies of biosciences and emit judgments related to their area of specialization and to related areas.

Admission Requirements

In addition to meeting the admission requirements for masters' studies, in agreement with the provisions of this Catalog, students requesting admission to this program, must:

1. Hold a Bachelor's degree in Natural Sciences or in related areas with a minimum grade point index of 2.50.
2. Present evidence of the test results of *Graduate Record Examination* or of the "*Examen de Admisión a Estudios de Posgrado*" (EXADEP).
3. Have approved a minimum of three (3) credits in each one of the following areas:
 - Cellular-Molecular Biology or Biochemistry
 - Statistics
 - Calculus I
 - Analytical Chemistry
4. Present two (2) letters of recommendation from the Faculty or the employer.

Graduation Requirements

To meet the institutional graduation requirements for masters programs, the student may select one of the following options:

Option A: with a Research Project

1. Approve 36 credits in the Program with a minimum average index of 3.00 (18 core course credits, 9 specialization credits, and 9 prescribed distributive credits).
2. Prepare the Proposal of the Research Project and approve its defense.
3. Complete the Thesis Project and approve its defense.

Option B: without a Research Project

1. Approve 36 credits in the Program with a minimum average index of 3.00 of (18 core course credits, 9 specialization credits, and 9 prescribed distributive credits).
2. Pass the Comprehensive Examination with a minimum of 75 percent, as stipulated in the current Graduate Catalog.
3. To take the Comprehensive Examination it is required to have completed 27 credits and the authorization of the Program Coordinator.

The Barranquitas Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN BIOTECHNOLOGY WITH SPECIALIZATIONS IN BIOTECHNOLOGY OF PLANTS AND GENERAL BIOTECHNOLOGY

Core Course Requirements		18 credits
Specialization Requirements		9 credits
Prescribed Distributive Requirements		<u>9 credits</u>
	Total	36

Core Course Requirements - 18 credits

BIOT	5011	Cellular and Molecular Biotechnology	3
BIOT	5100	Molecular Genetics and Bioinformatics	3
BIOT	6100	Bio-security	2
BIOT	6115	Biotechnology of Plants	3
BIOT	6125	Instrumental Analysis of Biomolecules	3
BIOT	6200	Industrial and Commercial Biotechnology	3
BIOT	6970	Seminar	1

Specialization in Biotechnology of Plants

Specialization Requirements in Biotechnology of Plants: - 9 credits

BIOL	6116	Micro-propagation of Plants	3
BIOT	6117	Plants as Biofactories	3
BIOT	6210	Biotechnology and Improvement of Cultures	3

Specialization in General Biotechnology

Specialization Requirements in General Biotechnology: - 9 credits

BIOT	6120	Animal Biotechnology	3
BIOT	6130	Tissue Culture of Animal Origin	3
BIOT	6230	Bio-processes	3

Prescribed Distributive Requirements - 9 credits

Students will have two (2) options to complete the 9 credits of the Prescribed Distributive Courses.

Option A: With a Research Project (Thesis)

BIOT	6220	Research Methods in Biotechnology I	3
BIOT	6221	Research Methods in Biotechnology II	3
BIOT	6990	Thesis in Biotechnology	3

Option B: Without a Research Project (Thesis)

Student will approve 9 additional credits in biotechnology from either of the specializations or from elective courses. In addition, they will take a comprehensive examination. They will not take the Research Methods and Thesis courses.

Elective Courses

BIOL	6009	Bioremediation	3
BIOT	6105	Biotechnology of Microorganisms	3
BIOT	6240	Special Topics in Biotechnology	3

Business Administration (M.B.A.)

A program of studies leading to the Master's Degree in Business Administration is offered. The curriculum has a General Program and six specializations: Accounting, Finance, Human Resources, Industrial Management, Marketing, and Managerial Information Systems.

Students desiring a second specialization in the Master's Degree in Business Administration must take fifteen (15) credits in addition to those required for the first specialization. They must also pass the Integration Seminar corresponding to the second specialization.

The curriculum for the Master's Degree in Business Administration aims to provide a broad base and a solid preparation in management and organization of business activities. In addition, the Program gives students an opportunity to specialize in one of the many functional areas of this discipline.

The core courses required of all students stress the general principles and training applicable to all organizations. They cover a wide spectrum of disciplines such as decision theory, management processes, application of quantitative analysis to management problems, contributions of the behavioral sciences to functional areas of business

management and relations of business organizations to socio-economic and political environments. Reference to special problems of business management, in areas like Puerto Rico and the Caribbean, is an additional objective.

For the Master's Degree in Business Administration, students must take 42 graduate credits, 15 of which must be in the area of specialization. The 15 specialization credits include the corresponding Integration Seminar. If students do not choose a specialization, they must select 18 credits from the specialization and elective courses.

Admission Requirements for the Master's Degree in Business Administration

Students requesting admission to the Master's Degree in Business Administration Program must:

1. Meet the requirements established in the section "Admission Requirements for Masters' Programs" of this Catalog.
2. Have a Bachelor's degree in Business administration (BBA), or
3. Have a Bachelor's degree in another discipline and present evidence of having passed the following courses at the baccalaureate level with a minimum grade of C or its equivalent:

Economics (Micro and Macro)	6 credits
Statistics (descriptive and inferential)	6 credits
Accounting I and II	6-8 credits

In addition to the requirements listed above, students who choose anyone of the following specializations must have passed the following courses at the baccalaureate level with a minimum grade of C:

- Accounting
 - Intermediate Accounting I and II (or their equivalents)
- Managerial Information Systems
 - Introductory course in the area of computers (or its equivalent)
 - A course in computer programming (or its equivalent)

Students who have not taken all of the required courses may request a provisional admission as established in this Catalog.

4. Present the results of the "Examen de Admisión a Estudios de Posgrado (EXADEP)" or the Graduate Examination Record (GRE), or their equivalent.

Additional Requirements for the Program at the Metropolitan Campus

1. Students requesting admission to the Metropolitan Campus must have a minimum of three years of professional work experience.
2. Students requesting transfer to the Metropolitan Campus must prove they have a minimum of three years of professional work experience and must take at least 70% of the courses at the Metropolitan Campus.

Requirements for a Minor Specialization in the Graduate Business Administration Programs

A minor specialization will consist of a minimum of nine (9) credits and a maximum of twelve (12) credits, according to the applicable academic program. All students may opt for a minor specialization within their graduate program, as specified in this Catalog.

To obtain a minor specialization that is not within their study program, students must meet the requirements established in this Catalog in the section Student Financial Aid, as well as with the academic norms of the program to which this minor specialization belongs.

If students want the minor specialization to appear on their transcripts, they must formally request this by means of the appropriate form. The declaration of a minor specialization requires the approval of the Academic Adviser and the Directors of the appropriate Departments. This declaration must be made prior to the application for graduation. Students must make sure they meet the academic progress norms and the minimum time required to complete their study program. A minimum academic index of 3.00 in the minor specialization is required for certification.

Graduation Requirements

For graduation, students must:

1. Have regular student admission.
2. Have a grade point index not less than 3.00.
3. Comply with the satisfactory academic progress norm at the graduate level.
4. Have approved the Integration Seminar in Entrepreneurial Strategies.
5. Have approved the Integration Seminar corresponding to their specialization.

Los recintos autorizados a ofrecer las especialidades de este Programa son:

The campuses authorized to offer the specializations of this Program are:

- 1) Accounting: Aguadilla, Arecibo, Metropolitan, San Germán
Accounting online: San Germán
- 2) Finances: Aguadilla, Arecibo, Metropolitan, San Germán
Finances online: Metropolitan
- 3) Industrial Management: Aguadilla, Metropolitan, San Germán
- 4) Marketing: Aguadilla, Fajardo, Guayama, Metropolitan, San Germán
- 5) Human Resources: Aguadilla, Arecibo, Barranquitas, Bayamón, Fajardo, Metropolitan, San Germán
Human Resources online: Fajardo
- 6) Management Information Systems: Aguadilla, Barranquitas, Fajardo, Metropolitan, San Germán
Management Information Systems online: San Germán
- 7) General Program: Fajardo, Metropolitan, San Germán
General Program online: Fajardo, Metropolitan

REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION DEGREE

Core Course Requirements	24 credits
Specialization Requirements	15 credits
Prescribed Distributive Requirements	<u>3 credits</u>
Total	42

Core Course Requirements - 24 credits

BADM	5010	Quantitative Methods in Decision Making	3
BADM	5020	Managerial Economics	3
BADM	5040	Accounting for Managers	3
BADM	5070	Public Policy toward Business	3
BADM	5090	Marketing Management	3
BADM	5100	Organizational Theory and Behavior	3
BADM	5190	Managerial Finance I	3
BADM	6500	Integration Seminar in Entrepreneurial Strategies	3

Specialization Requirements - 15 credits

Fifteen credits in the selected area:

Specialization in Accounting (M.B.A.)

Required Course

BADM	697A	Integration Seminar in Accounting	3
------	------	-----------------------------------	---

Four of the following courses:

BADM	6180	Advanced Cost Accounting	3
BADM	6300	Advanced Auditing	3
BADM	6310	Contemporary Aspects of Accounting	3
BADM	6320	Advanced Federal Taxes	3
BADM	6330	Advanced Puerto Rican Taxes	3

Specialization in Finance (M.B.A.)

Required Courses

BADM	6190	Managerial Finance II	3
BADM	6230	Investments	3
BADM	697B	Integration Seminar in Finance	3

Two of the following courses:

BADM	6150	Public Finance and Fiscal Policy	3
BADM	6200	International Business Finance	3
BADM	6220	Monetary Theory and Policy	3
BADM	6240	Financial Markets	3

Specialization in Human Resources (M.B.A.)

Required Courses

BADM	6070	Human Resources Administration	3
BADM	697C	Integrating Seminar in Human Resources	3

Three of the following courses:

BADM	6020	Training, Development and Administration of Human Resources	3
BADM	6080	Salary Administration	3
BADM	6090	Supervision and Leadership	3
BADM	6910	Practice in Human Resources	3
LARE	5010	Collective Bargaining in the Public and Private Sector	3
LARE	5400	Labor Legislation	3

Specialization in Industrial Management (M.B.A.)

Required Courses

BADM	6100	Introduction to Industrial Management	3
BADM	697D	Integration Seminar in Industrial Management	3

Three of the following courses:

BADM	6110	Work Measures and Methods of Improvement	3
BADM	6120	Analysis of Production Systems	3
BADM	6130	Production Planning and Control	3
BADM	6140	Industrial Plant Management	3
BADM	6170	Advanced Methods in Planning Production and Control	3
BADM	6290	Logistics of Transportation Systems	3
BADM	6295	International Operations	3

Specialization in Managerial Information Systems (M.B.A.)

Required Courses

BADM	5060	Management Information Systems	3
BADM	6030	Database Systems	3
BADM	6040	System Analysis and Design	3
BADM	6050	Internet: Superhighway of Information	3
BADM	6957	Integration Seminar in Information Systems	3

Prescribed Distributive Requirements for this Specialization - 3 credits

One course from the following:

BADM	6250	Telecommunications and Networks	3
BADM	6260	Advanced Programming	3
BADM	6270	Decision Support and Expert Systems	3
BADM	6280	Management of Information Technology	3

Specialization in Marketing (M.B.A.)

Required Courses

BADM	6350	Strategic Marketing	3
BADM	697E	Integration Seminar in Marketing	3

Three of the following courses:

BADM	6160	Marketing Research	3
BADM	6360	Marketing Communications	3
BADM	6370	Sales Forecasting and Analysis	3
BADM	6380	Consumer Behavior	3
BADM	6390	Global Marketing	3
BADM	6550	Seminar in Current Topics in Marketing	3

General Program (M.B.A.)

Students interested in pursuing the General Program must approve, in addition to the core courses in Business Administration; eighteen (18) credits from the other specialization courses or the elective courses from the Graduate Program in Business Administration, International Business Administration, Labor Relations, or from other related programs with the approval of their academic advisor.

Prescribed Distributive Requirements - 3 credits

Students are required to select three (3) credits from the following courses, from any specialization courses or from courses related to any other area in Business Administration, with the approval of their academic advisor, except the students in the Managerial Information Systems program, who will take the prescribed distributive courses for that specialization.

BADM	5030	Entrepreneurial Research Methodology	3
BADM	5060	Management Information Systems	3
BADM	6060	Banking Administration	3
BADM	6210	Financial Administration of Retirement Plans	3
BADM	6700	Global Business	3
BADM	6945	Small Business Institute Integration Seminar	3

Minor Specialization in Knowledge Management

The Minor Specialization in Knowledge Management is designed for the graduate student of Business Administration. This minor specialization is aimed to develop the knowledge and skills in the areas of management and administration of intellectual capital, as assets of the company, contributing to its profitability.

The Metropolitan Campus is authorized to offer this minor specialization.

Requirements for the Minor Specialization in Knowledge Management - 9 credits

BADM	5470	Foundations of Knowledge Management	3
BADM	6430	Administration of Intellectual Capital	3
BADM	6470	Strategies of Knowledge Management	3

Minor Specialization in Economic and Social Dimensions of Globalization

The minor specialization is designed to reflect on the meaning of the economic policy in the new context that defines the process of the globalization in the economic, social, and business activities. This process, driven by ideological reasons as well as by technological reasons, has substantially modified the effectiveness of the mechanisms of public intervention offered by economic literature.

The Metropolitan Campus is authorized to offer this minor specialization.

Requirements for the Minor Specialization in Economic and Social Dimensions of Globalization - 12 credits

Students will take the following 9 credits:

BADM	6555	Introduction to Research in Social Sciences	3
BADM	6580	Globalization: International Trade, Capital Flow, New Governance and Fairness	3
BADM	6590	Dimensions of the globalization and Incidences in Economic, Political and Socio Labor Relations	3

Select a course from the following:

BADM	5776	Transformation of the Liberal State in Current Globalization	3
BADM	6559	Analysis of Regression Applied to Social Sciences	3
BADM	6577	Introduction to Econometry	3
BADM	6600	Policy of Innovation in Globalization	3
BADM	6610	Culture, Identity and Policy in the Context of Globalization	3

Business Administration for Executives (M.B.A.)

The Master of Business Administration Program for Executives (Executive MBA) has the mission of developing business leaders in the Puerto Rican and global community. These leaders will be able to meet the highest standards of excellence and will acquire up-to-date knowledge and personal and professional competencies to improve their directive effectiveness and the competitiveness of their organizations. This accomplishment will be achieved together with ethical principles for the benefit of the community and society. The Master of Administration Degree for Executives or Executive MBA is the highest level program oriented towards the formation of business executives.

Admission Requirements

Students seeking admission to the Master in Business Administration Program for Executives must meet the admission requirements established for Masters' Programs in the current Graduate Catalog. In addition, they must meet the following specific Program requirements:

1. Occupy or have occupied a managerial position at the top or middle levels and have a minimum of five years of experience.
2. Have at least eight years of professional work experience.
3. If the student is in one of the following situations: a) has a Professional License issued by an entity of the Commonwealth of Puerto Rico, b) has a Professional License of some state of the United States or of a foreign State that is properly legalized and related to Business Administration disciplines or, c) has a professional certification issued by a recognized entity in business disciplines, will be granted, at the time of admission, two years of work experience for each license or professional certification.

Graduation Requirements

In addition to fulfilling the graduation requirements of the Graduate Catalog, students of this Program must meet the following requirement.

1. Pass the seminars of the specialization INBS 6970 and BADM 697F with a minimum grade of B.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION DEGREE FOR EXECUTIVES (EXECUTIVE MBA)

Specialization Requirements 36 credits

Specialization Requirements – 36 credits

BADM	5060	Management Information Systems	3
BADM	5140	Legal and Social Environment in Business	3
BADM	6450	Decision-Making	3
BADM	6500	Integration Seminar on Entrepreneurial Strategies	3
BADM	6780	The Manager in an International Economy	3
BADM	6971	Seminario de Responsabilidad Social Empresarial	3
BADM	697F	Seminario Integrador Empresarial para Gerentes	3
INBS	6970	Seminar: Business Environment and Administrative Practices of the Caribbean and Latin America	3
LARE	6430	New Working Patterns and Personal Values	3
QODS	5010	Strategic Management: Innovation and Change	3
QODS	6020	Accounting as a tool for Executive Action	3
QODS	6035	Voice of the External Client	3

Course BADM 697F (Integration Enterprise Seminar for Managers) replaces the Integration Seminar that this Catalog includes in Institutional Graduation Requirements for Masters' Programs.

Business Education (M.A.)

The Masters Program in Business Education is designed to prepare teachers and administrators to teach and supervise Business Education Programs. Its goal is to develop personnel capable of strengthening the teaching-learning process. It also aims to develop in students the skills needed to prepare and capacitate office personnel so it may respond to the needs of a technological society. In addition, the Program is designed to promote the necessary competencies in the area of business education that will permit students to assume leadership roles in developing educational programs of high academic quality and to be agents of change.

The Program leads to the Masters of Arts Degree in Business Education through specialized courses in the administration of office systems at the secondary and postsecondary levels.

In addition to meeting the requirements established in the section "Admission Requirements for Masters' Programs" of this Catalog, candidates for admission to this Program must:

1. Have passed the following undergraduate courses or their equivalents:

EDUC	2021	History and Philosophy of Education
EDUC	2031	Developmental Psychology
GEHS	2020	Global Vision of the Economy
or		
MAEC	2212	Economic Principles (Macro)
MAEC	2221	Basic Statistics I
2. Possess a Bachelor's Degree in Business Education, Office Systems Administration, or Business Administration from an accredited university.
3. Submit two letters of recommendation from professionals in the field.

The Metropolitan and San Germán campuses are authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN BUSINESS EDUCATION

Core Course Requirements	12 credits
Specialization Requirements	15 credits
Prescribed Distributive Requirements	9 credits
Total	*36 to 39

*Students who take course BUED 6970 Integrating Seminar to meet the Comprehensive Examination Requirements and other Masters Program Options must complete a total of 39 credits.

Core Course Requirements - 12 credits

EDUC	5111	Educational Research I	3
EDUC	6046	Curriculum Development	3

Students will select six (6) credits from the following courses:

EDUC	5013	Sociological Foundations of Education	3
EDUC	5024	Psychological Foundations of Education	3
EDUC	6058	Legal Aspects of Education	3
EDUC	6079	Instructional Leadership	3

Specialization Requirements - 15 credits

Students will take fifteen (15) credits from the following courses:

BUED	5010	Methodology in the Teaching of Information Processing Courses	3
BUED	5015	Teaching Strategies for Enterprise Development, Business Administration and Marketing	3
BUED	5020	Methods of Teaching Accounting	3
BUED	5030	Methodology in the Teaching of Shorthand and Transcription or other System of Abbreviated Writing	3
BUED	5035	Computers in the Teaching of Business Education	3
BUED	5040	Curricular Innovations in Teaching	3
BUED	5050	Fundamentals of Online Learning	3
BUED	5060	Preparation of Materials for Online Learning	3
BUED	5070	Interface Design for Instructional Resources through the Web	3
BUED	6000	Administration and Supervision in Business Education	3
BUED	6010	Curricular Design in Business Education	3
BUED	6020	Assessment, Measurement and Evaluation in Business Education	3
BUED	6050	Strategies for Office Personnel Training	3
BUED	6910	Internship in teaching Business Education at the	3

Secondary and/or Postsecondary Level 3

Prescribed Distributive Requirements - 9 credits

BUED	5000	Administration of Vocational and Technical Programs	3
BUED	6911	Supervised Practice in Business Education	3
BADM	6440	Advanced Personnel Administration	3
EDUC	5740	Education of Exceptional Students	3
EDUC	6024	Educational Measurements and Evaluation	3
EDUC	6057	Teaching Models and Strategies	3

Students will follow the required course sequence, according to the guidance they receive from the program director or coordinator.

Students interested in obtaining a certificate as a school teacher, supervisor or director of regular or vocational schools must take the courses required by the Teachers Certification Regulation of the Department of Education that is in effect at the date of graduation.

Computer Science (M.S.)

The program of studies for this degree has been designed to provide students a real option to the immediate demands of the labor market. It represents a formal higher education alternative in the computer field, with emphasis on programming at the master’s level, through the most sophisticated and accessible networks in any company.

The program follows the path of a masters without specializations, which should be developed according to the technological advances. This program aspires to prepare graduates as specialists in the distributed system area, software engineering specialized in communication networks, operating systems and high-level languages. These capacities will permit the graduates to be incorporated into the industrial sector as constituents capable of promoting the adoption of new technologies as well as developing basic or applied research with the aim of continuing doctoral studies.

Admission Requirements

In addition to fulfilling the admission requirements for master’s degree studies appearing in this Catalog, candidates desiring to enter this Program must meet the following requirements:

1. Have completed a Bachelor’s degree in: (a) Computer Programming, (b) Information Systems or other disciplines. Students from other disciplines must have approved nine (9) credits in Computers. These courses must be authorized by the academic adviser or the person designated.
2. Have obtained a minimum average of 250 in the major, as well as in the general average of the bachelor’s degree.

The Fajardo Campus is authorized to offer this Program through both classroom and online learning.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN COMPUTER SCIENCE

Specialization Requirements	31 credits
Prescribed Distributive Requirements	<u>6</u> credits
Total	37

Specialization Requirements - 31 credits

COMP	5100	Algorithms Design	3
COMP	5110	Automata Theory and Formal Languages	3
COMP	5120	Artificial intelligence	3
COMP	5325	Programming Languages	3
COMP	5510	Software Development and Design	3
COMP	5525	Seminar I	3

COMP	6300	Networks I	3
COMP	6315	Operating Systems	3
COMP	6400	Networks II	3
COMP	6970	Integrated Seminar	4

Prescribed Distributive Requirements

Students will select one course from the following:

COMP	6010	Operations Research	3
COMP	6200	Multimedia and Hypermedia	3
COMP	6250	Communication Protocols	3

Students will select one course from the following:

COMP	6500	Database Workshop	3
COMP	6525	Programming Workshop	3
COMP	6615	Seminar on Computation and Society	3
COMP	6650	Administration and Function of Information	3

Computer Science with Specialization in Networks and Security (M.S.)

The Masters Program in Computer Sciences with Specialization in Networks and Security aims to prepare professionals in the areas of analysis, design, implementation and development of efficient and secure computer network systems. This Program seeks to have students attain advanced, updated and research knowledge in the new technologies.

As part of the philosophy of the program, it is expected that a professional (graduate) possessing the following competencies and characteristics will be prepared as:

1. An authority in the theories, principles, techniques, methods and technological trends in the area of networks and security of computerized systems;
2. Qualified to apply research methodologies for problem solving;
3. An authority in the problems that will affect the operation of computer networks; and
4. Qualified to apply research methodologies for problem solving and analysis of situations.

Admission Requirements

In order to enter the Masters Program in Computer Science with a Specialization in Networks and Security students must meet the admission requirements of Inter American University of Puerto Rico, as established in the current Graduate Catalog, and in addition, must have passed the following courses or their equivalents:

1. Information and Computer Literacy
2. Introduction to Data Communication
3. Network Management I and II
4. Computerized Systems Analysis and Design

Graduation Requirements

In addition to passing a comprehensive examination as established in the current Graduate Catalog, students must:

1. Comply with the satisfactory academic progress norms at the graduate level.
2. Have completed a minimum of 30 credits of the specialization.
3. Submit a request for the comprehensive examination 30 days before the date on which the examination is administered, together with evidence of having paid the comprehensive examination fee.

The Guayama Campus is authorized to offer this Program through both classroom and online learning.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN COMPUTERS WITH SPECIALIZATION IN NETWORKS AND SECURITY

Specialization Requirements	33 credits
Prescribed Distributive Requirements	<u>6 credits</u>
Total	39

Specialization Requirements - 33 credits

CSNS	5100	Network Analysis and Design	3
CSNS	5110	Principles of Research	3
CSNS	5121	Routing Technologies I	3
CSNS	5131	Network Switching Technologies I	3
CSNS	5222	Routing Technologies II	3
CSNS	5232	Network Switching Technologies II	3
CSNS	6100	Firewalls	3
CSNS	6210	Design, Implementation and Assessment of Network Security	3
CSNS	6110	Security and Forensic Computing	3
CSNS	6220	Intrusion Detection Systems	3
CSNS	6330	Research Project	3

Prescribed Distributive Requirements - 6 credits

CSNS	5210	Internet Protocol Version 6	3
CSNS	6120	Remote Access Networks	3
CSNS	6310	Network Troubleshooting Techniques	3
CSNS	6320	Satellite Communications Systems	3

Criminal Justice (M.A.)

The Masters of Arts in Criminal Justice aims to provide an education of excellence to students interested in the field of Criminal Justice, so that they can perform effectively in public, private, state and federal agencies.

The Program aims to prepare the student to do research in the field of criminal justice; respond to the need for maintaining highly qualified professionals that master the competencies required in this discipline; and to train professionals to get involved with the different populations and problems that society faces.

Profile of the Competencies of Graduates

The Program is designed to develop the competencies that will permit students to:

Knowledge

1. Know the existing interaction between the state and federal legal systems, and between individuals and society.
2. Know the stages of the penal procedural right and the right of proof related to the Puerto Rico Justice System.
3. Know the social and legal aspects of juvenile delinquency.
4. Know the social-scientific research method.

Skills

1. Apply the criminological theories to the comprehensive study of the relation between laws, individuals and society.
2. Analyze the social and legal aspects of juvenile delinquency, as well as the theories, factors and conditions associated with this social problem.
3. Analyze the factors and conditions that lead people to create dependency on psycho addictive or illegal

substances and to criminal conduct.

4. Apply the social-scientific research method to the development of research in the area of criminal justice.
5. Evaluate the effectiveness of the prevention, treatment and rehabilitation strategies used with people with deviant behavior.

Attitudes

1. Demonstrate a critical attitude towards the study of the interaction of the Puerto Rico legal system, individuals and society.
2. Demonstrate a positive attitude towards the people with deviant behavior who are in the rehabilitation process.
3. Recognize the importance of research as an effective means for the production and construction of knowledge in the area of criminal justice.
4. Recognize the importance of an ethical-legal conduct in the field of criminal justice.

Graduation Requirements

1. Have a minimum general average of 3.00.
2. Approve one of the following options, as determined by the campus:
 - a. A comprehensive examination, which those students who have approved 30 credits including the Specialization Requirements, may request. Students will graduate with a total of 33 credits.
 - b. The course CJUS 6970 Integration Seminar results in 3 additional credits, therefore the student will graduate with a total of 36 créditos.*

The Aguadilla, Barranquitas, Metropolitan and Ponce campuses are authorized to offer this Program. In addition, the Barranquitas Campus is authorized to offer this Program online.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN CRIMINAL JUSTICE

Specialization Requirements	21 credits
Prescribed Distributive Requirements	9 credits
Elective Courses	<u>3 credits</u>
Total	*33-36

Specialization Requirements - 21 credits

CJUS	5010	Law and Society	3
CJUS	5055	Criminology	3
CJUS	5060	Social Scientific Research Methodology	3
CJUS	5070	Social Scientific Research Applied to Criminal Justice	3
CJUS	5080	Public Policy and State and Federal Justice Systems	3
CJUS	5310	Criminal Procedure and Evidence Law	3

Select one course from the following:

CJUS	5237	Juvenile Justice	3
CJUS	5613	Addiction, Criminality and Rehabilitation	3

Prescribed Distributive Requirements - 9 credits

Select nine (9) credits from the following courses:

CJUS	5023	Elements of Criminal Justice	3
CJUS	5299	Law and Correction	3

CJUS	5900	Special Assignment	3
CJUS	5970	Special Topics	3

Teaching of Reading and Writing (M.A.)

The Master of Arts program in Teaching of Reading and Writing aims to form teachers of different disciplines in the processes of reading and writing. Graduates of the Program will master the concepts of this field of study and their teaching in such a way that they can upgrade the acquisition processes of reading and writing at all academic levels.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN TEACHING OF READING AND WRITING

Specialization Requirements - 33 credits

EDUC	5111	Educational Research I	3
EDUC	5122	Critical Analysis of Children’s Literature at the Elementary Level	3
EDUC	5130	Fundamentals of the Acquisition of Reading and Writing	3
EDUC	5250	Teaching of Reading and Writing	3
EDUC	5320	Promotion of Reading	3
EDUC	5410	Evaluation of Reading and Writing	3
EDUC	597_	Special Topics	3
EDUC	6220	Developmental Process	3
EDUC	6300	Teaching Reading and Writing to Exceptional Students	3
EDUC	697_	Integration Seminar	3
SPAN	5140	Text Production	3

Education (M.A., M.Ed. and Ed.D.)

Master of Arts Program in Education

The Master of Arts Program offers graduate students a wide variety of specializations. Applicants for admission to these programs, besides meeting the admission requirements for studies at the Master’s level, must be capable of reading and interpreting professional matter in both Spanish and English and possess the ability to express themselves correctly in writing in one of these languages. This ability will be determined through an examination or other appropriate means. For specialization in a teaching field, the applicant must have an undergraduate major in the field of specialization.

Comprehensive Examination

Students may take the comprehensive examination or one of the other options explained in this Catalog after having passed all of their program’s foundation and specialization courses.

Specialization in Counseling (M.A.)

The specialization in Counseling is geared towards the formation of outstanding professionals who will be able to serve efficiently in organizations, corporations, institutions, government agencies, educational institutions or in dealings with the public in general.

This Program has the following goals:

1. To respond to the need of preparing counselors who master the required professional competencies.
2. To equip graduates with the skills required for intervening with different groups and problems encountered in contemporary society.
3. To develop counselors committed to their profession and to their personal and professional growth.

In addition to meeting the admission requirements for Master Degree studies established by the University, candidates for admission to the Master of Arts in Education with a Specialization in counseling program must satisfy the following requirements:

1. A course in statistics.
2. A Bachelor's Degree in Education or a Bachelor's Degree and at least six (6) credits in Foundations of Education.
3. A course in psychology.
4. An interview with an Admissions Committee composed of at least two fulltime faculty members.

The Arecibo, Metropolitan and San Germán campuses are authorized to offer this Specialization.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATION WITH A SPECIALIZATION IN COUNSELING

Foundation Requirements		9 credits
Specialization Requirements		27 credits
Elective Courses		<u>3 credits</u>
	Total	*39-42

Foundation Requirements - 9 credits

EDUC	5035	Values and Perspectives in Contemporary Education	3
EDUC	5047	Psycho-Social Foundations of Education	3
EDUC	6931	Research or Application Project In The Area Of Specialization I	3

Specialization Requirements - 27 credits

EDUC	5370	Principles of Counseling	3
EDUC	6220	Developmental Process	3
EDUC	6400	Student Assessment	3
EDUC	6420	Life and Career Development	3
EDUC	6451	Theories of Counseling	3
EDUC	6452	Individual Counseling Skills	3
EDUC	6470	Group Counseling Skills	3
EDUC	6472	Theory of Family and Couple Counseling	3
EDUC	6911	Practicum	3

*Students that take the course EDUC 697A (Integration Seminar) to meet the requirements of the Comprehensive Examinations and Other Options for Masters' Programs established in this Catalog will take a total of 42 credits.

Students having two or more years experience as professional counselors must present evidence to be evaluated for exemption from the Practicum. If exempted, they will take three (3) graduate credits of their choice.

Specialization in Educational Management and Leadership (M.A.)

The specialization in Management and Instructional Leadership aims to form excellent professionals in the field of administration of educational programs. This specialization contributes to the development of educational managers and leaders who demonstrate mastery in the solution of problems inherent to the contemporary professional environment at the different teaching levels. This specialization focuses on the study of theoretical foundations, the use and promotion of scientific research, the integration of technology to practice, the application of the highest ethical principles of the profession and participation in practical experiences in teaching scenarios.

Profile of the Competencies of Graduates

This Program is designed to develop the competencies that will permit students to:

Knowledge

1. Know useful strategies that contribute to improve the management of the fiscal, administrative and human resources operations of the teaching scenario.
2. Know the principles of educational management considering the social changes, recent laws, the rules, the regulations, and the current educational-labor jurisprudence.
3. Know the due process of law applicable to the educational scenarios.

Skills

1. Design plans based on principalship that contributes to the professional development of teaching and non-teaching personnel.
2. Develop teaching environments of quality and excellence for the development of innovating teaching strategies, with a scientific and inclusive base to attend to the diversity of learning styles and needs of the students.
3. Use the information and communications technologies (ICT's) as a means to improve the educational, instructional, administrative and fiscal processes of educational scenarios.
4. Make administrative-participative decisions considering the opinions and suggestions of the parents, students and the teaching personnel in the instructional processes.
5. Apply the scientific method to solve problems inherent to management and educational leadership, and to the teaching strategies.

Attitudes

1. Respect the ethical and moral values related to the good administration of the institution's fiscal, human, technological, and educational management.
2. Promote collaborative environments that contribute to the development of learning communities.
3. Appreciate the development of innovating activities that contribute to the achievement of the educational philosophy, vision, goals, and the objectives of the institution.

In addition to meeting the admission requirements for Master Degree studies established in this Catalog, candidates for admission to this Program must satisfy the following requirements:

1. Bachelor's Degree in Education or a Bachelor's Degree and Teacher Certification or
2. A Bachelor's Degree, three credits in Teaching Methodology and six (6) additional credits in Education
3. Three (3) credits in statistics are also required.

The Aguadilla, Arecibo, Barranquitas, Fajardo, Metropolitan and San Germán campuses are authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATION IN EDUCATIONAL MANAGEMENT AND LEADERSHIP

Foundation Requirements		9 credits
Specialization Requirements		<u>27</u> credits
	Total	36

Foundation Requirements - 9 credits

EDUC	6931	Research or Application Project In The Area Of Specialization I or	
EDUC	5111	Educational Research I	3
EDUC	6004	Information Systems in Educational management	3

EDUC	6058	Legal Foundations of Education	3
------	------	--------------------------------	---

Specialization Requirements - 27 credits

EDUC	6000	Human Resources Management and Labor Relations in Educational Scenarios	3
EDUC	6001	Fiscal Management	3
EDUC	6013	Organizational Behavior in Educational Institutions	3
EDUC	6046	Curriculum Development	3
EDUC	6057	Teaching Models and Strategies	3
EDUC	6079	Instructional Leadership	3
EDUC	6380	Administration of Special Education Programs	3
EDUC	6915	Practice in Management and Educational Leadership	3

Requirements for completing the degree

EDUC	697D	Integration Seminar	3
------	------	---------------------	---

Specialization in Physical Education (M.A.)

The Master of Arts Program in Education with a specialization in Physical Education enables the student to study the complexities of movement of the human body in its diverse manifestations. Graduates will be able to design, to implement and evaluate programs that promote active and healthy life styles in the context of formal as well as in informal education. The courses of this Program promote research and the integration of technology related to the field. Two subspecializations are offered: Teaching Physical Education and Sports Training and Performance. The subspecialization in Teaching Physical Education is oriented towards excellence in the preparation of effective professionals at the graduate level that have a formation in research, the design and implementation of the teaching and learning process in physical education. The subspecialization in Sports Training and Performance is directed to the development of physical training and sports programs in schools, sports and recreation.

In addition to meeting the master studies admission requirements established by Inter American University, candidates desiring to enter this Program must comply with the following requirements: A Bachelor’s Degree in Physical Education, health or related areas and a course in statistics for both subspecializations: Teaching of Physical Education and Sport Training and Performance.

Profile of the Competencies of Graduates

The subspecialization in Teaching of Physical Education is designed to develop the competencies that will allow students to:

Knowledge:

1. Know the concepts, terms and epistemological principles related to the processes of teaching and learning.
2. Identify the general standards for physical education of the Physical Education Program assigned to the Department of Education of Puerto Rico, the national standards NASPE and their application in the planning and development of learning experiences.
3. Know the philosophical, conceptual and theoretical framework that undergirds the Physical Education Program assigned to the Department of Education of Puerto Rico and to apply it to the design and implementation of educational programs.
4. Demonstrate knowledge of models and theories applicable to the design of curriculum in Physical Education.
5. Identify appropriate methods of evaluation and assessment to evidence the students’ psychomotor, affective and cognitive skills.

Skills:

1. Evaluate Public Policy documents established by the State and National educational agencies and to propose changes in harmony with current needs.
2. Use different methods of evaluation and assessment to identify students’ needs in the development of cognitive capacities.

3. Apply different models, methods and teaching techniques in educational scenarios that respond to the cognitive needs.
4. Use theoretical knowledge in the revision of Physical Education programs.
5. Use models for the development of the curriculum in the physical education that respond to the social, psychological and physical needs.
6. Put the scientific method into practice for the analysis, understanding and development of educational projects that benefit the quality from life of human beings.

Attitudes:

1. Appreciate the advance of the communication technologies and their impact in the dissemination of scientific and nonscientist information.
2. Foment the modeling and the clarification of universal values that promote physical education and sports.
3. Model a practice as a health professional framed in principles of respect and esteem for the study of physical education.

The subspecialization in Training and Sport Performance is designed to develop the competencies that will allow the student to:

Knowledge:

1. Know the concepts, terms and epistemological principles related to the function and movement of the human body.
2. Identify the trends of the discipline and their application in the planning and development of sport training programs.
3. Know the main current declarations of the American Sport Medicine School and apply them to the design and implementation of sport training programs.
4. Demonstrate knowledge of the laws, models and theories applicable to the development of the physical activity and physical exercise in different athletic populations.
5. Identify appropriate methods of evaluation and assessment to evidence athletic performance.
6. Recognize indicators of over training and its impact in sport performance.

Skills:

1. Evaluate of Public Policy documents established by the State and National sport and recreational agencies and propose changes in harmony with the current needs.
2. Use different methods of evaluation and assessment to identify needs in the development of the athlete's physical capacities.
3. Apply different models and sport methods of training that respond to the needs of the athlete.
4. Apply different models of prevention and techniques for the rehabilitation of athletic injuries.
5. Use theoretical knowledge in the revision of sport training programs.
6. Use models for the development of physical training programs that respond to the social, psychological and physical needs.
7. Put the scientific method into practice for the analysis, understanding and development of functional aspects of the human body in physical exercise.

Attitudes:

1. Recognize the advance of communication technologies and their impact in the dissemination of scientific and nonscientist information.
2. Foment the modeling, clarification and practice of universal values that promote health, the integral well-being and the quality of life.
3. Model a practice as a health a professional framed in the principles of respect and esteem for the study of the sport training.

The San Germán Campus is authorized to offer the Masters of Arts Program in Physical Education with both subspecializations.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATION WITH SPECIALIZATION IN PHYSICAL EDUCATION

Core Course Requirements in Education	9 credits
Core Course Requirements in Physical Education	9 credits
Subspecialization Requirements	12 credits
Elective Courses	<u>6 credits</u>
Total	36

Core Course Requirements in Education - 9 credits

EDUC	5111	Educational Research I	3
------	------	------------------------	---

Six (6) credits from the following orientations:

Sociological

EDUC	5035	Philosophical Values and Perspectives in Contemporary Education	3
EDUC	5046	The Individual, the Society and Education	3
EDUC	5068	Western World Education	3

Core Course Requirements in Physical Education - 9 credits

HPER	5000	Selected Bibliography in Physical Education	3
HPER	6440	Motor Learning	3
HPER	6910	Practicum	3

Subspecializations

Students will select one of the following subspecializations:

Subspecialization in Teaching of Physical Education

Requirements in the Subspecialization Teaching of Physical Education - 12 credits

HPER	5040	Curriculum Development in Physical Education	3
HPER	5050	Evaluation, Assessment and Measurements in Physical Education	3
HPER	5070	Models and Strategies for Teaching Physical Education	3
HPER	6010	Supervision of Physical Education	3

Subspecialization in Sports Training and Performance

Requirements in the Subspecialization Sports Training and Performance - 12 credits

HPER	5300	Sports Psychology	3
HPER	6030	Prevention and Rehabilitation of Athletic Injuries	3
HPER	6100	Training Theory and Scientific Methodology of Sports Training	3
HPER	6110	Physiology of Sports	3

Thesis Option

Students may substitute a thesis for six (6) elective credits. In such cases, they must take:

EDUC	6900	Thesis Seminar	3
EDUC	6990	Thesis	3

Specialization in Special Education (M.A.)

The Program leading to the Master of Arts Degree in Special Education prepares teachers to work with exceptional students. The goals of the Program are: prepare special education teachers who perform with excellence in the teaching of exceptional students; who know and make good use of the theories, principles, concepts and norms that govern the educational processes, prepare teachers with the necessary competencies for scientific research, design of creative and innovating projects and use of technology in the educational processes, train special education teachers with leadership who contribute in a proactive way to accomplish significant changes in the teaching of exceptional students.

In addition to meeting the admission requirements for Master Degree studies established in this Catalog, candidates for admission to this Program must satisfy the following specialization requirements:

1. A course in statistics
2. Bachelor's Degree in Special Education
3. Bachelor's Degree and three (3) credits in Special Education in each of the following fields:
 - a. Evaluation and Diagnosis
 - b. Teaching Methods
 - c. Introduction to Special Education*
4. Interview with an admissions committee of the faculty of Special Education composed of at least two full-time professors.

*Does not apply to students who have a Bachelor's Degree in Special Education.

The Arecibo, Barranquitas, Fajardo, Metropolitan, Ponce and San Germán campuses are authorized to offer this Specialization.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN SPECIAL EDUCATION

Foundation Course Requirements	12 credits
Core Course Requirements	18 credits
Prescribed Distributive Requirements	<u>9</u> credits
Total	39

Foundation Course Requirements - 12 credits

EDUC	5024	Psychological Foundations of Education	3
		or	
EDUC	5047	Psychosocial Foundations of Education	3
EDUC	5111	Educational Research I	3
EDUC	6220	Human Development Processes	3
EDUC	6340	Speech Development and Disorders	3

Core Courses Requirements - 18 credits

EDUC	6066	Technological Aid in the Teaching of Exceptional Students	3
EDUC	6240	Techniques of Behavior Analysis	3
EDUC	6270	Evaluation and Design of Teaching for Exceptional Students	3
EDUC	6300	Teaching Reading and Writing to Exceptional Students	3
EDUC	6320	Teaching Mathematics to Exceptional Students	3
EDUC	6850	Seminar in Special Education	3

Prescribed Distributive Requirements - 9 credits

Select 9 credits from the following courses:

*EDUC	5740	Education of Exceptional Students	3
EDUC	6043	The Student with Mental Retardation	3
EDUC	6044	Students with Specific Learning Problems	3
EDUC	6045	Students with Superior Intelligence and Talents	3
EDUC	6047	Nature and Needs of Handicapped Infants and Preschool Children	3
EDUC	6048	Evaluation and Programming for Handicapped Preschool Children	3
EDUC	6049	Students with Severe Behavior Disorders	3
EDUC	6058	Legal Foundations of Education	3
EDUC	6380	Administration of Special Education Programs	3
**EDUC	6910	Teaching Practice	3
EDUC	697_	Integration Seminar	3

Thesis option

Students may substitute a thesis for the nine (9) credits of the Prescribed Distributive Courses. For the thesis option, students must take the following courses:

EDUC	6900	Thesis Seminar	3
EDUC	6990	Thesis	3

*Applies only to students who do not have a bachelor's degree in Special Education.

** Applies only to students who do not have an approved Practice Teaching in Special Education

Specialization in the Teaching of Mathematics (M.A.)

The specialization in the Teaching of Mathematics aims to strengthen and expand the teachers' mathematical knowledge and skills and to develop in them a positive attitude towards the teaching of this subject. In addition, this program has the purpose of developing a positive attitude towards the teaching of mathematics in the teachers. These goals are expected to be attained through a curriculum that incorporates different methodological approaches to course content. These will include cooperative learning, exploration activities and the appropriate use of technology.

Admission Requirements

In addition to completing the master studies admission requirements established by Inter American University, the candidate desiring to enter this Program must one of the following options:

1. Possess a Bachelor of Arts Degree in Education with a Specialization en Mathematics and have taken a course in Discrete Mathematics or its equivalent.
2. Possess a Bachelor's Degree; have taken a minimum of six credits in Foundations in Education and the following courses or their equivalent: Statistics, Discrete Mathematics Precalculus and Calculus.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATION IN THE TEACHING OF MATHEMATICS

Foundation Requirements	6 credits
Specialization Requirements	24 credits
Elective Courses	<u>6</u> credits
Total	*39

Foundation Requirements - 6 credits

EDUC	5111	Educational Research I	3
------	------	------------------------	---

Select one course from the following:

EDUC	5024	Psychological Foundations	3
EDUC	5035	Philosophical Values and Perspectives in Contemporary Education	3
EDUC	5046	The Individual, the Society and Education	3

Specialization Requirements - 24 credits

EDUC	5105	Use of Technology in Teaching Mathematics	3
EDUC	5133	Statistics	3
EDUC	6024	Educational Measurement and Evaluation	3
EDUC	6310	Methodology in Teaching Mathematics	3
MATH	5100	Intermediate Calculus	3
MATH	5400	Probability	3
MATH	5800	Topics in Abstract Algebra	3
MATH	6100	Introduction to Real Analysis	3

Elective Course Requirements - 6 credits

The following elective courses are suggested:

EDUC	6044	Students with Specific Learning Problems	3
EDUC	6045	Students with Superior Intelligence and Talents	3
EDUC	6320	Teaching Mathematics to Exceptional Students	3
EDUC	6046	Curriculum Development	3
MATH	5500	Advanced Discrete Mathematics	3
MATH	6100	Introduction to Real Analysis	3
MATH	6400	Advanced Mathematical Statistics	3

*As a graduation requirement, students must take the course EDUC 697A Integration Seminar (3 credits), once they have passed the Foundation and Specialization requirements. Students will thus complete a total of 39 credits.

Specialization in the Teaching of Science (M.A.)

The purpose of the Teaching of Science specialization is to refine the teaching skills of teachers and school supervisors through educational experiences that will expand their knowledge of the teaching-learning processes in sciences. It is also hoped that the graduates from this Program will make a significant contribution to the educational system through curricular revisions and teaching innovations aimed at excellence in the scientific education area. It also aspires to increase interest in the study of sciences at all levels.

In addition to completing the master studies admission requirements established by Inter American University, the candidate desiring to enter this Program must meet the following requirements:

1. A course in statistics.
2. One of the following options:
 - a. A Bachelor's Degree of Arts in Education with a Specialization in the Natural Sciences.
 - b. Science Teacher Certification.
 - c. A Bachelor's Degree of Science with a Specialization in Biological or Physical Sciences, six (6) credits in Foundations of Education and three (3) credits in Teaching Methods in the Natural Sciences.

The San Germán Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATION IN THE TEACHING OF SCIENCE

Specialization Requirements	27 credits
Prescribed Distributive Requirements	<u>12</u> credits

Specialization Requirements - 27 credits

EDUC	5000	Geography for Teachers	3
EDUC	5009	Chemistry for Teachers	3
EDUC	5011	Physics I for Teachers	3
EDUC	5015	Biology for Teachers	3
EDUC	5100	The Computer in the Teaching of Science	3
EDUC	5111	Educational Research I	3
EDUC	6024	Educational Measurement and Evaluation	3
EDUC	6046	Curriculum Development	3
EDUC	6057	Teaching Models and Strategies	3

Prescribed Distributive Requirements - 12 credits

A. Six (6) credits from the following courses:

EDUC	5013	Sociological Foundations	3
EDUC	5024	Psychological Foundations	3
EDUC	5035	Philosophical Values and Perspectives in Contemporary Education	3
EDUC	5046	The Individual, the Society and Education	3
EDUC	5057	Comparative Education	3
EDUC	5068	Western World Education	3
EDUC	5133	Statistics	3
EDUC	6013	Organizational Behavior in Educational Institutions	3
EDUC	6079	Instructional Leadership	3

B. Six (6) credits from the following courses:

EDUC	5003	Ecology for Teachers	3
EDUC	5012	Physics II for Teachers	3
CHEM	5013	Theory and Mechanisms in Organic Chemistry	3
BIOL	5017	Biochemistry and Cellular Physiology	3
BIOL	5019	History and Philosophy of Science	3

Thesis Option

Students opting for the preparation and defense of a thesis will take six (6) credits from the Prescribed Distributive Requirements; three (3) credits from section A and three (3) from section B.

In addition, they will take the following courses:

EDUC	6900	Thesis Seminar	3
EDUC	6990	Thesis	3

Master in Education in Curriculum and Teaching (M.Ed.)

The Master in Education Degree in Curriculum and Teaching is a program for curriculum development designed for graduates of Programs of Teaching, Arts and Sciences of Postsecondary Institutions of Puerto Rico, desiring to complete a program based on the study, analysis, reflection and application of current technical theories. The Program integrates technology into the teaching and learning processes, online learning and the search for information.

The Program is designed to develop leaders in curriculum and teaching through competencies based on research, analysis and evaluation of problems that lead to school curriculum reformulation. The Program will offer the student an ample and critical view of the curricular component of an educational system and a basic understanding of its problems. In addition, it will give attention to the needs of professionals in teaching by providing skills and knowledge not contemplated at the undergraduate level, in their area of specialization. These areas include Biology, Chemistry, English as a Second Language, History, Mathematics, and Spanish

The Program is based on a practical approach, adapting and applying its requirements to the development of a project that will have an impact on the school curriculum within the selected specialization. The Program presents integrated experiences to direct the attention of participants to important educational issues that simultaneously contribute to the improvement of the school community. The Program will give attention to and reflect on ethical, moral and religious principles.

In addition to meeting the admission requirements for master degree established in this Catalog, candidates wishing to enter this Program must meet the following requirements:

1. Have passed a course in statistics (3 credits).
2. Meet one of the following options:
 - a. Have a Baccalaureate in Arts in Education with specialization in one of those offered in this Program.
 - b. Have a Bachelor’s Degree in Science in Secondary Education with specialization in one of those offered in this Program.
 - c. To have a Baccalaureate in Arts with specialization in one of the offered subjects.
 - d. Have a Baccalaureate in Science with a major in Biology, Chemistry, Mathematics or Health Sciences.
 - e. Have a Baccalaureate in Arts or Science and have a Teaching Certificate from the Puerto Rico Department of Education to teach the specialty they are requesting.
3. Be interviewed by an admissions committee composed of at least two full time professors, and be recommended favorably by it.

The Arecibo Campus is authorized to offer the specializations in Spanish, English as a Second Language, Mathematics, and Biology.

The Barranquitas Campus is authorized to offer the specializations in Biology, English as a Second Language, History and Spanish

The Ponce Campus is authorized to offer all of the specializations through classroom learning. It is also authorized to offer the Biology, English as a Second Language, History, Mathematics and Spanish specializations through online learning.

REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE IN CURRICULUM AND TEACHING IN BIOLOGY, CHEMISTRY, ENGLISH AS A SECOND LANGUAGE, HISTORY, MATHEMATICS, AND SPANISH

Core Course Requirements in Education		9 credits
Specialization Requirements in Curriculum and Teaching		15 credits
Specialization Requirements (Subjects)		<u>15</u> credits
	Total	39

Core Course Requirements in Education - 9 credits

EDUC	5047	Psychosocial Foundations of Education	3
EDUC	6580	Computers in Teaching	3
EDUC	6931	Research or Application Project in the Area of Specialization I	3

Requirements in Curriculum and Teaching - 15 credits

EDUC	6024	Educational Measurements and Evaluation	3
EDUC	6046	Curriculum Development	3
EDUC	6056	Curriculum Evaluation	3
EDUC	6057	Teaching Models and Strategies	3

Student will select one course from the following

EDUC	6932	Research or Application Project in the Area of Specialization II	3
		or	
EDUC	697_	Integration Seminar	3
		or	
		An elective course in the Specialization at the 5000 or major level (in case the option of Comprehensive Examination is selected)	3

Students of the Masters Program in Curriculum and Teaching may choose among three options to fulfill the requirements of their academic degree:

1. Continue with the completion of a research project or of the application in the specialization area (EDUC 6932).
2. Take the course Integration Seminar (EDUC 697-).
3. Take a three credit elective course at the 5000 or major level in the Specialization if they decide on the Comprehensive Examination.

Graduation Requirements

In order to meet the institutional graduation requirements for the Masters Program in Curriculum and Teaching, students must satisfy one of the following options:

EDUC	6932	Research or Application Project in the area of Specialization II
		or
EDUC	697_	Integration Seminar
		or
		A Comprehensive Examination and an elective three credit course in the Specialization at the 5000 level or above

Specialization in Biology (M.Ed.)

Specialization Requirements in Biology - 15 credits from the following courses

BIOL	6904	Cellular Biology	3
BIOL	6905	Molecular Biology	3
BIOL	6906	Human Physiology	3
BIOL	6907	Immunology	3
BIOL	6908	Marine Biology	3
BIOL	6909	Biogeography	3
BIOL	6910	Environmental Science	3

Specialization in Chemistry (M.Ed.)

Specialization Requirements in Chemistry - 15 credits

Required courses - 9 credits

CHEM	6904	Advanced Inorganic Chemistry	3
CHEM	6905	Instrumental Methods for Chemical Analysis	3
CHEM	6906	Organic Reaction Mechanisms	3

Students will take 6 credits from the following courses:

CHEM	6907	Thermodynamic Chemistry	3
CHEM	6908	Environmental Chemistry	3
CHEM	6909	Industrial Chemical Hygiene	3
CHEM	6910	Biochemistry and Molecular Biology	3
CHEM	—	Special Topics	3

Specialization in English as Second Language (M.Ed.)

Specialization Requirements in English as Second Language - 15 credits from the following courses

ENGL	6904	Applied Linguistic in the Teaching of English as a Second Language	3
ENGL	6905	Second Language Acquisition and Sociocultural Analysis	3
ENGL	6906	Fundamentals of the Teaching of English as a Second Language: Theory, Practice and Assessment	3
ENGL	6907	Advanced Research and Techniques in Reading, Instruction and Assessment	3
ENGL	6908	Advanced Research and Techniques in Writing, Instruction and Assessment	3
ENGL	6909	Literary Critique: Analysis, Techniques and Assessment	3

Specialization in History (M.Ed.)

Specialization Requirements in History - 15 credits from the following courses

HIST	6904	Analysis and Development of Historical Thought I	3
HIST	6905	Analysis and Development of Historical Thought II	3
HIST	6906	Historical Context of the Western World	3
HIST	6907	Historical Context of Contemporary Puerto Rico	3
HIST	6908	Historical Context of the United States	3
HIST	6909	Historical Context of Latin America	3

Specialization in Mathematics (M.Ed.)

Specialization Requirements in Mathematics - 15 credits

Required Course – 3 credits

MATH	6909	Problems Solving	3
------	------	------------------	---

Students will select 12 credits from the following courses:

MATH	6904	Advanced Algebra	3
MATH	6905	Modern Geometry	3
MATH	6906	Real Number Analysis	3
MATH	6907	Probability and Statistics	3
MATH	6908	Discrete Mathematics	3
MATH	6910	History of Mathematics	3
MATH	6911	Analytical Geometry	3
MATH	—	Special Topics	3

Specialization in Spanish (M.Ed.)

Specialization Requirements in Spanish - 15 credits from the following courses

SPAN	6904	Importance and Pertinence of Applied Linguistics in the Study of the Spanish Language in Puerto Rico	3
------	------	---	---

SPAN	6905	Application of Advanced Grammar in Modern Composition	3
SPAN	6906	Critical View of Puerto Rican Literature: 20th Century to the Present	3
SPAN	6907	Important Figures in Contemporary Spanish-American Literature	3
SPAN	6908	New Approaches to the Teaching of Spanish	3
SPAN	6909	Study and Application of Reading and Writing as Teaching Tools	3
SPAN	6910	Trajectory and Evolution of the Concept of Identity in Puerto Rican Poetry of the 20th Century	3
SPAN	___	Special Topics	3

Masters in Education (M.Ed.)

Specialization in Bilingual Education (M.ED.)

The Master of Education degree with specialization in Bilingual Education aims to prepare professionals with the theoretical and practical knowledge of bilingual education. The professionals will stand out for their understanding of the socio-cultural aspects, the linguistic, psycholinguistic and sociolinguistics theories of bilingual education, and the teaching methodology.

The Aguadilla Campus is authorized to offer this Program.

Admission Requirements

Persons seeking admission to the Master of Education Program with a specialization in Bilingual Education must meet the admission requirements established in the section “Admission Requirements for Masters Programs” in effect at the time of their admission. In addition, they must meet the following conditions:

- a) Have as a minimum a bachelor’s degree in education from a properly accredited institution.
- b) Persons who have completed a bachelor’s degree in another field with a minimum academic index of 3.00 in their major will be considered for admission to the program after passing the courses indicated below at the baccalaureate level (or their equivalents) with a minimum grade of B:

EDUC 2032 Learning Psychology
EDUC 3013 Teaching Strategies
EDUC 4011 Evaluation and Assessment
EDUC 4050 Curriculum Design

- c) Demonstrate mastery of the competencies in English and Spanish, by means of the approval of an examination to be administered by the Institution, as applicable.
- d) Have taken one of the following tests: Graduate Record Examination (GRE) or Examen de Admisión a Estudios de Postgrado (EXADEP).

Graduation Requirements

In order to obtain the Master of Education Degree in Bilingual Education students must have approved the following 36 credit requirements with a minimum grade point index of 3.00.

Academic Requirements.-.36 credits

BLED	5020	Sociocultural Aspects in Bilingual Teaching	3
BLED	5030	Instructional Content in Bilingual Programs	3
BLED	5040	Materials and Technology in the Bilingual Classroom	3
BLED	6020	Methods of Bilingual Teaching at the Elementary Level or	
BLED	6030	Methods of Bilingual Teaching at the Secondary Level	3
BLED	6040	Contemporary Topics in Bilingual Education	3

BLED	6510	Assessment in a Bilingual Educational Scenario	3
ENGL	6100	Theories and Principles of TESL	3
ENGL	6130	Fundamentals of Bilingual Education	3
ENGL	6530	Research Methods	3
ENGL	6904	Applied Linguistics in the Teaching of English as a Second Language	3
EDUC	6046	Curriculum Development	3
EDUC	697A	Integration Seminar	3

Specialization in Interdisciplinary Special Education (M.Ed.)

The specialization in Interdisciplinary Special Education aspires to develop a professional in special education properly endowed with the knowledge, necessary skills and attitudes so that he can: (a) provide interdisciplinary services to the student population with and without disabilities from childhood to high school; (b) become involved effectively with the families of the student population with and without disabilities; (c) offer educational services in inclusive classrooms, in other natural environments and in special classrooms.

Admission Requirements for the Master of Education with Specialization in Interdisciplinary Special Education Program

To enroll in the Master of Education with Specialization in Interdisciplinary Special Education Program students must:

- Have a Baccalaureate in Special Education or Special Pre-school Education. The student who has a Baccalaureate of Education in another discipline must approve 9 credits in Special Education.
- Or have a Baccalaureate in health related areas, psychology or social work and have approved the courses established in the Teacher Certification Law.
- Take the EXADEP.
- Have a general average of 2.50 or more.
- Have approved 3 credits in basic statistics with a minimum grade of C.

The Guayama Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE IN INTERDISCIPLINARY SPECIAL EDUCATION

Specialization Requirements	30 credits
Prescribed Distributive Requirements	<u>9</u> credits
Total	39

Specialization Requirements - 30 credits

EDUC	5740	Education of Exceptional Students	3
EDUC	6053	Interventions with Families in Inclusive Environments	3
EDUC	6054	Assessment in Interdisciplinary Special Education	3
EDUC	6059	Design and Development of Interdisciplinary Special Curricula	3
EDUC	6060	Teaching, Methods of Intervention and Materials for Special Students	3
EDUC	6066	Technological Assistance in the Teaching of Students with Disabilities	3
EDUC	6340	Speech Development and Disorders	3
EDUC	691A	Internship in Interdisciplinary Special Education	3
EDUC	6931	Research or Application Project in the Area of Specialization I	3
EDUC	6932	Research or Application Project in the Area of Specialization II	3

Prescribed Distributive Requirements - 9 credits

Nine credits from the following courses:

EDUC	6043	The Student with Mental Retardation	3
EDUC	6044	Students with Specific Learning Problems	3
EDUC	6047	Nature and Needs of Special Infants and Pre-school Children	3
EDUC	6048	Evaluation and Programming for Infants and Pre-school Children with Handicaps	3
EDUC	6050	Current Issues in Interdisciplinary Special Education	3
EDUC	6055	Seminar in Interdisciplinary Special Education	3
EDUC	6240	Techniques of Behavior Analysis	3
EDUC	6300	Teaching Reading and Writing to Exceptional Students	3
EDUC	6320	Teaching Mathematics to Exceptional Students	3

Masters of Education (M.Ed.)

Specialization in Teaching at the Elementary Level (M.Ed.)

The Masters in Education in Teaching at the Elementary Level Program has as its goal to provide students an excellent preparation in content, theories and current educational methodologies in teaching at the elementary level as well as the foundations and techniques of educational research to develop a professional who contributes in an integral and competent way to teaching with an ethical, social and cultural formation.

The Masters in Education in Teaching at the Elementary Level Program aims to develop a professional who can offer quality services. Its purpose is to provide an excellent preparation for professionals who are going to be or are teachers at the elementary level. This Program is directed to those graduates from Education, Arts and Sciences Programs from accredited universities that wish to complete a program based on the study, analysis, reflection, investigation and application of current educational theories to teaching at the elementary level. In addition, the Program integrates technology in the teaching-learning process, online learning, and in the search for information.

The Program also aims to form and develop leaders of excellence in teaching at the elementary level through competencies based on analysis, research and the evaluation of strategies and curriculum. In addition, it permits students to develop a broad and critical vision of the elementary level curricular component and an understanding with an interdisciplinary approach to its merits and difficulties by taking core courses in fundamental teaching areas such as Spanish, mathematics, sciences, and social studies. The Program also offers a selection of novel and attractive courses aimed at complementing students' education, according to their needs and interest: English as a Second Language, topics of Children's Literature, creativity and corporal movement, topics on health, environmental conservation, and computers in education, among others.

The Program is based on a constructivist and pragmatic approach by requiring the implementation of projects that add, develop or expand the knowledge of elementary level teaching, with emphasis on the development of teaching methods, strategies and materials. This results in a variety of integrated and integral experiences directed to foment reflection, research and analysis on important matters in elementary education and that, simultaneously, contribute in a creative manner to the improvement of learning in the classroom. The Program deals with, by means of reflection and application, the ethical principles characteristic of a professional in elementary education as an agent of change, a leader in the school and in the school community.

Goals of the Masters Program

- Provide students with an excellent preparation in the curricular content and in teaching at the elementary level
- Evaluate the foundations and techniques of educational research so that they may contribute, in an integral and competent way, to the professional, ethical, social, cultural and evaluative tasks of the teaching profession.

Objectives of the Masters Program:

1. Develop students' skills in critical and creative thought and in decision making in the, as well as in technology, research and in the assessment process and its application in the classroom.
2. Apply significant experiences and current methodologies that will permit students to effectively develop in their teaching competency.

3. Apply ethical values and principles to their teaching.
4. Evaluate the competencies of the students in the different subjects taught at the elementary level.

Profile of the Competencies of Graduates

This Program is designed to develop the competencies that will allow students to:

Knowledge

1. Know the foundations of teaching at the elementary level.
2. Know the subject matter of the elementary level curriculum.
3. Know about evaluation and assessment in the classroom.
4. Know the different developmental stages of human beings and how these affect the capacity to learn.

Skills

1. Apply the use of the research process in the classroom.
2. Use processes of design and evaluation of the curriculum to attain the educational goals.
3. Integrate technology in the field of education.
4. Apply the use of the critical and creative thought in the teaching performance.

Attitudes

1. Show ethical, social, cultural and value-based principles of teaching.
2. Promote favorable changes in society through solutions or alternatives that will improve the quality of teaching at the elementary level.
3. Posses tools for assertive decision making by means of the application of values.

General Admission Requirements

According to those established in the current Graduate Catalog.

Admission Requirements for the Program

Have a Bachelor of Education degree or of another major with a minimum grade point index of 2.50.

Graduation Requirements

Students will graduate in agreement with the Masters Program requirements and the norms established in the applicable Graduate Catalog. In addition, students must pass 36 credits of the Masters Program with a minimum general grade index of 3.00. By passing course EDUC 6932, students will comply with Section “Institutional Graduation Requirements for Master’s Programs” of this Catalog.

The Aguadilla, Arecibo, Barranquitas, Fajardo, Guayama, Metropolitan, Ponce, and San Germán campuses are authorized to offer this Masters Program.

REQUIREMENTS FOR THE MASTERS OF EDUCATION DEGREE WITH A SPECIALIZATION IN TEACHING AT THE ELEMENTARY LEVEL

Specialization Requirements		33 credits
Prescribed Distributive Requirements		<u>3</u> credits
	Total	36

Specialization Requirements - 33 credits

EDUC	5045	Family, School, Community and Ethical-Moral Awareness	3
EDUC	5114	Curriculum and Teaching of Social Studies at the Elementary Level	3
EDUC	5115	Curriculum and Teaching of Science at the Elementary Level	3

EDUC	5116	Curriculum and Teaching of Spanish at the Elementary Level	3
EDUC	5117	Curriculum and Teaching of Mathematics at the Elementary Level	3
EDUC	5120	Statistics Applied to the Field of Education	3
EDUC	5122	Critical Analysis of Children's Literature at the Elementary Level	3
EDUC	6024	Educational Evaluation and Measurements	3
EDUC	6580	Integration of Technology in Instructional Design	3
EDUC	6931	Research or Application Project in the Area of Specialization I	3
EDUC	6932	Research or Application Project in the Area of Specialization II	3

Prescribed Distributive Requirements - 9 credits

Three (3) credits selected from the following courses:

EDUC	5047	Psycho-Social Foundations of Education	3
EDUC	5125	The Fine Arts and Corporal Expression in Teaching at the Elementary Level	3
EDUC	597_	Special Topics in Elementary Education	3
EDUC	6046	Curriculum Development	3
EDUC	6050	Current Issues in Interdisciplinary Special Education	3
EDUC	6933	Continuation of the Preparation of the Research or Application Project	3

Specialization in Information Technology and Library Services (M.Ed.)

The Masters of Education Degree with a Specialization in Information Technology and Library Services has as its mission the preparation of librarian teachers that can offer information services giving emphasis to the new technologies, to meet the needs and interests of students, teachers and other members of the community. In addition, it aims to have this professional evaluate, select and use information technology as a means to support and improve educational services, and therefore, the quality of the teaching and learning processes.

Profile of the Competencies of Graduates

This program is designed to develop the competencies that will permit students to:

Know and Understand:

1. The theoretical and philosophical frame of library science and information science.
2. Its history, the terminology, literature, the associations, the education and the challenges of the profession.
3. The role of the library as the research and information center.
4. The library resources including the printed and not printed materials available in school libraries.
5. The information and reference services with emphasis on the appropriate resources for the users of school libraries.
6. The models of curricular design and their implications in education.

Skills

1. Design studies to diagnose the information needs of your school community.
2. Produce programs for skills in information and computer literacy destined for the different types of users.
3. Evaluate the computer applications and products used in the process of selection of printed and electronic resources.
4. Evaluate the general, printed and digital bibliographical resources.
5. Apply the teaching and learning models for the development of the skills in information and computer literacy by disciplines and levels.
6. Integrate the information and computer literacy skills in the teaching and learning processes.
7. Categorize the general, printed and electronic reference sources.
8. Apply the techniques of assessment in the teaching of information and computer literacy skills.

9. Apply the policies and the programs that stimulate the use of informative resources and strengthen the information infrastructure.

Attitudes

1. Demonstrate a critical attitude towards the information originating from different sources.
2. Recognize the importance of objectivity in information management.
3. Show interest for the contribution of informative resources to the field of research.

Admission Requirements

In addition to fulfilling the entrance requirements for master's degree programs as established in the section "Admission Requirements for Masters' Programs" of this Catalog, the following admission requirements for the Master's program in Information Technology and Library Services are established:

1. Have approved one course in statistics
2. Have a bachelor's degree and a regular teaching certificate, if the candidate is interested in the certificate as a library teacher that is granted by the Puerto Rico Department of Education.
or
Have a bachelor's degree, if the candidate is not interested in certification by the Puerto Rico Department of Education.

The Barranquitas Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTERS OF EDUCATION DEGREE WITH SPECIALIZATION IN INFORMATION TECHNOLOGY AND LIBRARY SERVICES

Core Course Requirements	9 credits
Specialization Requirements	27 credits
Elective Courses	<u>3 credits</u>
Total	36

Core Course Requirements - 9 credits

EDUC	6046	Psycho-social Foundations of Education	3
EDUC	6057	Curriculum Development	3
LISC	6750	Bibliographic Instruction	3

Specialization Requirements - 27 credits

LISC	5000	Library Fundamentals and Information Sciences	3
LISC	5200	Information Services and Documentation	3
LISC	5300	Cataloging and Bibliographic Descriptions	3
LISC	5450	Collection, Acquisition, Development and Evaluation	3
LISC	6150	Administration of School Libraries	3
LISC	6250	Research Methods Applied to Library and Information Services	3
LISC	6350	Educational Technology: Use, Production and Evaluation	3
LISC	6910	Internship in Libraries	3
EDUC	697_	Integration Seminar	3

Masters of Education (M.Ed.)

Specialization in Teaching of Science and Mathematics at the Elementary Level (M.Ed.)

The Masters of Education Program in the Teaching of Science and Mathematics at the Elementary Level aims to prepare teachers in the specialized content of science and mathematics at the elementary level, as well as in the

pedagogical and attitudinal skills required for the teaching of these disciplines. This specialized teaching formation will allow teachers to make more effective curricular and methodology contributions for the development of their students' academic skills in sciences and mathematics. The curriculum presents an interdisciplinary approach to foment scientific and mathematical reasoning through courses and through laboratory and research experiences that generate a scientific culture in education professionals. In addition, learning based on problem solving and ethical principles and social commitment is fomented.

Profile of the Competencies of Graduates

This program is designed to develop the competencies that will permit students to:

Knowledge:

Know and understand:

Field of education:

1. The curricular content of science and mathematics at the elementary level.
2. The methodology for teaching science and mathematics at the elementary level.

Field of science:

1. The concepts and fundamental principles of biology, chemistry, physics and the terrestrial sciences,
2. The designs of scientific research used in the field of science.
3. The use of the laboratory in educational practices for the analysis and interpretation of the results of experiments performed in the field of science.

Field of mathematics:

1. The fundamental principles and concepts of arithmetic, algebra, geometry and statistics and their application in problem solving.
2. The use of educational resources in the field of mathematics with emphasis on problem solving, and graphic and symbolic representations.
3. The postulates and basic theorems of geometry and their implications in problem solving and decision making.

Skills

Field of education:

1. Apply pedagogical methods and strategies in the teaching of science and mathematics at the Elementary Level.
2. Apply research methods and designs in the disciplines of science and mathematics at the Elementary Level.

Field of science:

1. Analyze the fundamental concepts and principles of biological sciences, as well as the structure and morphology of the animal and vegetable kingdoms and their implications in the ecosystems.
2. Apply the scientific method to research design in the field of science.
3. Analyze the fundamental concepts of chemistry and their application in experimentation.
4. Evaluate the use of the laboratory in pedagogical practices for the analysis and interpretation of results of experiments.
5. Apply the processes that structure and mold the surface of the Earth and the Biosphere.

Field of mathematics:

1. Analyze the concepts of enumeration, operation and measurement, and their application in problem solving.
2. Integrate educational resources in the field of mathematics, with emphasis on problem solving and in graphic and symbolic representations.
3. Analyze and represent numerical operations that include relations of amount, functions, analysis of changes by using numbers, letters (variables) and signs.

4. Analyze the basic postulates and theorems of geometry, as well as the geometric forms with regard to their structures, characteristics, properties and relations for problem solving and the understanding of the physical surroundings.
5. Apply different methods to collect, organize, interpret and present data to make inferences and conclusions.
6. Apply different computerized tools for teaching concepts of Arithmetic at the elementary level.

Attitudes

Fields of education, science and mathematics:

1. Recognize the importance of the ethical and legal aspects that frame the development of science and mathematics.
2. Apply the ethical, legal and social dimensions related to the practice of the profession, in the processes of problem solving and decision making.
3. Apply the strategies of the scientific method and consider the ethical dimension in problem solving.
4. Recognize the social importance of research as an effective means for the production and construction of knowledge in the fields of science and mathematics.
5. Respect and accept the individual and cultural differences of the diverse student populations, with sensitivity.
6. Work in teams and in an interdisciplinary manner for problem solving in the field of sciences and mathematics.
7. Show proactivity towards self-learning and the update of knowledge in agreement with the new trends and with the changes that occur in their profession.

Admission Requirements

In addition to satisfying the admission requirements for master level studies established by the University, candidates requesting admission to this program must meet the following requirements:

1. Have taken a statistics course
2. Possess a Bachelor's degree in elementary education from an accredited university
or
3. Possess a Bachelor's degree from an accredited university and six (6) credits in the area of foundations of education, from among the following courses or their equivalents:
 - a. Developmental Psychology
 - b. Philosophical Foundations of Education
or
Sociological Foundations of Education
or
Psychological Foundations of Education
4. Take the Entrance Examination to Postgraduate Studies (EXADEP)
5. Have a general average of 2.50 or above

Graduation Requirements

By passing course EDUC 6932, the student will comply with section "Institutional Graduation Requirements for Master's Programs" of this Catalog.

The Barranquitas Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER'S OF EDUCATION DEGREE IN THE TEACHING OF SCIENCE AND MATHEMATICS AT THE ELEMENTARY LEVEL

Core Course Requirements in Education	12 credits
Specialization Requirements	<u>24</u> credits
Total	36

Core Course Requirements in Education - 12 credits

EDUC	5115	Curriculum and Teaching of Science at the Elementary Level	3
EDUC	5117	Curriculum and Teaching of Mathematics at the Elementary Level	3
EDUC	6931	Research or Application Project in the Area of Specialization I	3
EDUC	6932	Research or Application Project in the Area of Specialization II	3

Specialization Requirements – 24 credits

PHYS	5000	Physics for Teachers at the Elementary Level	3
CHEM	5000	Chemistry for Teachers at the Elementary Level	3
GEOG	5000	Terrestrial and Environmental Sciences for Teachers at the Elementary Level	3
MATH	5001	Arithmetic for Teachers at the Elementary Level	3
MATH	5005	Basic Geometry for Teachers at the Elementary Level	3
MATH	5007	Algebra for Teachers at the Elementary Level	3
BIOL	5010	Modern Biology for Teachers at the Elementary Level	3
MATH	5010	Probability and Statistics for Teachers at the Elementary Level	3

Doctor of Education Program (Ed.D.)

Philosophy and Mission of the Program

The philosophy of the Doctor of Education degree is to contribute to the improvement of the educational situation by the formation of people with sensitivity, alertness, receptiveness, competence and who are able to advance in a specialty area while rendering services of excellence to society.

The mission of the Doctoral Program in Education is to prepare professionals who can undertake the management and support of instructional programs in different contexts and scenarios. In addition, the program aspires to contribute to the encouragement, development and appreciation of scientific research as a means of analysis and solution of problems that affect education.

Goals of the Doctoral Program in Education:

The Doctoral Program in Education aspires to achieve the following goals:

1. Promote the development of professionals with the critical capacity, ethical attitude and creative disposition that enables them to understand and act in the diverse contexts and educational scenarios,
2. Integrate in a critical manner the economic, political, social, psychological, philosophical and historical analysis in the comprehensive study of education;
3. Promote research as a foundation for the study and development of educational projects.
4. Refine the communication skills so that they reflect complex levels of thought and produce coherent and appropriate documents in accord with the norms, the styles and the principles of academic rigor.

Admission as a candidate to the Doctoral Degree

In order to be considered a candidate to the Doctoral Degree, the student must pass the comprehensive examination. The student will have three opportunities to pass.

The Doctor in Education degree offers specializations in Business Education, Counseling, Curriculum and Teaching, Educational Management and Leadership, Higher Education and Special Education and Transition Services.

Academic Advisement

1. Once admitted to the Program a professor will be assigned to each student. This professor will perform the function of academic advisor.

2. Before initiating registration of his first term of study the student, together with his academic advisor, will elaborate his plan of studies.
3. This plan of study will be considered as an agreement between the student and the Program. It must be approved by the Director of the Program.
4. The student, together with the advisor, will evaluate the plan of study periodically to verify its status.

Admission Requirements

To be admitted to this program, students must:

1. Have earned a master's degree at an accredited university with an academic average of at least 3.00.
2. Demonstrate mastery of English and Spanish according to the criteria established by the Program.
3. Have approved one of the tests for admission to graduate programs, officially accepted by the University, with an acceptable grade, within five years immediately preceding the date of admission.
4. Present evidence of having approved: a statistics course, a human development and learning course, another in general psychology; and a course in research methods at the master's level. Candidates to the specialization of Curriculum and Teaching must have passed a course in educational philosophy or its equivalent. This requirement replaces the course of general psychology.
5. Present three (3) letters of recommendation from professors, supervisors or other people that demonstrate the professional development of the candidate.
6. Have an interview with and be recommended by the Admissions Committee.
7. In addition, to meeting the admission requirements to doctoral studies established by the University, the candidate who wishes to enter the Doctoral Program in Education with a Specialization in Counseling and whose Masters is not in this area of specialization will have to meet the following thematic areas:
 - Foundations of counseling
 - Theoretical foundations of counseling
 - The aid process
 - Occupational development
 - Group counseling process
 - Measurement and evaluation
8. In addition to fulfilling the admission requirements of the program, students must have the following two courses or their equivalents if they are seeking the Doctor in Education Degree with specialization in Special Education and Transition Services.

EDUC	5740	Education of Exceptional Students	3
EDUC	6360	The Family in the Education of Handicapped Students	3

9. In addition to fulfilling the admission requirements to doctoral studies established by the University, the candidate who wishes to enter the Doctoral Program in Education with a Specialization in Business Education and whose Masters Degree is not in this area must have a Baccalaureate in Offices Administration, Business Administration or equivalent, in addition to fulfilling the following thematic areas at the masters level:
 - Measurement and Evaluation in Business Education
 - Administration and Supervision in Business Education
 - Curriculum Design in Business Education
 - Two courses of Methodology in Business Education

Graduation Requirements

1. Students must pass:
 - a. all Program courses with a minimum grade of B.
 - b. the doctoral comprehensive examination in all the parts (oral and written) for which students will have a maximum of three opportunities.
 - c. the doctoral dissertation.

2. The Program Director in common agreement with the student, will designate a Dissertation Committee composed of three members of the Faculty, one of which will preside over the Committee. The candidate's Dissertation Committee will have, from then on, the function of advising and directing the student until the completion of his dissertation. Prior to the defense, two members will join as readers. The Committee in its entirety will recommend the defense of the Dissertation.
3. The student must meet the requirements for the degree within an eight (8) year period. The Program Director can recommend to the appropriate authorities the extension of this term for a period not greater than two (2) years only in exceptional cases.

The Doctor in Education degree offers specializations in Business Education, Counseling, Curriculum and Teaching, Educational Management and Leadership, Higher Education, Special Education and Transition Services.

The Metropolitan Campus is authorized to offer all specializations, except the specialization in Business Education.

The campuses authorized to offer the specializations of this Program are:

- 1) Special Education and Transition Services: Metropolitan
- 2) Counseling: Metropolitan and San Germán (51 % of the specialization courses)
- 3) Curriculum and Teaching: Metropolitan and San Germán
- 4) Business Education: San Germán
- 5) Higher Education: Metropolitan
- 6) Educational Management and Leadership: Metropolitan and San Germán

REQUIREMENTS FOR THE DOCTOR OF EDUCATION PROGRAM

Core Course Requirements	15 credits
Specialization Requirements	*18-24 credits
Operational Requirements	9 credits
Elective Courses	*3-9 credits
Total	51

*The number of credits varies according to the specialization.

Core Course Requirements - 15 credits

The Core Course Requirements are divided into two components: Research and Foundations.

Research Component - 9 credits

EDUC	7050	Statistics	3
EDUC	7060	Quantitative Research	3
EDUC	7070	Qualitative Research	3

Foundations Component - 6 credits

Select 6 credits from the following:

EDUC	7003	Formation and Development of Educational Thought in Puerto Rico	3
EDUC	7010	Socio-Scientific Concepts of Education	3
EDUC	7020	Culture, Education and Philosophy	3
EDUC	7030	Analysis of Human Behavior	3
EDUC	7100	Foundations of Design of Teaching Programas	3
EDUC	7510	Comparative Education	3

Operational Requirements - 9 credits

EDUC	8960	Research Seminar	3
EDUC	8991	Dissertation	3
EDUC	8992	Dissertation	3

Specialization Requirements – 18-24 credits

Elective Courses – 3-9 credits

Courses selected at the doctoral level in consultation with the academic advisor.

Specialization in Business Education (Ed.D.)

The specialization in Business Education is aimed to satisfy the needs for continuous professional growth of Business Education teachers of Puerto Rico and the Caribbean, by means of the creative and reflective search for alternatives for the development of pedagogical practices. This program aspires to develop professionals who can assume leading positions in harmony with the needs of the public and private educational systems, especially at the higher education level. In addition, it will train leaders in Business Education who will contribute to advance the mission of the different academic programs in public and private scenarios in and outside Puerto Rico.

REQUIREMENTS FOR THE SPECIALIZATION IN BUSINESS EDUCATION

Core Courses		
Foundations		6 credits
Research		9 credits
Specialization Requirements		21 credits
Operational Requirements		9 credits
Elective Courses		<u>9 credits</u>
	Total	51

Specialization Requirements in Business Education – 21 credits

Required Courses – 15 credits

BUED	7030	Contemporary Approaches and Teaching Strategies in Business Education	3
BUED	8500	Business Education in the Global Context	3
BUED	8520	Evaluation and Selection of Emergent Technology in Business Education	3
BUED	8525	Assessment and Evaluation of Business Education Programs	3
BUED	8615	Design and Administration of Business Education Programs	3

Courses selected from the following – 6 credits

BUED	7020	Historical, Social and Ethical Aspects in Business Education	3
BUED	7050	Business Education at the Post-Secondary and University Levels	3
BUED	8620	Instructional Design for Online Business Courses	3
BUED	797_	Special Topics in Business Education	3
BADM	7010	Enterprise Development	3
EDUC	8500	Normative and Descriptive Models, Theories in the Administration Educational Organization and Supervision	3
EDUC	8570	Contemporary and Operational Approaches of the Educational Management	3
HURS	8060	High-Tecnology Managagement	3
HURS	8070	Human Resources Planning, Recruitment and Selection	3
INBU	7130	Multinational and Global Management and Strategy	3

Specialization in Counseling (Ed.D.)

The specialization in Counseling aspires to develop leaders with an integrated humanistic and socio-cultural formation that allows them to have a global conception of education and society. Problems will be presented with a universal scheme of values, in an interdisciplinary manner and put in the Puerto Rican socio-cultural context. These professionals will have the knowledge, skills and attitudes that enable them to effectively intervene in the processes of individual, group and familiar assistance. They will have to recognize the function that research plays in the educational field and in the development and effectiveness of professional counseling programs. Graduates of counseling will be able to perform with effectiveness as advisors and consultants in organizations, corporations, institutions, government agencies, public and private educational institutions and special populations.

This program has the following goals:

1. Form professional advisors by means of the scientific-practical model
2. Prepare professional advisors that master the competences required by the profession based on theory and research.
3. Develop professional advisors committed with their profession and growth as humans and professionals.
4. Have an academic offering in harmony with the diversification of counseling scenarios, student interests and the trends within the profession.

REQUIREMENTS FOR THE SPECIALIZATION IN COUNSELING

Core Courses	
Foundations	6 credits
Research	9 credits
Specialization Requirements	18 credits
Operational Requirements	9 credits
Elective Courses	<u>9</u> credits
Total	51

Specialization Requirements in Counseling - 18 credits

EDUC	8300	Counseling and Consulting Program Design	3
EDUC	8330	Strategies, Methods and Techniques in Individual Counseling	3
EDUC	8360	Family and Couples Counseling	3
EDUC	8390	Group Counseling Seminar	3
EDUC	8510	Seminar in Professional Consulting	3
EDUC	8910	Internship	3

Students interested in the Professional Counseling license must meet the requirements established by the law governing the profession.

Specialization in Curriculum and Teaching (Ed.D.)

The mission of the specialization in Curriculum and Teaching is to develop transforming educators with the intellectual depth, the competencies for research, pedagogical knowledge, ethical sensitivity and the opening to change. They will also design and propose innovating alternatives that solve the problems of education in contemporary society. This specialization admits candidates of a multiplicity of disciplinary backgrounds and educational levels that aspire to develop an integral vision of education that values and promotes constructive dialog, diversity and social justice. The graduates of this program can perform as consultants or facilitators for the design, development, implementation and evaluation of teaching programs in variable scenarios, as well as investigators in educational projects.

The goals of this specialization are the following:

1. Establish a diverse interchange of intellectual and practical experiences among educators of different academic backgrounds and educational levels that will facilitate the exploration and extension of traditional disciplinary limits and promote a transforming vision of education.
2. Prepare top level educators with the knowledge, abilities and the attitudes necessary to design, implement and evaluate programs and to promote learning in diverse social and educational contexts.
3. Develop top level educators with a reflective, critical and ethical attitude that will take into consideration the historical, economic, political, social, and cultural factors in the analysis of the curricula and propose alternatives to take care of contemporary problems.
4. Strengthen the professional communicative abilities to make curricular proposals, related research and other projects.

Perfil de competencias del Egresado

Graduates of the specialization in Curriculum and the Teaching of the Doctoral program in Education (Ed. D.) will demonstrate the following competencies:

Demonstrate knowledge and understanding to:

1. Interpret the diverse factors that sustain the historical, philosophical, psychological and sociological evolution in which one frames the curriculum and teaching as fields of study.
2. Analyze the economic, social, cultural and political factors that affect decision making regarding the elaboration of educational programs in diverse sociocultural contexts.
3. Compare the theories and the diverse approaches that orient research of the teaching processes, the learning and the elaboration of curricula.
4. Analyze the methodological theories and approaches that guide the evaluation processes of curriculum and teaching in diverse educational and cultural contexts.

Skills:

1. Develop educational programs that respond to the needs of the students within the framework of the corresponding institutional, cultural and social contexts.
2. Develop teaching models that consider research related to the ways of knowing and learning and the diversity of the students.
3. Develop evaluation processes for appropriate educational programs according to the diverse institutional, educational, social and cultural contexts.
4. Design educational research which advances knowledge in areas related to curriculum and teaching.

Attitudes:

1. Show a disposition for continuous and ample learning with an integrated and transdisciplinary vision that foments the construction of a contextualized, globalized, open and reflective thought for curriculum and teaching.
2. Show openness for creativity, change and innovation with particular attention to social, cultural and technological changes that lead and affect transformations of an educational and social nature.
3. Demonstrate an ethical conduct that considers the interests, problems and needs of all sectors from which the participants in the educational process come.
4. Demonstrate a critical and creative perspective in your approach to educational practices that respond to the human cultural diversity that promotes social justice.

REQUIREMENTS FOR THE SPECIALIZATION IN CURRICULUM AND TEACHING

Core Courses	
Foundations	6 credits
Research	9 credits
Specialization Requirements	18 credits
Operational Requirements	9 credits
Prescribed Descriptive Requirements	6 credits
Elective Courses	<u>3</u> credits

Total 51

Specialization requirements in Curriculum and Teaching - 18 credits

EDUC	8100	Theoretical Foundations and Principles for the Study of Curriculum and Teaching	3
EDUC	8103	Contemporary Theoretical Perspective for the Study of Curriculum and Teaching	3
EDUC	8130	Learning and Teaching	3
EDUC	8135	Development of Teaching Models	3
EDUC	8160	Design of Curricular Evaluation	3
EDUC	8190	Design and Construction of Educational Programs	3

Prescribed Descriptive Requirements in Curriculum and Teaching – 6 credits

Students will select two (2) of the following courses:

EDUC	8150	Curriculum at the Postsecondary Level	3
EDUC	8151	Change and Curricular Innovation	3
EDUC	8152	Educational Policy and Curricular Implementation	3
EDUC	8153	Neuroscience Applied to Curriculum and Teaching	3
EDUC	8154	Technology, Curriculum and Teaching	3

Elective Courses in the Specialization in Curriculum and Teaching - 3 credits

Students will select one (1) course at the doctoral level to complete the three (3) credits.

Specialization in Educational Management and Leadership (Ed.D.)

The specialization in Educational Management and Leadership combines the conceptual, technical, and attitudinal competencies to prepare professionals that will hold leadership positions in the area of education. The curriculum responds to the most recent trends related to the preparation of educational managers.

REQUIREMENTS FOR THE SPECIALIZATION IN EDUCATIONAL MANAGEMENT AND LEADERSHIP

Core Courses		
Foundations		6 credits
Research		9 credits
Specialization Requirements		21 credits
Operational Requirements		9 credits
Elective Courses		<u>6 credits</u>
	Total	51

Specialization Requirements in Educational Management and Leadership - 21 credits

EDUC	8500	Theories and Models in Educational Management and Leadership	3
EDUC	8530	The Educational Leader: Change and the Decision-Making Process	3
EDUC	8550	Contemporary Problems in Educational Management Seminar	3
EDUC	8570	Contemporary and Operational Approaches of Educational Management	3

Select 9 credits from the following:

EDUC	8505	Information Processing in Educational Management	3
EDUC	8515	Educational Management and Leadership Seminar	3

EDUC	8520	Human Resources Management in Educational Institutions	3
EDUC	8540	Labor Relations in Educational Management	3
EDUC	8545	Planning of the Educational Budget	3
EDUC	8560	Evaluative Process in Management and Instructional Leadership	3
EDUC	8565	Introduction to Educational Management and Leadership Seminar	3
EDUC	8670	Organization and Management of Special Education Programs	3
EDUC	8690	Assessment of Exceptional Children	3

Specialization in Higher Education (Ed.D.)

The specialization in Higher Education considers the graduate as a professional prepared to perform effectively in positions of leadership in institutions of higher education. The institutions at the post-secondary level need professionals capable of analyzing social, cultural, political and economic factors that affect decision making and who may reach beyond the mere adaptation to the profound technological and social changes, to become designers of a new future vision for higher education in Puerto Rico.

In addition to the requirements established in the Catalog, the candidate must have two years of educational or administrative experience in institutions of Higher Education.

REQUIREMENTS FOR THE SPECIALIZATION IN HIGHER EDUCATION

Core Courses		
Foundations		6 credits
Research		9 credits
Specialization Requirements		24 credits
Operational Requirements		9 credits
Elective Courses		<u>3</u> credits
	Total	51

Specialization Requirements in Higher Education - 24 credits

EDUC	7205	Historical Foundations of Higher Education	3
EDUC	8130	Learning and Teaching	3
EDUC	8150	Curriculum at the Post-secondary Level	3
EDUC	8215	Public Policy in Higher Education	3
EDUC	8225	Legal Foundations of Higher Education	3
EDUC	8230	Student Population in Higher Education	3
EDUC	8240	Institutional Evaluation in Higher Education	3
EDUC	8500	Models, Normative and Descriptive Theories in Educational Administration and Leadership	3

Specialization in Special Education and Transition Services (Ed.D.)

The doctoral specialization in Special Education and Transition Services offers an advanced professional preparation for students interested in becoming advance guard research leaders. The areas of assessment, curricular adaptations, technological assistance, processes and procedures in educational areas, and special education and transition services are emphasized. Due to its interdisciplinary nature, the student can take elective courses from other doctoral specializations with the authorization of his academic adviser. This allows the student to diversify, as well as to develop his capacities and knowledge to the maximum in order to make an impact and attain changes in educational services and other related services.

REQUIREMENTS FOR THE SPECIALIZATION IN SPECIAL EDUCATION AND TRANSITION SERVICES

Core Courses		
Foundations		6 credits
Research		9 credits
Specialization Requirements		18 credits

Operational Requirements	9 credits
Elective Courses	<u>9 credits</u>
Total	51

Specialization Requirements in Special Education and Transition Services - 18 credits

EDUC	8645	Teaching Methodologies and Strategies for Students with Special Needs	3
EDUC	8655	Curricular Adaptation and Accommodations in Special Education Programs and Transition Services	3
EDUC	8665	Practices and Procedures of Special Education and Transition Services	3
EDUC	8680	Technological Assistance Applied to Special Education and Vocational Rehabilitation	3
EDUC	8690	Assessment in Special Education and Transition Services	3
EDUC	8915	Internship in Special Education and Transition Services	3

Operational Requirements - 9 credits

EDUC	8960	Research Seminar	3
EDUC	8991	Dissertation	3
EDUC	8992	Dissertation	3

Elective Courses - 9 credits

By means of academic counseling students will select the specialization courses at the doctoral level in curriculum and teaching, guidance and counseling, school psychology and management and leadership among others, according to their professional interests and projections.

Leadership and Instruction in Online Education (Ed. D.)

The doctoral degree in education in Leadership and Instruction in Online Education is designed to develop avant-garde educational leaders who promote the quality, evolution and development of online education. Graduates of this program will show evidence of leadership skills in effective decision making in the management and operation of an educational program. The program promotes pedagogical mastery, the application of theories, models and strategies tailored for the online teaching-learning process. Emphasis is given to the application of innovating strategies for the best practices in the online instructional process.

This program will be offered by means of the online studies modality.

Goals of the Program

- A. Provide the theoretical bases for putting into practice the leadership skills in the decision making, administrative and evaluation processes in education.
- B. Bring about the enrichment of the instructional process in virtual education through the implementation and valuation of innovating pedagogical strategies.
- C. Enrich online education with the diverse technologies of information and communication.
- D. Foment the development of research designs in areas related to the subject matter.

Admission Requirements

1. meet the admission requirements in the current Graduate Catalog.
2. Possess a master's degree.
3. Realize an argumentative article, evaluated by the Admissions Committee of the program.

Graduation Requirements

1. Pass all the courses of the program with a minimum grade of B.
2. Successful complete, present and defend a doctoral dissertation.
3. The approval of a comprehensive examination is not required to pass to the the dissertation phase.

Students must meet the requirements for the degree within the term of eight (8) years. The graduate committee may recommend to the pertinent authorities the extention of this term by a term no greater than two (2) years in exceptional worthy cases.

The Ponce Campus is authorized to offer this program.

REQUIREMENTS FOR the DOCTORAL DEGREE IN EDUCATION IN LEADERSHIP AND INSTRUCTION IN ONLINE EDUCATION

Core Course Requirements in Education		12 credits
Specialization Requirements		17 credits
Operational Requirements		<u>9</u> credits
	Total	38

Requirements in Education - 12 credits

EDUC	8170	Foundations of Virtual Teaching	3
EDUC	8173	Model of Instructional Design for Online Courses	3
EDUC	8530	The Educational Leader, Change and the Decision-Making Process	3
EDUC	8560	Evaluative Process in Management and Instructional Leadership	3

Specialization Requirements - 17 credits

LIDE	7010	Development and Planning of the Online Education Program	3
LIDE	7020	Pedagogical Interaction	3
LIDE	7030	Instructional Technology in Online Education	3
LIDE	7040	Virtual Platforms and Learning Objects for Online Education	3
LIDE	7050	Research Methods	5

Operational Requirements - 9 credits

EDUC	8960	Research Seminar	3
EDUC	8991	Dissertation I	3
EDUC	8992	Dissertation II	3

Education in Diabetes (Professional Post-Baccalaureate Certificate)

Education in diabetes applies knowledge and educational skills to provide competent educational services to the population in risk of diabetes, pre-diabetes, people with diabetes and the important people in the life of the patient. The Certificate is offered to different health professionals (doctors, professional nurses with a bachelor's degree in nursing (BSN) or a masters (MS, MSN), dietitians, psychologists, exercise physiologists, pharmacists, health educators, occupational and physical therapists with a bachelor's degree, who have an interest in developing competences in the prevention, assessment, and in the clinical and educational administration of diabetes. This Certificate provides the development of the skill to realize individualized assessment of the person with diabetes, pre-diabetes and their caretakers. In addition, it provides for the formulation of an educational plan. It promotes critical thinking to consider, plan and initiate interventions to prevent the health problems presented by the person with diabetes, pre-diabetes and their caretakers. It will promote healthful lifestyles as part of the strategies of promoting and maintaining the health of the people with diabetes/pre-diabetes and their caretakers. The selected interventions are based on the evidence obtained by research within the field of the administration of and education about diabetes.

The Ponce Campus is authorized to offer this Program.

Admission Requirements

Have a current license in the health profession in which you work with at least a baccalaureate. If it is in nursing, it is required to at least have completed credit a Bachelor of Science Degree in Nursing (BSN) from an accredited institution with a minimum academic index of 2.50 in the major.

1. Minimum of two (2) years of work experience in one of the following disciplines: pharmacist, dietitian, social worker, occupational and physical therapist, and health educator. The psychologists, doctors and dentists must have a current license.
2. Interview with the coordinator of the Certificate in Diabetes or the person designated by the Academic Director.
3. Submit the following up-to-date documents:
 - Health Certificate
 - Vaccination Certificate against Hepatitis B and Influenza
 - Negative Certificate of Criminal Records
 - License and Registry of the health profession of in which you work, emitted by the Examining Board of the specialization field.
 - Membership in your professional association

Meet the established admission norms in the Graduate Catalog of Inter American University of Puerto Rico.

All those interested in entering this Program must be admitted to the University and meet the admission norms. Due to the exigencies of the regulating health agencies, students are asked to present original and up-to-date documentation of: Health Certificate, recent Criminal Record, and Certificate of immunization against Hepatitis B and Influenza.

Requirements for the Professional Certificate in Education in Diabetes - 15 credits

DIAB	5000	Fundamentals for Care of the Person with Diabetes	4
DIAB	5010	Administration of an Educational Program in Diabetes	4
DIAB	5020	Diabetes in Different Stages of Growth and Development	4
DIAB	5030	Diabetes and Its Complications	3

Educational Computing (M.A.)

The Master of Arts Degree in Educational Computing has the goal of preparing specialized professionals for integrating computing in education with an interdisciplinary approach. This Program aspires to develop leadership in graduates to promote significant educational changes and in addition, it provides the conceptual, technical and research competencies for the use of computational means in an effective manner in educational scenarios.

In addition to meeting the general requirements established by the University for admission to master degree studies, students must:

1. Have approved the following courses or their equivalent:
 - a) COMP 2110 Introduction to Computer Science
 - b) COMP 2120 Programming Logic
 - c) COMP 2300 Visual Programming
 - d) A course in Basic Statistics at the undergraduate level from a recognized university
 - e) A course in Educational Psychology at the undergraduate level from a recognized university
2. Demonstrate proficiency in the English language through reading and comprehension or have passed the Test of English as a Foreign Language (TOEFL).

Cases for transfer, equivalencies and validations, etc. will be considered by the Admissions Committee or by the Program Coordinator.

To obtain the Master of Arts Degree in Educational Computing, candidates must:

1. maintain a 3.00 academic index
2. defend and pass before the Program Committee, the project developed in the course ECMP 6980 Project Development in Educational Computing.

The Metropolitan Campus is authorized to offer this Program which can also be offered completely through Internet.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATIONAL COMPUTING

Specialization Requirements		30 credits
Prescribed Distributive Requirements		<u>9</u> credits
	Total	39

Specialization Requirements - 30 credits

ECMP	5100	Future and Leadership of Computer Changes in Education	3
ECMP	5105	Design and Evaluation of Educational Software	3
ECMP	5130	Computer Assisted Educational Management	3
ECMP	5200	Authoring Languages	3
ECMP	5240	Special Peripherals, Telecommunications and Networks	3
ECMP	5245	Computer Programming	3
ECMP	6160	Computer Assisted Instruction	3
ECMP	6170	Training and Design of Computerized Practice	3
ECMP	6975	Research Seminar in Educational Computing	3
ECMP	6980	Project Development in Educational Computing	3

Prescribed Distributive Requirements - 9 credits

Students will select 9 credits from the following courses:

ECMP	5250	Knowledge Banks and Expert Systems	3
ECMP	6300	Interaction between the User and the Computer	3
ECMP	6310	Graphics Systems and Animations	3
ECMP	6320	Advanced Programming for Internet	3
ECMP	6350	Artificial Intelligence and Knowledge	3
ECMP	6355	Knowledge Acquisition and Intelligent Tutors	3
ECMP	6400	Online Learning	3
ECMP	6970	Advanced Seminar Topics in Educational Computing	3
ECMP	6990	Thesis in Educational Computing	3
COIS	5100	Relational Data Banks	3
COIS	5120	Client-Server Networks and Architecture	3
COIS	5130	Design Methodology and Advanced Tools	3
COIS	5220	Reengineering Processes	3
COIS	6250	Multimedia and Interface	3
COIS	6360	Social Impact of Computers	3
COIS	6370	Geographic Information Systems	3
EDUC	5133	Statistics	3
EDUC	6013	Organizational Behavior in Educational Institutions	3
EDUC	6046	Curriculum Development	3

Educational Neuroscience (M.A.)

The Masters of Arts Program in Educational Neuroscience develops professionals with a preparation in neuroscience and education, capable of linking scientific research on the brain, cognition, and learning with the problems most common in the educational setting. Graduates of the program will have competencies of brain-appropriate design of instruction, knowledge of learning problems, and the techniques of assessment and intervention of learning in the classroom. They will be competent in professional consultancy with parents, school officials and educational agencies, among others.

Admission Requirements

Students seeking admission to the Masters of Arts Program in Educational Neuroscience must meet the following requirements, in addition to the general requirements established by the Institution for master degree programs:

1. Have a baccalaureate in education, science or related areas.
2. Have a minimum academic index of 3.0.

Graduation Requirements

1. Approve course NEUR 6970 Integration Seminar to comply with the section Requirements for Comprehensive Examination and Other Options for Masters Programs.
2. Have a minimum academic average of 3.00.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATIONAL NEUROSCIENCE

Core Course Requirements	12 credits
Specialization Requirements	<u>21</u> credits
Total	33

Core Course Requirements - 12 créditos

EDUC	5047	Psycho-social Foundations of Education	3
EDUC	5111	Educational Research I	3
EDUC	6057	Teaching Models and Strategies	3
PSYC	5100	Cognition, Motivation and Learning	3

Specialization Requirements - 21 créditos

NEUR	5010	Educational Neuroscience	
NEUR	5020	Neurodevelopment	3
NEUR	5030	Neuropsychology of Learning	3
NEUR	5040	Educational Physiological Psychology	3
NEUR	6010	Disorders of Neurodevelopment	3
NEUR	6020	Neurolearning Assessment	3
NEUR	6970	Integration Seminar	3

English (Teaching of English as a Second Language) (M.A.)

The of Master of Arts Program in Teaching English as Second Language aims to prepare professionals in applied linguistics and literature in the field of English as a second language. The objectives of the program are:

1. To train professionals capable of applying modern linguistic concepts and those of literature to the teaching-learning process of teaching English as a second language.

2. To provide students the academic preparation to continue doctoral studies and to continue innovating research projects in the field of teaching English as a second language.
3. To prepare professionals oriented to their continuous development.

Admission Requirements

Candidates for admission to the Masters Program in TESL must meet all admission requirements for entering master's degree programs established in the section "Admission Requirements for Masters' Programs" of the Graduate Catalog, except requirement 3: *Demonstrate, through an examination...* In addition, candidates must have a phonological and structural mastery of English that they will demonstrate by writing an essay and by an interview with the Department Director or his representative.

The Metropolitan and San Germán campuses are authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN TEACHING OF ENGLISH AS A SECOND LANGUAGE

Specialization Requirements		30 credits
Prescribed Distributive Requirements		<u>6</u> credits
Total		*36-39

Specialization Requirements - 30 credits

ENGL	5040	English Phonological System	3
ENGL	5050	English Syntax and Morphology	3
ENGL	5220	Academic Text Writing	3
ENGL	5240	Writing Theories and Their Application	3
ENGL	6090	Reading in a Second Language	3
ENGL	6100	Theory and Principles of TESL	3
ENGL	6113	Materials and Techniques in TESL at the Elementary, Secondary, Post Secondary and Adult Levels	3
ENGL	6170	Assessment of Linguistic Abilities	3
ENGL	6530	Research Methods	3

**ENGL

**Students must choose a course in the area of literature in accord with their interests.

Prescribed Distributive Requirements – 6 credits

Students will select six (6) credits from the following courses:

ENGL	5030	Principles of Linguistics	3
ENGL	5110	English Class Literary Text Reading	3
ENGL	5210	Dramatic Literature	3
ENGL	5230	Literature for Young Readers	3
ENGL	5290	Psycholinguistics	3
ENGL	5320	Sociolinguistics	3
ENGL	5330	First and Second Language Acquisition	3
ENGL	6120	Sociocultural Aspects of Puerto Rico and the United States	3
ENGL	6130	Fundamentals of Bilingual Education	3
ENGL	6150	Translation	3
ENGL	6180	Using the Computer in TESL	3
ENGL	6260	Contemporary Literature of the United States	3
ENGL	6310	Contemporary Fiction	3
ENGL	6350	Representative Works in English Literature	3
ENGL	6600	Supervision in TESL	3
ENGL	6610	Curriculum Development in TESL	3

ENGL	Special Topics	3
SPAN 6140	Teaching of Spanish as a Second Language	3

*Students who take course ENGL 6970 (Integration Seminar) or course ENGL 6992A (Research Project in MA-TESL) to fulfill the Graduation Requirements established in this Graduate Catalog, 2009-2011, will complete the Program with 39 credits.

Entrepreneurial and Managerial Development (Ph.D.)

The Doctoral (Ph.D.) Program in Entrepreneurial and Managerial Development with specializations in Human Resources and Interregional and International Business aims to prepare excellent professional to occupy high level administrative and management positions as well as positions in post secondary educational institutions in Puerto Rico.

This Program centers its interest in scientific research, the management of problems affecting the economy, politics and education. At the same time it provides for the development of analytical and critical thinking.

The Program aims to contribute to the formation of values and attitudes that should be characteristic of the professional person who recognizes the value of globalization and modern technology within the framework of current theories. It also aims to contribute to the social and economic improvement of Puerto Rico through the formation of highly competent, alert, receptive and capable professionals interested in the continuous enhancement and enrichment of knowledge, skills and attitudes.

General Program Objectives

1. To offer a high-quality doctoral program in the area of business administration to adequately meet the current emerging needs and interests of the Puerto Rican society and of geographic areas of greater relevance (the United States, the Caribbean and Central and South America).
2. To achieve the highest amount of knowledge and to develop the required conceptual and methodological skills for planning, directing and conducting creative and original scientific research in the area of business administration.
3. To assist in the integral formation of graduate by offering a curriculum with a modern human and global focus which at the same time propitiates the development of analytical, reflective and critical thinking.
4. To promote and support research oriented toward the achievement of those levels of efficiency and productivity which will contribute to economic growth, a reduced rate of unemployment, and which will bring about the just distribution of wealth and to the general welfare of our society.
5. To contribute to the formation of highly capable persons who individually or in groups, through participation and collaboration may show leadership, devotion and a continuous commitment to the search for innovative and creative solutions to the most relevant problems in the field of business administration at the local and foreign levels.
6. To promote students and professors' active participation in the solution of developmental, economic and social problems in Puerto Rico the Caribbean.
7. To expose students and the community to different trends of knowledge, practice and philosophies that guide the business administration field.
8. To promote both oral and written language proficiency in Spanish and English in this professional field.

Specific Objectives by Specialization

Specialization in Interregional and International Businesses

The specialization in Interregional and International Businesses is directed to develop the knowledge, skills and attitudes necessary for:

- Enhancing and enriching the teaching profession in higher education institutions;

- Planning, directing and leading creative and original scientific research;
- Making administrative business decisions in complex and conflicting situations in a global environment;
- Establishing policies and strategies for the development of companies at the domestic as well as the global level.

Specialization in Human Resources

The specialization in Human Resources is directed to develop in the graduates the knowledge, skills and attitudes necessary for:

- Enhancing and enriching the teaching profession in higher education institutions;
- Planning, directing and leading creative and original scientific research;
- Making administrative human resource decisions in complex and conflicting situations in a global environment;
- Establishing policies and strategies for the development of companies at the domestic as well as the global level.

Admission Requirements

Students who apply for admission to this Program must:

1. Have a Masters degree in Business Administration or equivalent, if evidence of experience in the field is presented.
2. Have passed mathematical courses at the calculus level.
3. Have passed courses at the graduate level in: accounting, finance, quantitative methods, managerial economy, statistics, statistics applied to business administration, computers, and management.
4. Have a minimum general average of 3.25.
5. Have passed the EXADEP with a minimum score of 550 points or the GMAT with a minimum score of 500.
6. Hold an interview with the Doctoral Program's Admissions Committee and be recommended by the Committee.
7. Demonstrate by examination or some other form that the Department, Graduate Studies Center, Professional School or the Academic Division considers appropriate, the abilities to interpret professional material, in Spanish as well as in English, and to communicate correctly in writing in one of these languages.

Conditional Admission

The Admissions Committee of the Program could recommend a conditional admission for a candidate who does not fulfill some requirements at the time of requesting admission to the Program. This conditional admission would allow the student to initiate studies in the Program.

Once the student passes nine (9) credits in the Program, with a minimum grade of B, in a period of time not greater than a year, the Admissions Committee will reevaluate the case and will make recommendations on the admission request. The performance in the courses taken in the Program, the professional experience, and other factors that the Admissions Committee considers appropriate will be taken into account to predict the student's success in the Program. This type of admission does not guarantee that the student finally receives a regular admission to the Program.

Admission of Transfer Students

The admission of transfer students will be considered if they satisfy the Program Admission Requirements.

In order for credit to be granted for studies already realized, candidates will have to request that their university of origin send their official transcript directly to the Office of the Doctoral Program of the campus to which they are requesting admission and they must meet the following conditions:

1. Students who have begun studies for a doctoral degree in Business Administration at another accredited university can transfer up to 15 credits they have passed with grades of A or B, if the courses are equivalent to courses offered in the Doctoral Program in Entrepreneurial and Managerial Development of Inter American University of Puerto Rico.
2. Transfer of credits of finished doctoral degrees will not be accepted.
3. These decisions will be made by the Doctoral Program Director or his counterpart and will be subject to the approval of the Dean of Academic Affairs of the campus to which the transfer student will be admitted.
4. No academic work taken more than 10 years previously will be considered for validation purposes. Each case will be evaluated separately.

Admission of Internal Transfer Students

Students of Inter American University of Puerto Rico, who wish to move to another unit of the System to complete the Doctoral Program Requirements, must satisfy the following:

- a. Have regular student admission to the Program.
- b. Request the transfer of their academic file to the unit to which they wish to transfer.
- c. Have an interview with the Admissions Committee of the Program of the unit to which they wish to transfer.
- d. Present a letter from the Director of the Doctoral Program from which they wish to transfer indicating if they fulfill the academic progress norms of the Doctoral Program and recommending the transfer.

Academic progress

In the Doctoral Program students show their academic progress through the following steps:

- a. Maintain a minimum general index of 3.00.
- b. Pass each one of the specialization courses with a minimum grade of B.
- c. Approval of the comprehensive examinations with a minimum grade of 80 percent.
- d. Admission as a degree candidate.
- e. Selection of the Dissertation Committee.
- f. Defense and approval of a research proposal.

Besides fulfilling the established Academic Progress norms for this Program, students will have to meet the Satisfactory Academic Progress Requirements for Doctoral Programs of the Graduate Catalog.

Comprehensive Examinations

The Doctoral Program in Entrepreneurial and Managerial Development of Inter American University of Puerto Rico requires the approval of the comprehensive examinations in order to request candidacy to the degree.

Prior to requesting admission to candidacy to the degree, students will pass the comprehensive examination and will present a preliminary research proposal. The comprehensive examinations can only be taken after the student has passed every core course maintaining a minimum index of 3.00 and each one of the specialization courses with a minimum grade of B.

The comprehensive examinations will include material related to the Program core courses and to the student's area of specialization.

To be eligible to take the comprehensive examinations, students must satisfy the following requirements:

- a. Be a regular student of the Program.
- b. Have completed all core courses with a general academic index of 3.00 and all the specialization courses with a minimum grade of B.
- c. Have a minimum average of 3.00.

Students will have a maximum of two opportunities to take and pass the comprehensive examination. If after two attempts they do not pass these, the faculty of the Program will evaluate the case and will submit recommendations to the students of the actions that must be taken to satisfy the deficiencies identified in their examinations. If finally the student does not satisfy these deficiencies and pass the comprehensive examination, the student will not be able to continue in the Program.

Dissertation

The Doctoral Program in Entrepreneurial and Managerial Development of Inter American University of Puerto Rico requires the approval of a doctoral dissertation to confer the degree.

The Dissertation Committee will be integrated by three professors and will be designated by the Program Director in common agreement with the doctoral student, according to the institutional norms. One of the professors will preside over the Dissertation Committee.

In consultation with the Dissertation Committee, the student will select the subject of the dissertation and will prepare the preliminary research proposal. The student will submit this proposal to the Dissertation Committee. Once approved, the Doctoral Program Director will inform the student of admission as a degree candidate.

The Doctoral Program Director will provide the Dissertation Committee with the student file, containing the results of the comprehensive examinations, preliminary research project proposal, record of the student's academic work up to that moment, and any other document of academic relevance to the work of the candidate. The Dissertation Committee will have from that moment on the function of advising and directing the student until the completion of the dissertation.

The dissertation will have to be defended and approved by an oral examination before the Doctoral Dissertation Committee for this requirement to be completed.

Graduation Requirements

Students must meet the following graduation requirements:

1. Pass all courses with a general index of 3.00 or more.
2. Pass each of the specialization courses with a minimum grade of B, maintaining a specialization index of 3.00 or more.
3. Pass the comprehensive examinations in agreement with the requirements established in the Program.
4. Pass the doctoral dissertation defense.

Students must fulfill the requirements for the degree within an eight (8) year period. The Graduate Committee may recommend to the pertinent authorities to extend this term by a period no greater than two (2) years in worthy exceptional cases.

The Metropolitan and San Germán campuses are authorized to offer this Program.

REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY DEGREE IN ENTREPRENEURIAL AND MANAGERIAL DEVELOPMENT

Core Course Requirements	34 credits
Specialization Requirements	15 credits
Prescribed Distributive Requirements	<u>6 credits</u>
Total	55

Core Course Requirements - 34 credits

BADM	7000	Organizational Theory and Design	3
BADM	7001	Professional Seminar	1
BADM	7010	Enterprise Development	3
BADM	7020	Research Methods	3
BADM	7070	Organizational Behavior	3
BADM	7201	Quantitative Methods I	3

BADM	7202	Quantitative Methods II	3
BADM	7220	Micro Economic Theory	3
BADM	7223	Macro Economic Theory	3
BADM	8950	Research Seminar	3
BADM	8991	Doctoral Dissertation I	3
BADM	8992	Doctoral Dissertation II	3

Specialization in Human Resources (Ph.D.)

Specialization Requirements in Human Resources - 15 credits

Required courses (6 credits):

HURS	7000	Human Resources Management	3
HURS	8070	Human Resources Planning, Recruitment and Selection	3

Select nine (9) credits from the following courses:

HURS	8010	Comparative Administration	3
HURS	8020	Labor Legislation	3
HURS	8040	Initiation of Cooperation between Management and Workers	3
HURS	8075	Compensation Administration	3
HURS	8085	Human Resources Development	3
HURS	8090	Management of Change	3
HURS	8100	Discrimination in Employment	3
HURS	8946	Seminar in Special Topics in Human Resources	3

Specialization in Interregional and International Business (Ph.D.)

Specialization Requirements in Interregional and International Business - 15 credits

Required courses (6 credits):

INBU	7100	Policies and Strategies in International and Global Business	3
INBU	8210	Theory of International Business	3

Select nine (9) credits from the following courses:

INBU	7120	Global Marketing	3
INBU	7130	Multinational and Global Management and Strategy	3
INBU	7140	Communication and Intercultural Negotiation in International Business	3
INBU	8170	International Finance	3
INBU	8946	Seminar in Special Topics in Interregional and International Business	3
ECON	8150	Economic Development	3

Prescribed Distributive Requirements - 6 credits

6 credits selected from the following courses:

BADM	7225	Managerial Econometrics	3
BADM	797A	Special Topics Seminar on Entrepreneurial and Managerial Development	3
BADM	797B	Special Topics Seminar in Management Information Systems	3
BADM	797C	Special Topics Seminar in Accounting	3
BADM	797D	Special Topics Seminar in Marketing	3
BADM	797E	Special Topics Seminar in Finances	3

BADM	797_	Special Topics Seminar	3
ECON	7200	Labor Economy	3
ECON	8000	Economy of the Labor Market Structure	3
HURS	8050	Labor Negotiations	3
HURS	8060	High Technology Management	3

Note: In order to finish the Doctoral Dissertation the student must register in BADM 8992 (1 credit) Doctoral Dissertation Continuation, up to a maximum of three (3) credits.

Environmental Science (M.S.)

The Master of Science in Environmental Sciences aims to provide knowledge and improve research skills and critical thought, forming professional capable of responding to the needs of environment and society, by applying scientific principles and ethical values. In addition, it will serve as an instrument to advance knowledge on the real needs and conditions of the environment.

The Program leads to a Master of Science Degree in Environmental Sciences and offers three specializations: Environmental Biology, Environmental Chemistry, and Water Resources and Unit Operations. It is intended for students that have obtained a Bachelor's degree in Science, Engineering or in other science areas, who meet the program's admission requirements.

The Program aspires to prepare professionals that demonstrate:

1. Skills to apply the scientific method to the solution of problems.
2. Experience in the application of available technology to solve and understand the environmental problems of Puerto Rico and to compare them to those of other countries.
3. Knowledge of the cultural social and ethic factors which influence or determine the environmental problems in Puerto Rico.
4. Scientific and technological knowledge, which permit decision making based on science and ethical values regarding issues related to conservation, the development, and the use of natural resources.
5. Skills and abilities necessary to become a leader in the environmental sciences.
6. Attitudes that promote the development and implementation of the technologies necessary for solving environmental problems.
7. Attitudes that promote scientific research and scientific ethics as tools for the control of environmental deterioration and the development of economic planning.

Admission Requirements

Students that apply to the Master of Science Degree in Environmental Sciences must fulfill the current institutional admission requirements of Master Degree Programs and the following requirements:

1. Have a Bachelor Degree in Natural Sciences, in Engineering or in other disciplines related to the sciences from an accredited college or university.
2. Have approved Analytical Chemistry with a minimum grade of "C".
3. Students interested in the Environmental Biology specialization must have approved a course in Ecology.
4. Have completed a Bachelor's degree with a grade point index of 2.50 in the last 60 credits in academic work and 2.50 average in the major.
5. Present two letters of recommendation.
6. Submit an essay with a minimum of 500 words where they establish what motivated them to study Environmental Sciences and the selected specialization, their expectations of the program, interests in research and what their plans are, once they finish the degree.

The San Germán Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN ENVIRONMENTAL SCIENCES

Core Course Requirements

* a minimum of 21 credits

Specialization Requirement	12 credits
Prescribed Distributive Requirements	<u>6</u> credits
Total	*a minimum of 39 credits

Core Course Requirements - 21 credits minimum*

EVSC	5010	Environmental Chemistry	3
EVSC	5020	Biostatistics	3
EVSC	5030	Environmental Health	3
EVSC	5285	Puerto Rican Policy Regulations	3
EVSC	6101	Investigation Methods Applied to Environmental Sciences I	3
EVSC	6102	Investigation Methods Applied to Environmental Sciences II	3
EVSC	699_	Thesis	3

*These minimums apply to students who finish their thesis in the first course (EVSC 699A).

Specialization Requirements - 12 credits

The student must select one of the following three specializations, Environmental Biology, Environmental Chemistry, Water Resources and Unit Operations.

Specialization in Environmental Biology (Environmental Sciences)

EVSC	5110	Environmental Ecology	3
EVSC	5200	Environmental Biology	3
EVSC	5220	Environmental Microbiology	3
EVSC	5510	Risk Assessment	3

Specialization in Environmental Chemistry (Environmental Sciences)

EVSC	5100	Biochemistry	3
EVSC	5165	Environmental Instrumentation	3
EVSC	5275	Environmental Toxicology	3
EVSC	5515	Disposal of Contaminants	3

Specialization in Water Resources and Unit Operations (Environmental Sciences)

EVSC	5180	Limnology	3
EVSC	5255	Water Analysis and Contamination	3
EVSC	5310	Water Treatment: Chemical and Physical Operations Unit	3
EVSC	5330	Water Treatment: Biological Operations Unit	3

Prescribed Distributive Requirements – 6 credits

Students should take six (6) credits from the following courses in accord with their specialization and the approval of the Advisory Committee.

EVSC	5040	Urban Ecology	3
EVSC	5050	Environmental Problems of Puerto Rico	3
EVSC	5100	Biochemistry	3
EVSC	5105	Geographic Information Systems and Applications in Environmental Sciences	3
EVSC	5110	Environmental Ecology	3
EVSC	5165	Environmental Instrumentation	3
EVSC	5180	Limnology	3
EVSC	5200	Environmental Biology	3

EVSC	5220	Environmental Microbiology	3
EVSC	5250	Control and Current Analysis	3
EVSC	5255	Water Analysis and Contamination	3
EVSC	5275	Environmental Toxicology	3
EVSC	5310	Water Treatment: Operations of Chemical and Physical Units	3
EVSC	5330	Water Treatment: Biological Operation Units	3
EVSC	5510	Risk Assessment	3
EVSC	5515	Disposal of Contaminants	3
EVSC	597_	Special Topics in Environmental Sciences	3

Family Counseling (Post Master Professional Certificate)

The Post Master Professional Certificate of Family Counseling has been designed to develop a counseling professional who can provide quality therapeutic services to family systems from a biopsychosocial-spiritual holistic framework. Emphasis to the therapeutic process in areas of extreme need in the families of our country, such as violence, abuse, conflict management, addictions and the crisis management and losses from the thanatological perspective, and prevention. This certificate is designed for graduates of Guidance and Counseling Programs from accredited universities, who wish to provide family counseling services in hospitals, Government agencies, public and private educational agencies, and other institutions that provide services to families.

The Family Counseling Post Master Professional Certificate has as its goals:

1. To develop competent counseling professionals in the intervention process with families.
2. To develop counseling professionals who contribute in an integral manner with the mental, social and holistic health of the Puerto Rican family.

Profile of the Competencies of Graduates

This Program is designed to develop the competencies that will allow students to:

1. Apply the diverse theories of family counseling, and incorporate the developmental theory to the counseling process.
2. Apply the therapeutic process, strategies and skills of family counseling.
3. Demonstrate knowledge of the ethical and legal issues of family counseling.
4. Demonstrate the knowledge of human sexuality as part of the process of human development, which will allow them to develop effective strategies in the management of conflicts, disorders and family situations present in this area.
5. Design and develop intervention practices in family counseling, emphasizing the issues of the Puerto Rican family.
6. Demonstrate knowledge and effectively implement family counseling interventions for managing crises, addictions, pathology, conflict management and loss.
7. Demonstrate competence in the use of technological resources in the performance of their professional work.
8. Demonstrate a major commitment with their profession of a certified family counselor, for the quality of life of the Puerto Rican family, and with their responsibility to stay updated as part of their personal and professional competency.

Admission Requirements

1. Have obtained a minimum degree of Masters in Counseling or in Guidance from an accredited university with a minimum general average of 3.00.
2. Have approved a course in family counseling at the graduate level.

Academic Progress Requirement

The student must maintain a cumulative academic index of 3.00

The Arecibo Campus is authorized to offer this professional Certificate.

Requirements for the Post Masters Certificate in Family Counseling - 18 credits

PSYC	6005	Family Psychopathology	3
FACO	6020	Ethical and Legal Issues of Family Counseling	3
FACO	6025	Human Sexuality	3
FACO	6030	Conflict Management, Crises and Losses in the Family	3
FACO	6040	Family Counseling in Addiction and Abuse Cases	3
FACO	6050	Case Management in Family Counseling	3

Finance (D.B.A.)

The DBA Program is designed to develop professional, research and academic personnel in the field of finance with an interest in developing expertise related to financial practices and management. It deals with economic and financial events with ethical sense and within an interdisciplinary team. It frames conduct in the knowledge of theories and practices in the field of finance by maintaining a proactive, objective and sensible attitude.

Admission Requirements

Students interested in requesting admission to this Program must:

1. Have a Masters in Business Administration or an equivalent degree, if it presents evidence of experience in this field.
2. Have approved courses at the graduate level, with a minimum grade of B, in: accounting, management, financial management (6 credits), investments, quantitative methods, and managerial economics.
3. Have a minimum general average of 3.00.
4. Demonstrate, by means of a test in the area of finance, your mastery of the subject and your capability to express yourself correctly in writing in Spanish or English.

Graduation Requirements

Students must meet the following graduation requirements:

1. Approve the forty-eight (48) credits of the Program
2. Complete the credits of DBA Program with a minimum grade point index of 3.0.
3. Have passed the comprehensive tests in agreement with the requirements established in the Program
4. Successfully defend the doctoral dissertation

Students must complete the requirements for the degree within a period of eight (8) years. In exceptional cases, the Graduation Committee may recommend to the pertinent authorities, an extension of no more than two (2) years to this period.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE DOCTOR OF BUSINESS ADMINISTRATION DEGREE (DBA) WITH SPECIALIZATION IN FINANCE

Specialization Requirements	30 credits
Prescribed Distributive Requirements	12 credits
Elective Courses	<u>6 credits</u>
Total	48

Specialization REquirements - 30 credits

BADM	7020	Métodos de Investigación	3
BADM	7220	Teoría de Microeconomía	3
BADM	8950	Seminario de Investigación	3
FINA	7101	Finanzas Corporativas I	3
FINA	7102	Finanzas Corporativas II	3
FINA	7200	Matemáticas Financieras	3
FINA	8100	Seminar in Investments	3
FINA	8991	Doctoral Dissertation I	3
FINA	8992	Doctoral Dissertation II	3
*FINA	8993	Continuation of Doctoral Dissertation	3

*This course will be taken as many times as necessary until the student completes the Dissertation. If it is not necessary to take it, the student must take another course within the prescribed distributive courses.

Prescribed Distributive Requirements - 12 credits

Students will select twelve (12) additional credits from the following courses:

BADM	7150	Public Policy and Corporate Decisions	3
BADM	7223	Theory of Macro Economy	3
BADM	797C	Special Topics Seminar in Accounting	3
ECON	8312	Theory of Capital and Economic Cycles	3
FINA	8000	Seminar in Corporate Finances	3
FINA	8500	Seminar in Financial Strategies	3
FINA	8550	Epistemology Applied to Finances	3
INBU	8170	International Finance	3

Elective Courses -6 credits

Students will take six (6) credits, of the courses offered in the D.B.A or in the Ph. D. In special cases, authorization may be given to students to take up to three (3) credits at the doctoral level in another discipline with the previous approval of the dissertation supervisor.

Fine Arts (M.F.A.)

The Master in Fine Arts program has the objective of helping professional artists to developing their artistic capacities to the maximum in the medium that they have selected as their area of study. The Program promotes the development of students' own style and propitiates creative labor within a framework of conceptual maturity with full awareness of the place, time and space in which it is performed.

Since the Master in Fine Arts program is a terminal degree it aims to develop performance and aptitudes of the highest quality in the graduates.

The curriculum is geared to students who have obtained a Bachelor in Fine Arts degree or in other disciplines provided the candidates meet the admission requirements established by the Program.

This Program requires a creative project as one of the requirement for graduation.

Students may opt for one of the following specialization: ceramics, drawing, painting, photography, printmaking and sculpture.

Students have seven years to complete their study program.

General Competencies

Graduates of this Program are expected to show knowledge of:

- The philosophical, political and social theories that influence the rise and development of artistic movements.
- The pertinent technique for their particular area of study and its plastic qualities for artistic expression.
- The techniques for creating, preparing, exhibiting and defending an artistic work which constitutes their creative project.

Graduates from the Program will show ability to:

- Expand knowledge in the handling of tools, materials and specialized equipment necessary for performing artistic work
- Analyze, compare and evaluate philosophical and social theories that influence the development of art
- Evaluate and make decisions regarding appropriate techniques for artistic creation
- Use new technology, particularly the computer, for creating artistic works
- Make critical analyses of the theoretical approaches that permit the understanding and appreciation of the expressive qualities of visual arts.

Graduates from the Program will demonstrate the aptitude to:

- Recognize theories regarding the relationship between human beings and society and how art serves as a mirror of society
- Develop their own style that may be perceived in their artistic works within a framework of conceptual maturity
- Recognize, in a critical manner, the conceptual components that guide and motivate their work so they may be able to present and defend their aesthetic proposal
- Develop an artistic work with full awareness of the place, time and space in which it is created.

Admission Requirements

In addition to meeting the requirements established in the section “Admission Requirements for Masters’ Programs” of this Catalog, students who apply for admission to the Master in a Fine Arts program must meet the following requirements:

Artistic Requirements

Submit a portfolio of at least twenty images in electronic format of your works of art for evaluation by a committee.

Academic Requirements and other documents

- Students requesting admission to this program will be exempt from taking standardized admission tests.
- Possess a Bachelor in Fine Arts degree from an accredited college or university, or
- Possess a Bachelor's Degree from an accredited college or university, have six credits in History of Art and nine credits in the specialization area they apply for, with a minimum grade of B.
- Have completed the Bachelor’s degree with a minimum general grade index of 2.50 in the last 60 credits of academic work and with minimum general grade index of 3.00 in the major.

Conditional Admission

In worthy cases, the Admissions Committee of the Program may recommend a conditional admission to a candidate who does not fulfill some of the academic requirements of admission when submitting the application.

Academic Progress Requirement

In addition to the academic progress requirements for Masters Degrees, established in the Graduate Catalog, students must fulfill the following academic progress requirement:

Once the course ARTS 6974 has been approved, students must select the Creative Project Committee.

Graduation Requirements

In addition to the graduation requirements for Masters Degrees, established in the Graduate Catalog, students must fulfill the following graduation requirements:

1. Have a general academic index of 3.00 or more.
2. Approve all courses with a minimum grade of B.
3. Have approved courses ARTS 6996 - Creative Project I and ARTS 6997 - Creative Project II.
4. Have approved the public presentation of the Creative Project.
5. Submit to the office of the Program of Plastic Arts two copies of the written description of the Creative Project.

The San Germán Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF FINE ARTS DEGREE

Foundation Requirements in Fine Arts	24 credits
Specialization Requirements	24 credits
Prescribed Distributive Requirements	9 credits
Elective Courses	<u>3</u> credits
Total	60

Foundation Requirements in Fine Arts -24 credits

A. General - 15 credits

ARTS	5980	History of Puerto Rican Art	3
ARTS	6964	Seminar: Practice, Theory and Critique of Art	3
ARTS	6971	Concept and Theme in the Plastic Arts Proposal	1
ARTS	6972	Documentation and Research in the Plastic Arts Proposal	1
ARTS	6974	Concept and Composition in the Artistic Proposal	1

Six credits of Creative Project I and II according to the specialization

ARTS	6995C	Creative Project I: Ceramics	
ARTS	6995D	Creative Project I: Drawing	
ARTS	6995E	Creative Project I: Sculpture	
ARTS	6995F	Creative Project I: Photography	
ARTS	6995G	Creative Project I: Printmaking	
ARTS	6995P	Creative Project I: Painting	3
ARTS	6995C	Creative Project II: Ceramics	
ARTS	6995D	Creative Project II: Drawing	
ARTS	6995E	Creative Project II: Sculpture	
ARTS	6995F	Creative Project II: Photography	
ARTS	6995G	Creative Project II: Printmaking	
ARTS	6995P	Creative Project II: Painting	3

B. History of Art and Theory - 12 credits

Twelve credits from the following courses.

ARTS	5135	Art and Public Policy	3
ARTS	5140	Philosophy of Art	3
ARTS	6010	History of Ancient Art	3

ARTS	6020	History of Medieval Art	3
ARTS	6030	History of Renaissance and Baroque Art	3
ARTS	6040	History of Modern Art	3
ARTS	6050	History of Oriental Art	3
ARTS	6060	History of Pre-Columbian Art	3
ARTS	6070	History of Latin American Art	3
ARTS	6080	History of Contemporary Art	3
ARTS	6940	Seminar in Art Administration	3
ARTS	6944	Seminar in Museology	3
ARTS	6954	Seminar in Gallery Administration	3
ARTS	6973	Special Problems III	3

Specialization Requirements - 24 credits

Students will select one of the six specializations offered by the Master in Fine Arts Program. The advanced studies in the specializations should be taken in sequence until six credits per level have been taken.

Specialization in Ceramics (Fine Arts)

ARTS	6(111-115)	Advanced Ceramics I	2-6
ARTS	6(121-125)	Advanced Ceramics II	2-6
ARTS	6(131-135)	Advanced Ceramics III	2-6
ARTS	6(141-145)	Advanced Ceramics IV	2-6

Specialization in Drawing (Fine Arts)

ARTS	6(411-415)	Advanced Drawing I	2-6
ARTS	6(421-425)	Advanced Drawing II	2-6
ARTS	6(431-435)	Advanced Drawing III	2-6
ARTS	6(441-445)	Advanced Drawing IV	2-6

Specialization in Painting (Fine Arts)

ARTS	6(311-315)	Advanced Painting I	2-6
ARTS	6(321-325)	Advanced Painting II	2-6
ARTS	6(331-335)	Advanced Painting III	2-6
ARTS	6(341-345)	Advanced Painting IV	2-6

Specialization in Photography (Fine Arts)

ARTS	6(611-615)	Advanced Photography I	2-6
ARTS	6(621-625)	Advanced Photography II	2-6
ARTS	6(631-635)	Advanced Photography III	2-6
ARTS	6(641-645)	Advanced Photography IV	2-6

Specialization in Printmaking (Fine Arts)

ARTS	6(211-215)	Advanced Printmaking I	2-6
ARTS	6(221-225)	Advanced Printmaking II	2-6
ARTS	6(231-235)	Advanced Printmaking III	2-6
ARTS	6(241-245)	Advanced Printmaking IV	2-6

Specialization in Sculpture (Fine Arts)

ARTS	6(511-515)	Advanced Sculpture I	2-6
ARTS	6(521-525)	Advanced Sculpture II	2-6

ARTS 6(531-535)	Advanced Sculpture III	2-6
ARTS 6(541-545)	Advanced Sculpture IV	2-6

Distributive Descriptive Requirements - 9 credits

Nine (9) credits selected from the advanced courses in a medium other than the student’s specialization.

History of the Americas (M.A., Ph.D. and Combined Program)

General Description

The main purpose of this three-year Program of graduate study is to achieve the rigorous preparation in the development of historical research skills through curriculum. The fundamental aim of the Program is to develop specialists in Historical Research, who are highly competent, cognizant and committed to intellectual and historical development.

Master’s Program (M.A.)

This Program integrates history as the base for critical, analytical and creative research that will facilitate the understanding of political, economic, social, religious, artistic, literary and philosophical aspects to help recognize and identify reality and to seek alternatives to historical problems. The formation accessible through this specialization will enable the professional to work with investigative aspects in the area of history.

Admission Requirements

For admission to the masters program, students:

1. Must have a bachelor’s degree in History, or in Education in Social Studies, or in Secondary Education in History, or in Political Science. Students who have a bachelor’s degree in other areas must approve 15 credits in history, that include six credits in the following courses:
 - a. HIST 4020 Historiography
 - b. HIST 4210 Historical Research and nine credits from the following areas:
 - Colonial Latin America
 - Latin America from Independence
 - History of Puerto Rico
 - History of the United States

2. Have passed a course in a modern language other than English and Spanish with a minimum grade of C.

Graduation Requirements

1. Complete all course requirements with a minimum grade of 3.00.
2. Complete the thesis satisfactorily.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN HISTORY

Core Course Requirements	21 credits
Specialization Requirements	9 credits
Elective Courses	<u>6</u> credits
Total	36

Core Course Requirements - 21 credits

HIST	5000	History of the Aboriginal Cultures in the Americas	3
HIST	5005	History of Puerto Rico, 1800-1898	3
HIST	5010	International Relations between the United States and Puerto Rico, 19th. – 21st. Centuries	3
HIST	5015	Colonial Institutions of America	3
HIST	5020	Slavery in the Americas	3
HIST	6005	Puerto Rican Historiography	3
HIST	6020	Historiography of the Americas	3

Specialization Requirements - 9 credits

HIST	6000	Colonization, Society and Culture of the Spanish Antilles, 16th -18th Centuries	3
HIST	6980	Thesis Proposal	3
HIST	6990	Thesis	3

Elective courses - 6 credits

The student must pass 6 additional credits in courses at the master's level.

Doctoral Program (Ph.D.)

This Program integrates research to history as a fundamental basis to promote learning and historical development. It uses technology to identify and strengthen the area. It will develop new strategies that facilitate analytical processes in order to foment and address reality and historical truth in today's world, particularly in the Americas.

Admission Requirements

For admission to the doctoral program, students with a master's degree must:

1. Have a Master's Degree in History or its equivalent from an accredited university with a minimum academic index of 3.00.
2. Take the following courses if their master's degree is in related areas:
 - a. HIST 6005 Puerto Rican Historiography
 - b. HIST 6010 Methodologies for Historical Research
3. Have approved a course of a modern language different from English and Spanish and with a minimum grade of C.
4. Demonstrate analytical and research capability by means of a historiography article of a topic previously announced by the academic director of the History Department. The article will be presented with the application for admission. Please consult the Department of History for topics and dates to turn in the article.
5. Students who have a master's degree in areas unrelated to History must approve courses HIST 6005 and 6010 and nine additional credits, recommended by the Admissions Committee, at the Master's level in History of America. Their admission is conditional until they take the courses.
6. Be interviewed by the Admissions Committee and to be recommended favorably by it.

Graduation Requirements

1. Complete all course requirements with a minimum grade of 3.00.
2. Pass the doctoral comprehensive examination prior to the defense of the doctoral dissertation.
3. Complete the doctoral dissertation satisfactorily.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE DOCTORATE IN PHILOSOPHY AND LETTERS IN HISTORY

Core Course Requirements	12 credits
Specialization Requirements	9 credits
Prescribed Distributive Requirements	6 credits
Elective Courses	<u>3 credits</u>
Total	30

Core Course Requirements - 12 credits

HIST	7015	The United States in Latin America: 20 th Century	3
HIST	7020	Topics in History of America I	3
HIST	7030	Topics in History of America II	3
HIST	7040	Topics in History of Puerto Rico: 20 th Century	3

Specialization Requirements - 9 credits

HIST	8970	Historical Research Methodology	3
HIST	8980	Doctoral Dissertation Proposal	3
HIST	8990	Dissertation	3

Prescribed Distributive courses - 6 credits

Students must approve six credits from the following courses

HIST	7000	Popular Culture and Nationalism in Latin America	3
HIST	7005	Islamic Societies in the Americas during the 20 th Century	3
HIST	7010	Russia and the Americas	3
HIST	7050	Historical Research in Puerto Rico	3
HIST	7060	Paleography in America	3
HIST	7070	Critical Historiography	3
HIST	7080	Plastic Arts as Manifestation in History	3
HIST	7090	Oral History	3
HIST	7110	History of Cuba and the Caribbean	3
HIST	7120	Puerto Rican Historiography	3
HIST	7130	History from India in Time of Conquest	3
HIST	7140	Bioarchaeology as a Source for Historical Research	3
HIST	7150	Historiography of the Conquest	3

Elective Courses – 3 credits

Students must approve three credits at the doctoral level

The student will have the option of completing the Doctoral Degree if admitted to the Combined Masters and Doctoral Program. In the Combined Program students are exempt from taking the course HIST 6990 (Thesis) and six (6) elective credits at the master's level.

REQUIREMENTS FOR THE OF DOCTOR IN PHILOSOPHY AND LETTERS DEGREE IN HISTORY FOR THE COMBINED MASTERS-DOCTORAL PROGRAM

Core Course Requirements	33 credits
Specialization Requirements	15 credits
Prescribed Distributive Requirements	6 credits
Elective Courses	<u>3 credits</u>
Total	57

Core Course Requirements - 33 credits

HIST	5000	History of the Aboriginal Cultures in the Americas	3
HIST	5005	History of Puerto Rico, 1800-1898	3
HIST	5010	International Relations between the United States and Puerto Rico, 19 th – 21 st Centuries	3
HIST	5015	Colonial Institutions of America	3
HIST	5020	Slavery in the Americas	3
HIST	6005	Puerto Rican Historiography	3
HIST	6020	Historiography of the Americas	3
HIST	7015	United States in Latin America: Twentieth Century	3
HIST	7020	Topics in History of America I	3
HIST	7030	Topics in History of America II	3
HIST	7040	Topics in History of Puerto Rico: Twentieth Century	3

Specialization Requirements - 15 credits

HIST	6000	Colonization, Society and Culture of the Spanish Antilles, 16 th –18 th Centuries	3
HIST	6010	Methodologies for Historical Research	3
HIST	8970	Historical Research Methodology	3
HIST	8980	Doctoral Dissertation Proposal	3
HIST	8990	Dissertation	3

Prescribed Distributive Requirements - 6 credits

Students must approve six credits from the following courses

HIST	7000	Popular Culture and Nationalism in Latin America	3
HIST	7005	Islamic Societies in the Americas during the 20 th Century	3
HIST	7010	Russia and the Americas	3
HIST	7050	Historical Research in Puerto Rico	3
HIST	7060	Paleography in America	3
HIST	7070	Critical Historiography	3
HIST	7080	Plastic Arts as a Manifestation in History	3
HIST	7090	Oral History	3
HIST	7110	History of Cuba and the Caribbean	3
HIST	7120	Puerto Rican Historiography	3
HIST	7130	History from India in the Time of the Conquest	3
HIST	7140	Bioarchaeology as a Source for Historical Research	3
HIST	7150	Historiography of the Conquest	3

Elective courses - 3 credits

Students must approve three credits at the doctoral level.

Information Security (M.S.)

The Master of Science Program in Information Security offers studies of a high level of complexity and specialization for the evaluation, analysis, administration and implementation of security strategies in computer information systems. The program is directed to all those professionals who possess a Baccalaureate in areas of computer sciences or information systems or their equivalent. It is also an alternative for the professional of any discipline who has approved specific courses in the computation area and wishes to enter the computation field. Graduates of the Program will be able to contribute their knowledge and skills in information security systems in public or private companies and institutions. The Program allows the interested student to aspire to obtain the following professional certifications: Certified Network Defense Professional (CNDP), Certified Cybercrime Forensic Investigator (CCFI), Certified Intrusion Detection Specialist (CIDS) and the option of the Certified Voice over Internet

Security (CVoIP). The student will be responsible for obtaining these certifications through the Department of Continuing Education of the Metropolitan Campus.

Admission Requirements

To be admitted to the of Master of Science Program in Information Security, the candidate must meet the general admission requirements for a Master’s degree, established by Inter American University of Puerto Rico in its Graduate Catalog and must meet the following specific requirements of the program:

To be admitted to the Program, the candidate must:

1. Have completed a bachelor’s degree from an accredited university or educational institution, in any of the following areas:
 - a. computation,
 - b. information systems,
 - c. mathematics,
 - d. engineering,
 - e. or related areas, subject to the evaluation of the coordinator.
2. Have an academic index of at least 3.0 in the last 60 credits.
3. Have approved a course of:
 - a. Programming Logic or its equivalent
 - b. Structured Programming in any of the following languages: Java, C#, C++ or its equivalent
 - c. Networks and telecommunications or their equivalent
 - d. Computer Security or its equivalent

Graduation Requirements

In addition to the graduation requirements established in the current Graduate Catalog, the following requirements are required:

1. Approve course 6980 INSE - Development of a Security Project to comply with section “Institutional Graduation Requirements for Masters’ Programs” of this Catalog, in relation to the research seminars.
2. Have a minimum academic average of 3.00 points.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN INFORMATION SECURITY

Specialization Requirements		27 credits
Prescribed Distributive Requirements		<u>6 credits</u>
	Total	33

Specialization Requirements - 27 credits

INSE	5101	Fundamentals of Security in Networks I	3
INSE	5201	Forensic Informatics I	3
INSE	6130	Research Methodology	3
INSE	6120	Risk Analysis	3
INSE	5102	Fundamentals of Security in Networks II	3
INSE	5202	Forensic Informatics II	3
INSE	6100	Practices for the Detection and Prevention of Intrusions	3
INSE	5140	Security in E-Commerce	3
INSE	6980	Development of a Security Project	3

Prescribed Distributive Requirements - 6 credits

Six prescribed distributive credits are required, where at least 3 credits must be from the following courses and the other 3 credits can be from another graduate program approved by the coordinator or director of the program.

INSE	5400	Security in Networks of Voice on Internet (VoIP)	3
INSE	6400	Special Topics in Security	3
INSE	6200	Auditing of Information Systems	3
INSE	5600	Security in Databases	3

International Business (M.I.B.)

The Masters Program in International Business develops the competences that contribute to preparation in management and enterprise in the international field. The diverse operational areas that affect global enterprise transactions are studied.

The Program aims to develop the following competencies:

1. Manage the cultural and economic factors that play a part in business relations at the international level.
2. Analyze the operational process of multinational and transnational companies.
3. Apply new knowledge and managerial skills to compete in global markets, either as an employee or industrialist.
4. Develop projects or research related to international aspects.
5. Distinguish and value cultural differences with other countries and adapt judiciously to them.
6. Examine the situation of the entrepreneurs of Puerto Rico in the light of current international commercial treaties.
7. Analyze the multidisciplinary and international context of the managerial practices.
8. Evaluate international markets as the present and future means to do business in view of a new economy and new global sociopolitical environment.

Admission Requirements

Students requesting admission to the Master's Degree in International Business Program must:

1. Meet the requirements for entering masters programs established in the section "Admission Requirements to Masters Programs" of this Catalog.
2. Obtain a minimum score of 450 points in the Entrance Examination to Studies of Posgrado (EXADEP) or in the Graduate Management Admission Test (GMAT) or its equivalent, except the candidates who have a grade point average of 3.25 or above in their bachelor's degree and a minimum grade point average of 3.00 in the last 60 credits.
3. Have a bachelor's degree in Business Administration (BBA) or have a baccalaureate in another discipline and present proof of having approved courses (or their equivalent) in the following areas, at the baccalaureate level with a minimum grade of C or its equivalent:
 - Statistics (6 créditos)
 - Economics (6 créditos)
 - Accounting I (3-4 créditos)
 - Management (3 créditos)
 - Marketing (3 créditos)
 - Finance (3 créditos)
 - Quantitative Methods or Precalculus (3-5 créditos)

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF INTERNATIONAL BUSINESS DEGREE

Specialization Requirements

41 credits

Prescribed Distributive Requirements

Total 3 credits
44

Specialization Requirements - 41 credits

INBS	5000	Intercultural Negotiation and Communication in International Business	3
INBS	5005	Professional Workshop	2
INBS	5020	International Macroeconomy	3
INBS	6000	International Business Management	3
INBS	6010	International Business Law	3
INBS	6020	International Economic Policy	3
INBS	6210	Research Methods in International Business	3
INBS	6970	Seminar: Business Environment and Administrative Practices of the Caribbean and Latin America	3
INBS	6990	Project in Consulting/ Research in Business	3
BADM	6200	International Business Finance	3
BADM	6295	International Operations	3
BADM	6390	Global Marketing	3
BADM	6820	The Multinacional Company	3
ACCT	6420	International Financial Statements and their Analysis	3

Prescribed Descriptive Requirements - 3 credits

Students must select one course from the following:

INBS	6905	International Internship	3
INBS	6910	Professional Practice	3

Minor Specialization in International Marketing

The minor specialization in International Marketing is designed for the graduate student of the Master of Business Administration and the Master of International Business. This minor specialization aspires to develop knowledge and skills in decision making in the entrepreneurial areas of communication, consumer behavior and the determination of pricing strategies from a perspective of marketing in the global environment.

The Metropolitan Campus is authorized to offer this minor specialization.

Requirements for the Minor Specialization in International Marketing - 9 credits

BADM	5480	Electronic Business and Mobile Marketing	3
BADM	6480	International Pricing	3
MKTG	6430	Consumer Behavior at the International Level	3

Minor Specialization in International Relations

The Minor Specialization in International Relations is designed for the graduate student of the Master of Business Administration and the Master of International Business. The goal of this program has is to develop knowledge and skills in the areas of globalization, international organizations and international civil society. This minor specialization provides managerial knowledge and skills in the areas dealing with globalization.

The Metropolitan Campus is authorized to offer this minor specialization.

Requirements for the minor specialization in International Relations – 12 credits

INBS	6070	Globalization: Foundation of Contemporary International Businesses Relations	3
INBS	6080	International Relations and Contemporary Affairs of Economy and International Business	3
INBS	6090	International Organizations and International Civil Society: Their Influence in International Relations and Business	3
INBS	6310	International Humanitarian Actions: Philanthropy and Business Opportunities	3

Minor Specialization in Economic and Social Dimensions of Globalization

The minor specialization is designed to reflect on the meaning of the economic policy in the new context that defines the process of the globalization in the economic, social, and business activities. This process, driven by ideological reasons as well as by technological reasons, has substantially modified the effectiveness of the mechanisms of public intervention offered by economic literature.

The Metropolitan Campus is authorized to offer this minor specialization.

Requirements for the Minor Specialization in Economic and Social Dimensions of Globalization - 12 credits

Students will take the following 9 credits:

BADM	6555	Introduction to Research in Social Sciences	3
BADM	6580	Globalization: International Trade, Capital Flow, New Governance and Fairness	3
BADM	6590	Dimensions of the globalization and Incidences in Economic, Political and Socio Labor Relations	3

Select a 3 credit course from the following:

BADM	5776	Transformation of the Liberal State in Current Globalization	3
BADM	6559	Analysis of Regression Applied to Social Sciences	3
BADM	6577	Introduction to Econometry	3
BADM	6600	Policy of Innovation in Globalization	3
BADM	6610	Culture, Identity and Policy in the Context of Globalization	3

International Business Administration (M.I.B.A.)

The Masters in International Business Administration deals with the administration of organizational resources in an international environment and is designed for graduates from programs of accredited Postsecondary Institutions, desiring to complete a program based on the study, analysis, consideration and application of managerial theories and practices in the current international environment. The Program integrates technology, business processes in other countries, international regulations and laws and the function of Accounting, Human Resources, Marketing, Global Logistics and Finance in an international frame.

The Program aims to develop leaders in International Administration through competencies based on research and problem analysis and evaluation that lead to the development of organizational goals, objectives and strategies in a multinational environment. The Program will offer the student a broad and critical vision of the international component in a company and a fundamental understanding of the problems faced. In addition, it will give attention to the profile of company administration professionals with skills and knowledge not contemplated in their area of specialization at the undergraduate level. These areas include Human Resources, Accounting, Marketing, Global Logistics and Finance. This Program offers a new dimension in local and international employability, the development of critical and analytical thinking for decision making, the performance of functions with ethical and moral principles, the capacity for self employment and the globalization and economic integration of countries involved in commerce and their impact on the local environment.

The Program is based on a practical approach, by adjusting and applying its requirements to the development of a special project that will impact sectors of private or governmental enterprises within the selected specialization. It presents a group of integrated experiences to direct the attention of participants in important matters in business administration with an international focus, which also contribute to the improvement of performance of local

organizations. Students will take the course IBAD 6971 Special Project in International Business in which the student, together with advisory professor, is required to select either a functional project in a business or agency, or a research project.

Admission Requirements

In addition to the admission requirements established in the Graduate Catalog, students in this Masters Program must meet the following Program requirements:

Students whose baccalaureate is not in Business Administration must:

1. Have passed six (6) credits in Micro and Macro Economics, six (6) credits in Statistics and six (6) credits in Accounting with a minimum grade of “C”.
2. The Accounting specialization requires that students pass courses ACCT 2051 and 2052 Intermediate Accounting I and II, ACCT 3451 Advanced Accounting I, or equivalent courses at the baccalaureate level with a minimum grade of “C”.
3. The Finance specialization requires that students pass FINA 3100 Managerial Finance and FINA 4100 International Finance or equivalent courses at the baccalaureate level with a minimum grade of “C”.
4. Attend an orientation session.

The campuses authorized to offer the specializations of this Program are:

- 1) Accounting: Barranquitas, Ponce
Accounting online: Ponce
- 2) Finances: Ponce
Finances online: Ponce
- 3) Global Logistics online: Ponce
- 4) Marketing: Ponce
Marketing online: Ponce
- 5) Human Resources: Ponce
Human Resources online: Ponce

REQUIREMENTS FOR THE MASTER OF INTERNATIONAL BUSINESS ADMINISTRATION DEGREE

Core Course Requirements		30 credits
Specialization Requirements		<u>12</u> credits
	Total	42

Core Course Requirements - 30 credits

IBAD	5100	Research in the International Environment	3
IBAD	5110	Strategic International Administration	3
IBAD	5210	Information Systems and Electronic Commerce	3
IBAD	5320	Global Environment of Business	3
IBAD	5410	International Distribution	3
IBAD	6971	Special Project in International Business Administration	3
BADM	5040	Accounting for Managers	3
BADM	6390	Global Marketing	3
BADM	5190	Managerial Finance I	3
BADM	6780	The Manager in International Economics	3

Note: Exemption of Prerequisite

Students of this Masters Degree are exempt from taking the course BADM 5090 Marketing Management as a prerequisite of course BADM-6390 Global Marketing because the international aspect of course BADM 6390 Global Marketing, because of its international content, is suitable for this Program that has a totally international approach

Specialization in Accounting (M.I.B.A.)

Specialization Requirements for Accounting - 12 credits

ACCT	6410	International Accounting	3
ACCT	6420	International Financial Statements and their Analysis	3
ACCT	6430	Advanced Internal Auditing	3
ACCT	6440	Forensic Accounting	3

Specialization in Finance (M.I.B.A.)

Specialization Requirements for Finance - 12 credits

FINA	6310	International Financial Administration	3
FINA	6420	International Financial Markets	3
FINA	6430	International Analysis of Investment Portfolios	3
BADM	6200	International Business Finance	3

Specialization in Human Resources (M.I.B.A.)

Specialization Requirements for Human Resources - 12 credits

BADM	6010	Human Resources Management in the International Environment	3
BADM	6415	International Administration of Salaries, Benefits and Services	3
BADM	6510	International Labor Economics	3
LARE	6410	Comparative Labor Relations	3

Specialization in Marketing (M.I.B.A.)

Specialization Requirements for Marketing - 12 credits

MKTG	6410	Integrated Communication of International Marketing	3
MKTG	6420	Strategic Planning of International Marketing	3
MKTG	6430	Consumer Behavior at the International Level	3
MKTG	6440	Electronic Marketing	3

Specialization in Global Logistics (M.I.B.A.)

Specialization Requirements for Global Logistics - 12 credits

GLLO	6100	Introduction to Global Logistics	3
GLLO	6200	Technology for Global Logistics	3
GLLO	6300	Security in the Global Value Chain	3
GLLO	6400	Advanced Global Logistics	3

Labor Relations (M.A.)

The Masters of Arts Program in Labor Relations integrates the theoretical, technical and legal aspects related to labor relations, human resource management and the practice of the Labor Relations profession. The Program entails a background of human relations in labor conflict resolution. In addition, it aims to train enterprising professionals and leaders who may work in organizations, to make the solution of situations that affect the work world feasible.

In addition to meeting the requirements established in the section “Admission Requirements for Masters’ Programs” of this Catalog, candidates for admission to this Program must have passed the following undergraduate courses (or their equivalent):

MAEC	2212	Principles of Economics (MACRO)	3
PSYC	1051	General Psychology I	3
SOCI	2030	Introduction to Sociology	3

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN LABOR RELATIONS

Core Course Requirements	21 credits
Specialization Requirements	12 credits
Prescribed Distributive Requirements	<u>3</u> credits
Total	36

Core Course Requirements - 21 credits

LARE	5001	Research Methods in Labor Relations	3
LARE	5010	Collective Bargaining in the Public and Private Sector	3
LARE	5200	Labor Statistics	3
LARE	5400	Labor Legislation	3
LARE	5410	History and Philosophy of Labor Movements	3
LARE	6440	Mediation, Conciliation and Labor Arbitration	3
BADM	5100	Organizational Theory and Behavior	3

Specialization Requirements - 12 credits

LARE	6975	Integrating Seminar in Labor Relations	3
------	------	--	---

Nine (9) credits from the following:

LARE	5300	Labor Economics	3
LARE	5420	Labor Relations in the Public Sector	3
LARE	6300	Protective Work Legislation	3
LARE	6410	Comparative Labor Relations	3
LARE	6450	Job Discrimination	3
BADM	6080	Salary Administration	3

Prescribed Distributive Requirements – 3 credits

Three (3) credits from the following:

BADM	6070	Human Resource Administration	3
BADM	6090	Supervision and Leadership	3
LARE	6430	New Organizational Work Patterns	3

Minor Specialization in Economic and Social Dimensions of Globalization

The minor specialization is designed to reflect on the meaning of the economic policy in the new context that defines the process of the globalization in the economic, social, and business activities. This process, driven by ideological reasons as well as by technological reasons, has substantially modified the effectiveness of the mechanisms of public intervention offered by economic literature.

The Metropolitan Campus is authorized to offer this minor specialization.

Requirements for the Minor Specialization in Economic and Social Dimensions of Globalization - 12 credits

Students will take the following 9 credits:

BADM	6555	Introduction to Research in Social Sciences	3
BADM	6580	Globalization: International Trade, Capital Flow, New Governance and Fairness	3
BADM	6590	Dimensions of the globalization and Incidences in Economic, Political and Socio Labor Relations	3

Select a course from the following:

BADM	5776	Transformation of the Liberal State in Current Globalization	3
BADM	6559	Analysis of Regression Applied to Social Sciences	3
BADM	6577	Introduction to Econometry	3
BADM	6600	Policy of Innovation in Globalization	3
BADM	6610	Culture, Identity and Policy in the Context of Globalization	3

Library and Information Sciences (M.L.S.)

This Program aspires to prepare students to hold positions as professional librarians. Through the Program, students recognize the importance of strengthening the profession of librarian in aspects of professional leadership, knowledge and the necessary attitudes for improving library and information center services.

Graduates of the Program will qualify for certification from the Department of Education if they have a minimum of two years satisfactory experience as a librarian teacher.

In addition to meeting the requirements established in the section “Admission Requirements for Masters’ Programs” of this Catalog, a statistics course is required for admission to the Library and Information Sciences Program.

The San Germán Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF LIBRARY AND INFORMATION SCIENCES DEGREE

Specialization Requirements	33 credits
Prescribed Distributive Requirements	<u>6</u> credits
Total	39

Specialization Requirements - 33 credits

LISC	5000	Library Fundamentals and Information Sciences	3
LISC	5180	Computer Applications in the Library	3
LISC	5200	Information Service and Documentation	3
LISC	5300	Cataloging and Bibliographic Description	3
LISC	5350	Subject Classification and Indexing	3
LISC	5390	Control and Handling of Serial Publications	
		or	
LISC	6460	Development of Collections and Services for Children, Young People and Adults	3
LISC	5450	Collection Acquisition, Development and Evaluation	3
LISC	6150	Administration of School Libraries	
		or	
LISC	6710	Services in Academic Libraries and Documentation Centers	3
LISC	6250	Research Methods Applied to Library and Information Services	3
LISC	6350	Educational Technology: Use, Production and Evaluation	3
LISC	6910	Internship in Libraries	3

Prescribed Distributive Requirements - 6 credits

Six (6) credits to be selected from the following courses with approval of the Director of the Department.

LISC	5250	Documentation and Database for the Humanities	1
LISC	5260	Documentation and Database for the Behavioral Sciences	1
LISC	5270	Documentation and Database for the Natural Sciences	1
LISC	5370	Special Problems in Descriptive Cataloging	3
LISC	6750	Bibliographic Instruction	3
LISC	6980	Independent Study	1 - 3

Mechanical Engineering (M.S and M.E.)

The Department of Mechanical Engineering offers two modalities of master degrees: Master of Science (M.S.) in Mechanical Engineering and Master of Engineering (M.E.) in Mechanical Engineering. In each modality two specializations are offered: Aerospace and Energy. These programs are designed to prepare students with the skills and attitudes necessary to perform as efficient professionals in the aerospace and energy specializations. In the Energy specialization students are prepared in the study of fossil and renewable energies. In the Aerospace specialization students are offered the knowledge necessary to perform successfully in the aerospace industry. Students can choose one of the two specializations offered: Aerospace and Energy.

Admission Requirements

In addition to the general requirements in the Graduate Catalog, the following is required:

1. Possess a Bachelor's degree in Mechanical Engineering or related area.
2. Present three (3) letters of recommendation from people who know the student in his academic or professional performance or both.
3. Have approved the following courses or equivalents:
 - a. MECN 4202 Thermodynamics II
 - b. MECN 3135 Solid Mechanics
 - c. MATH 3400 Differential Equations

The Bayamón Campus is authorized to offer these programs and specializations.

REQUIREMENTS FOR THE MASTER OF SCIENCE (M.S.) IN MECHANICAL ENGINEERING

Core Course Requirements	12 credits
Prescribed Distributive Requirements	6 credits
Specialization Requirements	9 credits
Thesis Requirements	<u>6</u> credits
Total	33

Core Course Requirements - 12 credits

MECN	6010	Advanced Mathematics for Engineers	3
MECN	6020	Advanced Thermodynamics	3
MECN	6030	Advanced Solid Mechanics	3
MECN	6040	Computational Modeling for Engineering	3

Prescribed Distributive Requirements - 6 credits

Select 6 credits from the following courses:

MECN	5970	Advanced Topics in Mechanical Engineering	3
MECN	6140	Fuel Cells	3
MECN	6150	Advanced Power Generation	3
MECN	6240	Aerospace Materials	3
MECN	6250	Computational Fluid Dynamics	3
MECN	6260	Advanced Mechanical Vibration	3
MECN	6300	Advanced Control Systems	3
MECN	6510	Lighting Systems Design	3

Specialization Requirements

The student will select one of the following specializations:

Specialization in Energy (Mechanical Engineering) (M.S.)

Specialization in Energy - 9 credits

MECN	6110	Renewable Energy	3
MECN	6120	Energy Management	3
MECN	6130	Sustainable Buildings	3

Specialization in Aerospace (Mechanical Engineering) (M.S.)

Specialization in Aerospace - 9 credits

MECN	6210	Integration of Engineering Systems	3
MECN	6220	Advanced Aerospace Structures	3
MECN	6230	Aerospace Dynamics	3

Thesis Requirements - 6 credits

MECN	6991	Thesis I	1
MECN	6992	Thesis II	2
MECN	6993	Thesis III	3

REQUIREMENTS FOR THE MASTER OF ENGINEERING (M.E.) IN MECHANICAL ENGINEERING

Core Course Requirements	12 credits
Prescribed Distributive Requirements	12 credits
Specialization Requirements	9 credits
Project Requirements	<u>3</u> credits
Total	36

Core Course Requirements - 12 credits

MECN	6010	Advanced Mathematics for Engineers	3
MECN	6020	Advanced Thermodynamics	3
MECN	6030	Advanced Solid Mechanics	3
MECN	6040	Computational Modeling for Engineering	3

Prescribed Distributive Requirements - 12 credits

Select 12 credits from the following courses:

MECN	5970	Advanced Topics in Mechanical Engineering	3
MECN	6140	Fuel Cells	3
MECN	6150	Advanced Power Generation	3
MECN	6240	Aerospace Materials	3
MECN	6250	Computational Fluid Dynamics	3
MECN	6260	Advanced Mechanical Vibration	3
MECN	6300	Advanced Control Systems	3
MECN	6510	Lighting Systems Design	3

Specialization Requirements

The student will select one of the following specializations:

Specialization in Energy (Mechanical Engineering) (M.E.)

Specialization in Energy - 9 credits

MECN	6110	Renewable Energy	3
MECN	6120	Energy Management	3
MECN	6130	Sustainable Buildings	3

Specialization in Aerospace (Mechanical Engineering) (M.E.)

Specialization in Aerospace - 9 credits

MECN	6210	Integration of Engineering Systems	3
MECN	6220	Advanced Aerospace Structures	3
MECN	6230	Aerospace Dynamics	3

Project Requirements of 3 credits

MECN	6981	Project I	1
MECN	6982	Project II	2

Music Education (M.A.) Metropolitan Campus

The main purpose of this two (2) year Program is to improve the preparation, teaching techniques and methodology of music teachers of the public and private school systems of Puerto Rico. This rigorous and highly specialized technical preparation is complemented with history of the music education courses compared with the history of music education in Puerto Rico. The fundamental aim of the Program is to develop a highly competent music teacher who is aware of and committed to the intellectual and musical development of students, thus raising the level of music education in the island.

Specific Admission Requirements

1. Have a Baccalaureate in Music, Baccalaureate in Arts in Music or a Baccalaureate in Music Education.
2. Have an interview with a jury of three (3) faculty members of the Master of Arts in Music Education Program.
3. Satisfactorily pass entrance examinations to the Master of Arts in Music Education Program in the areas of Music Theory and the principal instrument.
4. Write an essay in which students explain their music education philosophy and their goals upon requesting admission to the Program.

Students of the Program who show deficiencies in their musical skills will be required to take additional courses from the Bachelors Program in Popular Music. These courses must be taken before completing nine (9) credits leading to the Masters of Arts Degree in Music Education.

The Metropolitan Campus is authorized to offer this Program

REQUIREMENTS OF THE MASTER OF ARTS DEGREE IN MUSIC EDUCATION

Core Course Requirements	21 credits
Specific Requirements	6 credits
Directed Elective Courses	<u>6</u> credits
Total	33

Core Course Requirements - 21 credits

MUED	5100	Research Techniques in Music Education	3
MUED	5101	Philosophy of Music Education	3
MUED	5102	Comparative History of Music Education	3
MUED	5103	Seminar in Music Education at the Elementary Level	3
MUED	5104	Seminar in Music Education at the Secondary Level	3
MUED	5105	Measurement, Assessment and Evaluation of Music Learning	3
MUED	5106	Technology and Instructional Design	3

Specific Requirements - 6 credits

MUED	6691	Thesis Seminar	3
MUED	6692	Thesis in Music Education*	3

* Note: Student will repeat course MUED 6692 Thesis in Music Education until they complete their thesis requirement for the master's degree.

Directed Elective Courses - 6 credits

MUED	5200	Musical Analysis Techniques	3
MUED	5201	History of Puerto Rican Music	3
MUED	5202	Music of the World	3

Music Education (M.A.) San Germán Campus

The Master of Arts Program in Music Education aims to prepare professionals who expand their role and function in the different school levels as well as in the diverse educational systems. The study program will develop knowledge in philosophical, social and educational theories. It concentrates in the application of the teaching and learning process of music.

The core component focuses on general conceptual courses to expose students to the diversity of aspects related to music, whereas the specialization component deals more with the specific formation within the field of the music education. In the elective component students will be able to explore other areas of music of their preference or may opt for a special research project or a special creative project. The number of required credits to complete this master's degree compares favorably with the master of music degrees offered in universities in the United States and with the standards established by the National Association of Schools of Music (NASM).

Graduates of the Masters of Arts Program in Music Education will be a professional prepared in all facets of music; its teaching, its historical and philosophical background, its development, its esthetic sense and its interpretation.

The specialization in Music Education aims to satisfy the professional growth needs of the teachers of Music Education in Puerto Rico, the Caribbean and Spanish speaking countries. It aspires to develop professionals that can assume a leadership role as teachers in the public and private educational systems of the country, as well as in the music profession that enriches our cultural inheritance.

Profile of the Competencies of Graduates

This program is designed to develop the competencies that will permit students to:

Knowledge:

1. Know materials, methodologies, curricular developments and technologies to design significant educational experiences.
2. Know the musical elements and the theoretical, auditory and historical foundations of music.
3. Know the evaluation and assessment mechanisms that are particular to the teaching of music.
4. Know the history the music education and its influence in the physical, social and psychological development of the human being.
5. Know the methods and processes of quantitative and qualitative research.

Skills:

1. Interpret music and handle their instrument effectively.
2. Demonstrate capacity to carry out analysis and direct ensembles with an interpretation that is musical and esthetic.
3. Analyze critically and create curricula of music education using historical, philosophical, esthetic, methodological, psychological, and educational foundations.
4. Use recent technology to create didactic materials and strengthen their pedagogical work.

Attitudes:

1. Contribute to the improvement of Music Education in Puerto Rico by assuming an educational leadership role that will contribute to society with social, cultural and ethical values.
2. Recognize the importance of being at the vanguard of knowledge in the subject matter.
3. Aspire to enrich, with music, the lives of students, who then will enrich the society in which they live.

Admission Requirements

Students requesting admission to the Masters of Arts in Music Education program must meet the admission requirements for masters programs established in the current Graduate Catalog. In addition, they must meet the following particular requirements:

1. Have an interview with an Admissions Committee.
2. Have one of the following:
 - A Baccalaureate degree in Music Education
 - A Baccalaureate degree with a major in Music and 12 credits in foundations of education or music education *.
 - A Baccalaureate degree and Music Teacher Certification from the Department of Education of Puerto Rico
 - A Baccalaureate degree and 24 credits in music and 12 credits in foundations of education or music education *.

* The 12 credits must include areas such as: foundations, philosophy, history, learning theories, evaluation, curriculum, or methodology.

Note: All students admitted to the Program must take a placement test before beginning their first semester to determine their sequence of courses.

Admission of Transfer Students

Students requesting admission as transfer students must meet the requirements of the current Graduate Catalog and the specific requirements of the program.

Graduation Requirements

All candidates for graduation with a Master of Arts in Music Education degree must meet the specific requirements of the Graduate Catalog and the specialization requirements, including passing the Comprehensive Examination.

Satisfactory Academic Progress Requirements

The academic index and minimum grade requirements established in the Graduate Catalog are in effect for this program.

The San Germán Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN MUSIC EDUCATION

Core Course Requirements	15 credits
Specialization Requirements	13 credits
Prescribed Distributive Requirements	<u>6 credits</u>
Total	34

Core Course Requirements - 15 credits

MUED	5160	History and Philosophy of Music Education	3
MUSI	5185	Musical Interpretation and Analysis	3
MUSI	5255	Workshop in Applied Music I	1
MUSI	5256	Workshop in Applied Music II	1
MUSI	5257	Workshop in Applied Music III	1
MUSI	5265	Conducting and Literature	3
MUTE	5261	Technology Applied to Music Education	3

Specialization Requirements - 13 credits

MUED	5105	Measurement, Assessment and Evaluation of Music Learning	3
MUED	5130	Psychology of Musical Learning	3
MUED	5171	Development and Application of Knowledge in Music Education	4
MUED	5191	Curriculum Design in Music	3

Prescribed Distributive Requirements - 6 credits

Students should take 6 elective credits at the graduate level with the approval of their academic advisor.

Special Project Option

Students may opt for a special four-credit project and two credits in electives at the graduate level, with the approval of their academic advisor.

Nursing (M.S.N.)

The Master of Science in Nursing Program offers three specialization options: Critical Care Nursing, Medical-Surgical Nursing and Maternal Child Nursing. The Program has the goal of developing specialists in nursing that:

1. Have knowledge and skills inherent to the specialization.
2. Have ethical-professional attitudes, communication, leadership and critical thinking skills and are able to use technology to facilitate their intervention with individuals, the family and groups.
3. Apply the scientific research process in the solution of health problems, thereby improving the quality of service in the field of nursing.
4. Apply knowledge of mental health during intervention with the individual, family and groups.

5. Perform educational or administrative functions in different scenarios as part of the selected specialization: Critical Care Nursing, Medical-Surgical Nursing or Maternal Child Nursing.

Admission Requirements

In addition to meeting the admission requirements established for Masters Programs in this Catalog, candidates for admission must:

1. Have a Bachelor's Degree in Nursing from an accredited institution.
2. Have a grade point index of 2.50 or above in the last sixty (60) credit hours of academic work.
3. Have a provisional or permanent and current generalist nursing license for practicing nursing in Puerto Rico.
4. Be an active member of the College of Professional Nursing of Puerto Rico.
5. Send two (2) letters of recommendation from individuals who have supervised the candidate in the work setting or from the nursing faculty.
6. Present the following documents:
 - a. A health certificate.
 - b. Vaccination certificate of Hepatitis B.
 - c. A Certificate of No Penal Record issued by the Puerto Rico Police Department.
 - d. A copy of current provisional or professional license and licensure.
 - e. Cardiopulmonary Resuscitation (CPR) training.
 - f. Updated resume of professional experience.

Note: Some agencies and courses stipulate additional requirements. Students are responsible to meet any other requirement that the practice agency may require. Among these are: up-to-date CPR certificate, negative doping test, and nose and throat culture, among others.

Graduation Requirements

In addition to completing the graduation requirements for a Master's Degree established in this Catalog, students must:

1. Pass all courses with a minimum grade of B.
2. Meet the required minimum hours for each course that entails practice.
3. Pass course NURS 6970 – Integration Seminar.

Students or graduates of the Program may request a second certification once they have completed the requirements of the specialization or the functional role.

The Arecibo Campus is authorized to offer all specializations of this Program. The Guayama Campus is authorized to offer the specialization in Medical-Surgical Nursing.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN NURSING WITH A SPECIALIZATION IN CRITICAL CARE NURSING, MEDICAL-SURGICAL NURSING AND MATERNAL CHILD NURSING

Core Course Requirements	18 credits
Specialization Requirements	10 credits
Prescribed Distributive Requirements	10 credits
Elective Courses	<u>3</u> credits
Total	41

Core Course Requirements - 18 credits

NURS	5000	Theoretical Foundations	3
NURS	5010	Epidemiology	2
NURS	5020	Biostatistics	3
NURS	5040	Health Assessment	2

NURS	6090	Research in Nursing	3
NURS	6910	Practice in Health Assessment	2
NURS	6970_	Integration Seminar	3

Specialization Requirements - 10 credits

Specialization in Critical Care Nursing (M.S.N.)

NURS	6111	Critical Care I	3
NURS	6112	Critical Care II	3
NURS	6916	Practice in Critical Care I	2
NURS	6917	Practice in Critical Care II	2

Specialization in Medical-Surgical Nursing (M.S.N.)

NURS	6221	Medical-Surgical Nursing I	3
NURS	6222	Medical-Surgical Nursing II	3
NURS	6918	Practice in Medical-Surgical Nursing I	2
NURS	6919	Practice in Medical-Surgical Nursing II	2

Specialization in Maternal Child Nursing (M.S.N.)

NURS	6311	Maternal and Child Nursing I	3
NURS	6920	Maternal and Child Nursing Practice I: Maternal - Neonatal	2
NURS	6312	Maternal and Child Nursing II	3
NURS	6921	Maternal and Child Nursing Practice II: Childhood - Adolescence	2

Prescribed Distributive Requirements - 10 credits

Functional Role in Education

NURS	6050	Curriculum in Nursing	3
NURS	6060	Evaluation in Education	3
NURS	6914	Educational Practice in Nursing	4

Functional Role in Administration

NURS	6070	Administration in Nursing	3
NURS	6080	Evaluation in Administration	3
NURS	6915	Administrative Practice in Nursing	4

Students will choose the area of preference in agreement with the functional role they hope to carry out: nursing education or administration.

Open Information Computer Systems (M.S.)

This Program permits students to obtain a Professional Certificate in Technology and Administration of Databases and with further studies a Master in Science degree in Open Information Computer Systems.

The fundamental purpose of the Program is to form professionals in the field of computers who develop information systems in open settings and architecture in both public and private organizations.

The Professional Certificate in Technology and Administration of Data Banks strives to prepare computer specialists that have the necessary skills to plan, develop, manage, tune and troubleshoot data banks mainly related to the client-server platform in an open environment.

The Program, in addition to permitting students to obtain a Professional Certificate, is directed to the formation of specialists in programming, application and integration of data banks in information systems, with an open approach.

This is done with a scientific perspective regarding programming oriented to the object and responding to the new technologies in the computing field.

The knowledge and ability acquired through this Program will allow graduates to develop new information systems and knowledge that enterprises need today. The open focus applied in this Program keeps students from restricting themselves to an owned or closed computer system architecture, and orients them towards the prevailing public standards, in which networks offer inter-connections and inter-operations.

The Program consists of two stages: the first 21 credits are focused on studying data banks, and lead to the Professional Certificate in Technology and Administration of Data Banks.

Students may continue their studies to obtain a Master's Degree in Open Information Computer Systems by taking 18 additional credits, 9 of which must be prescribed distributive courses.

In order to comply with the requirements to a present creative work that demonstrates the capacity to integrate the acquired knowledge, candidates to the Master's Degree in Computer Sciences in Open Information Systems, must defend the developed project before a Program Committee in COIS 6980.

In addition to meeting the general requirements established by the University for admission to master degree studies, students requesting admission to the program must have approved the following courses or their equivalents at the bachelor's level:

COMP 2110 Introduction to Computer Science	3
COMP 2120 Programming Logic	3
COMP 2315 Structured Programming	3
COMP 3850 Database Theory	3

The Metropolitan Campus is authorized to offer the Professional Certificate and the Graduate Program.

Professional Certificate in Technology and Administration of Data Banks

REQUIREMENTS FOR THE PROFESSIONAL CERTIFICATE IN TECHNOLOGY AND ADMINISTRATION OF DATABASES

Core Courses Requirements	21 credits
---------------------------	------------

Core Courses Requirements - 21 credits

COIS	5100	Relational Databases	3
COIS	5120	Client-server Architecture and Networks	3
COIS	5130	Design Methodology and Advanced Tools	3
COIS	5200	Application of Programming Languages in Data Banks	3
COIS	5210	Database Management	3
COIS	5400	Rapid Application Development	3
COIS	6200	System Tuning, Troubleshooting, Codification, Security and Quality	3

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN OPEN INFORMATION COMPUTER SYSTEMS

Core Course Requirements	30 credits
Prescribed Distributive Courses	<u>9</u> credits
Total	39

Core Course Requirements - 30 credits

COIS	5100	Relational Databases	3
COIS	5120	Client-Server Architecture and Networks	3
COIS	5130	Design Methodology and Advanced Tools	3
COIS	5200	Application of Programming Languages in Data Banks	3
COIS	5210	Database Management	3
COIS	5300	Open System Analysis and CASE	3

COIS	5400	Rapid Application Development	3
COIS	6200	System Tuning, Troubleshooting, Codification, Security and Quality	3
COIS	6980	Project Development in Open Information Systems	3
BADM	5060	Management Information Systems	3

Prescribed Distributive Requirements - 9 credits

Nine credits from the following courses:

COIS	5220	Reengineering Processes	3
COIS	6250	Multimedia and Interface	3
COIS	6360	Social Impact of Computers	3
COIS	6370	Geographic Computer Systems	3
COIS	6380	Decision Support Systems	3
COIS	6970	Seminar on Advanced Topics in Open Systems	3
COIS	6975	Research Seminar	3
ECMP	5240	Special Peripherals, Telecommunications and Networks	3
ECMP	5250	Knowledge Banks and Expert Systems	3
ECMP	6170	Training and Design of Computerized Practice	3
ECMP	6310	Graphic Systems and Animations	3
ECMP	6320	Advanced Programming for Internet	3
ECMP	6350	Artificial Intelligence and Knowledge	3
ECMP	6355	Knowledge Acquisition and Intelligent Tutor	3

Psychological Counseling with Specialization in Family (M.S.)

The Master of Science in Psychological Counseling with a Specialization in Family aims to prepare graduates to perform interventions with psycho-social problems that affect individuals and contemporary families. The program foment the development of the knowledge, skills, attitudes, and ethical values that make possible the formation of a psychologist with a critical and flexible mind; with the capacity to identify and search for solutions to situations that arise in the individual and family environment.

The program aims to provide graduates the knowledge and the experiences necessary to be able to meet the requirements established for the exercise of the profession by Law 96: "Law To Regulate the Exercise of the Psychology Profession in Puerto Rico", as amended, and by the Examining Board of Psychologists of Puerto Rico.

Upon completing the degree, graduates should be able to demonstrate the knowledge, skills, attitudes and ethical values inherent to the field of Psychological Counseling with a Specialization in Family.

Profile of the Competencies of Graduates

The Master of Science in Psychological Counseling with a Specialization in Family is designed to develop the competences that will permit students to:

Knowledge

1. Know the theoretical and conceptual frames related to Psychological Counseling.
2. Know the behavioral situations that occur in the individual, family and social context in order to propose solutions.
3. Identify the most urgent needs of the individual, the family and the community they serve by means of the use of the appropriate research tools.
4. Understand the biological, neurological, and pharmacological knowledge that helps sustain the science of Psychology.
5. Identify the psycho-social indicators that cause the changes, situations and problems in the individuals and in families.

Skills

1. Use the psychological intervention tools based on the evidence.

2. Show the mastery of the oral and written communication that facilitates interpersonal relations.
3. Evaluate those situations that imply risk for the individual, couples and families.
4. Establish treatment plans for situations and problems with children, adolescents and adults.
5. Constitute multidisciplinary teams to search for solutions to the psychological problems and situations that affect individuals and families.
6. Apply technology to the professional intervention with children, adolescents and adults.

Attitudes

1. Develop a conduct in harmony with the ethical and legal standards of the psychology profession.
2. Show empathy and commitment to value, identify and work with the needs of the population that they deal with.
3. Value family and social diversity.

Admission Criteria for Students with a Bachelor's Degree:

1. Possess a bachelor's degree from an accredited University.
2. Have a grade point index of 2.50 or above in the last 60 credits of academic work at the undergraduate or graduate level or in a combination of both. Although generally these credits will be at the baccalaureate level, in the case of students who have postgraduate credits from an accredited university, they can combine these postgraduate credits with the last credits approved at the baccalaureate level to complete the 60 required credits.
3. Have approved with a score acceptable to the University, within five years prior to the date of the admission application, one of the following tests:
4. Examen de Admisión a Estudios de Postgrado (EXADEP)
5. Graduate Examination Record (GRE)
6. Miller Analogy Test (MAT)
7. Candidate will have to demonstrate the ability to interpret professional material, in Spanish as well as in English, and to express themselves properly in written form in one of languages by writing an essay on a topic designated by the Admissions Committee of the Psychological Counseling Program with specialization in Family.
8. Have a structured interview with the Admissions Committee of the Psychological Counseling Program with specialization in Family and be recommended favorably by this Committee.
9. Present two letters of recommendation from professionals related to the discipline.
10. Present a Certificate of no Criminal Record, updated within six months and any other document that is considered necessary at the time of the evaluation of the candidate.
11. Show evidence of having approved with a minimum grade of B the following courses:
 - a. A course in Basic Statistics
 - b. A course in Principles of Psychological Measurement
 - c. A course in Psychopathology
 - d. Two additional courses in psychology at the baccalaureate level.

Norms and Procedures

A. Academic Progress

Students must comply with the norms included in the section Requirements for Satisfactory Academic Progress in Masters' Programs and with the norms indicated below:

1. Pass all courses leading to the degree with a minimum grade of B. Student who do not pass a course with a minimum grade of B will not be able to register in any course that has this course as a prerequisite.
2. Pass the Integration Seminar with a minimum grade of B as a graduation requirement.

B. Conduct

Students of the Program must comply at all times with the norms, policies and procedures established in the Program, in the current Graduate Catalog, as well as in the General Student Regulations of Inter American University

of Puerto Rico. Any violation of the established norms will be sufficient reason to impose disciplinary sanctions. Any student suspended from the Program due to violation of the norms and procedures established in the aforementioned documents may not be re-admitted to the same program.

C. Intrauniversity Transfers

Candidates wishing to transfer to the Masters of Science Program in Psychological Counseling with Specialization in Family will be considered if they meet the conditions set forth in the section Admission Requirements for Masters' Programs and meet the following:

1. Are admitted as a regular student of the Program.
2. Request the transfer of their academic file to the unit to which they wish to move.
3. Are interviewed by the Admissions Committee of the Program of the unit to which they wish to move.
4. Present a letter of the official in charge of the Program at the campus of origin certifying that they meet the conduct and satisfactory academic progress norms.

D. Transfers

Students must meet the transfer norms included in the section Admission of Transfer Students to Masters' Programs, the conditions established in the section Admission Requirements for Masters' Programs and with the norms indicated below:

1. Present a letter from the official in charge of the Program of origin certifying that they meet the conduct and satisfactory academic progress norms of the Program.
2. Are interviewed by the Admissions Committee of the Program of the unit to which they wish to move.

The Aguadilla Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN PSYCHOLOGICAL COUNSELING WITH SPECIALIZATION IN FAMILY

Core Course Requirements		32 credits
Specialization Requirements		<u>27</u> credits
	Total	59

Core Course Requirements - 32 credits

Psychological Fundamentals -18 credits

PSYC	5030	Ethics and the Legal Aspects of Psychology	3
PSYC	5040	Physiological Psychology	3
PSYC	5050	Developmental Psychology	3
PSYC	5060	Psychology of Personality	3
PSYC	5100	Cognition, Motivation and Learning	3
PSYC	5200	Contemporary Social Psychology	3

Methodology and Statistics - 14 credits

PSYC	5150	Advanced Statistics	2
PSYC	5220	Methodology of Research in Psychology	2
PSYC	5231	Psychological Measurement I	3
PSYC	5232	Psychological Measurement II	3
PSYC	6421	Practice in Advanced Statistics	1
PSYC	6422	Practice in Psychology Research	1
PSYC	6925	Practice in Psychological Research	2

Specialization Requirements - 27 credits

PSYC	5033	Interview Processes and Techniques	2
PSYC	6000	Theoretical Foundations of Family Therapy	3
PSYC	6005	Family Psychopathology	3
PSYC	6010	Counseling Techniques and Individual, and Group and Family Psychotherapy	3
PSYC	6015	The Nontraditional Family	3
PSYC	6020	Intervention with Families in Crisis	3
PSYC	6410	Practice in Interview Processes and Techniques	1
PSYC	691A	Supervised Practice in Psychological Counseling I	2
PSYC	691B	Supervised Practice in Psychological Counseling II	2
PSYC	691C	Supervised Practice in Psychological Counseling III	2
PSYC	697F	Advanced Integration Seminar	3

Psychology (M.A. and Ph.D.)

Master's Program in Psychology

The Masters Program leading to the Masters of Arts Degree in Psychology has as its goal to offer theoretical and practical education leading to the formation of professionals in this field following the standards of certifying organizations in Puerto Rico and the United States. The courses and the practices expose students to topics and fundamental experiences for understanding and handling the diverse manifestations of human behavior produced in Puerto Rican society. The Program also has as its goal to offer the required preparation for students and professionals who aspire to continue studies at the doctoral level.

The following specializations are offered:

Psychological Counseling

School Psychology

Industrial/Organizational Psychology

Admission Requirements

People who seek admission to the Masters of Arts Degree in the Psychology Program must meet the Admission Requirements established in the section Admission Requirements for Masters' Programs" in effect at the time of their admission. In addition, they must satisfy the following conditions:

1. Have earned a bachelor's degree in psychology with a minimum academic index of 3.00 in the last sixty (60) credits of academic work and in their major.
2. Send two (2) letters of recommendation from professors or professionals related to the field to which they are requesting admission, who can appropriately comment on their academic, intellectual and personal capacity to undertake Masters Degree studies.
3. Provide official evidence of having passed with a minimum grade of B, the courses at the bachelor's level (or its equivalent) that are indicated below:

PSIC 3001 Statistical Methods I	3
PSIC 3002 Statistical Methods II	3
PSIC 4234 Psychology of Personality	3
PSIC 4600 Experimental Psychology	4
4. Students who have completed a bachelor's degree in another field with a minimum academic index of 3.00 in the last sixty (60) credits of academic work and in their major will be considered for admission to the program after approving the courses indicated in number 3 above and the following courses (or their equivalents) with a minimum grade of B:

PSIC 1051 General Psychology I	3
PSIC 1052 General Psychology II	3

5. Present evidence of having skills in computers for academic purposes. Students who do not possess these skills will take a course in computers, as recommended by the Admissions Committee, before receiving regular admission to the Program.
6. Present a Certificate of no penal record issued by the Police Department of Puerto Rico (original).
7. Have an interview with the Program's Admissions Committee and be recommended favorably by it. The Program's Admissions Committee uses acceptable minimum scores for admission to the Masters degree. The Program may establish a maximum number of admissions per year.

Norms and Procedures

Academic Progress

Students will comply with the norms contained in the section Requirements for Satisfactory Academic Progress and the norms indicated below.

1. Pass all the courses leading to the degree with a minimum grade of B and in the case of the Practices with a minimum score of 80. Students who do not pass a course with a minimum grade of B will not be able to register in any course that has this course as a prerequisite.
2. Pass the Comprehensive Examination or the Integration Seminar with a minimum grade of B or 80.

Conduct

Students of the Program must at all times comply with the norms, policies and procedures established in the Program, as established in the Psychology Program Graduate Student Manual as well as in the General Student Regulations of Inter American University of Puerto Rico.

Any violation to the established norms will be sufficient reason to apply disciplinary sanctions. Any student who is suspended from the Program due to violation of the norms cannot be re-admitted to the Program in any campus.

Internal Transfers

Students of Inter American University of Puerto Rico, who wish to transfer to another unit of the System to complete the Requirements of the Masters' of Arts Degree in Psychology, must comply with the following requirements:

1. Have admission as a regular student of the Program.
2. Request the transfer of their academic file to the unit to which they wish to transfer.
3. Have an interview with the Admissions Committee of the Program of the unit to which they wish to transfer.
4. Present a letter of the official in charge of the Program certifying that they fulfill the norms of conduct and satisfactory academic progress of the Program.

Transfers

Students will comply with the norms of transfer contained in the section Admission of Transfer Students to Masters' Programs and the norms indicated below:

1. Present a letter of the official in charge of the Program from the unit of origin certifying that they fulfill the norms of conduct and satisfactory academic progress of the Program.

The Metropolitan and San Germán campuses are authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN PSYCHOLOGY

Specialization in Psychological Counseling

Core Course Requirement

29 credits

Specialization Requirements		<u>33</u> credits
	Total	62

Specialization in School Psychology

Core Course Requirement		29 credits
Specialization Requirements		<u>33</u> credits
	Total	62

Specialization in Industrial/Organizational Psychology

Core Course Requirement		29 credits
Specialization Requirements		<u>35</u> credits
	Total	64

Core Course Requirements - 29 credits

Fundamentals of Psychology - 18 credits

PSYC	5010	History and Systems of Psychology	3
PSYC	5030	Ethics and Legal Aspects of Psychology	3
PSYC	5040	Physiological Psychology	3
PSYC	5050	Developmental Psychology	3
PSYC	5100	Cognition, Motivation and Learning	3
PSYC	5200	Contemporary Social Psychology	3

Methodology and Statistics - 11 credits

PSYC	5150	Advanced Statistics	2
PSYC	5153	Principles of Measurement and Construction of Psychological Tests	3
PSYC	5220	Research Methodology in Psychology	2
PSYC	6421	Practice in Advanced Statistics	1
PSYC	6422	Practice in Psychology Research	1
PSYC	6983	Seminar in Psychological Research	2

Specialization Requirements –33-35

Students must choose one of the following specializations:

Specialization in Psychological Counseling (M.A.)

Specialization in Psychological Counseling - 33 credits

PSYC	5033	Interview Processes and Techniques	3
PSYC	5285	Psychological Counseling	2
PSYC	6050	Intervention Models and Techniques I	3
PSYC	6051	Intervention Models and Techniques II	3
PSYC	6090	Psychopathology	3
PSYC	6260	Cognitive Assessment	3
PSYC	6270	Personality Assessment	3
PSYC	6410	Practice in Interview Processes and Techniques	1
PSYC	6914	Practice in Cognitive Assessment	1
PSYC	6915	Practice in Personality Assessment	1
PSYC	6933	Practice I: Personal and Professional Development	1
PSYC	6934	Practice II in Psychological Counseling	3
PSYC	6935	Practice III in Psychological Counseling	3
PSYC	6936	Practice IV in Psychological Counseling	3

Specialization in School Psychology (M.A.)

Specialization in School Psychology - 33 credits

PSYC	5033	Interview Processes and Techniques	2
PSYC	5295	Consultation, Collaboration and School Organization	3
PSYC	6110	Psychological and Learning Problems in Children and Adolescents	3
PSYC	6214	Intervention and Psychotherapy Models with Children and Adolescents	3
PSYC	6216	Psycho Educational Evaluation and Interventions with Exceptional Children	2
PSYC	6260	Cognitive Assessment	3
PSYC	6270	Personality Assessment	3
PSYC	6410	Practice in Interview Processes and Techniques	1
PSYC	6914	Practice in Cognitive Assessment	1
PSYC	6915	Practice in Personality Assessment	1
PSYC	6928	Practice in Psycho Educational Evaluation and Interventions with Exceptional Children	1
PSYC	6933	Practice I: Personal and Professional Development	1
PSYC	6944	Practice II in School Psychology	3
PSYC	6945	Practice III in School Psychology	3
PSYC	6946	Practice IV in School Psychology	3

Specialization in Industrial/Organizational Psychology(M.A.)

Specialization in Industrial/Organizational Psychology - 35 credits

PSYC	6300	Personnel Psychology	4
PSYC	6303	Psychological and Social Aspects of Organizational Behavior	3
PSYC	6304	Strategies for Quality in the Organization	3
PSYC	6305	Strategies for Continuous Improvement and Decision Making	2
PSYC	6306	Psychological Dimensions in the Education and Training of Human Resources	4
PSYC	6308	Contemporary Aspects in Industrial/Organizational Psychology	3
PSYC	6314	Psychological Evaluation in Industrial/Organizational Environment	3
PSYC	6933	Practice I: Personal and Professional Development	1
PSYC	6954	Practice II in Industrial/Organizational Psychology	3
PSYC	6955	Practice III in Industrial/Organizational Psychology	3
PSYC	6956	Practice IV in Industrial/Organizational Psychology	3
PSYC	6980	Research in Industrial/Organizational Psychology	3

Doctoral Program in Psychology

The Doctoral Program leading to the degree of Doctor of Philosophy in Psychology (Ph.D.) with specializations in Psychological Counseling, Organizational Industrial Psychology and School Psychology provides educational and professional training framed in a scientific-practical model. The curriculum is designed to reflect the integration of psychological theory, scientific research, and professional practice in the discipline.

Graduates of the doctoral program in Psychology of Inter American University of Puerto Rico will demonstrate to a core body of scientist-professional knowledge and competencies and attitudes in harmony with the standards of the discipline of psychology.

Psychological Counseling

This specialization integrates psychological science, theory and practice to facilitate individual and group functioning through the cycle of life, and to attend the cognitive, emotional, biological, social, cultural, occupational health, and human development aspects. This specialization uses a variety of methods for research, testing, evaluation and supervision, as well as, prevention and intervention techniques, to help people improve their well-being, identify, understand and search solution alternatives to the problems they have, and that do not let them develop their cognitive

and socio-emotional potential. The formation that is offered in this specialization allows the professional to work with the functional as well as the dysfunctional aspects of individual and group development.

School Psychology

This specialization integrates psychological science, theory, and practice to research, and promotes learning the cognitive, emotional and social development of students through the cycle of life as well as those of parents, teachers, and other personnel in the school scenario. Uses testing and evaluation techniques to identify and diagnosis problems and disorders in learning, and techniques in educational intervention and cognitive remediation. Develops strategies for the prevention and solution of problems and implements techniques to facilitate teaching-learning processes with the purpose of promoting psychological well-being and attending mental health and educational needs of all children and adolescents.

Industrial/Organizational Psychology

This specialization integrates psychological science, theory, and practice to research, and promotes human development and their effectiveness in the industrial and organizational environment. Uses scientific methods to study individual and group behavior, leadership, and organizational variables associated to the work environment. Develops strategies related to the design, analysis, organizational development from the perspective of the Industrial/Organizational psychology. Uses and applies psychological techniques for recruiting, selection, and placement of personnel, education and training of human resource, conflict solution, and offering of consulting services.

Philosophy

The doctoral program in psychology, framed in a scientific-practical model, educates and trains in the use of scientific and practical foundations of the discipline for creative, critical and responsible actions and reflections in decision-making and in problem solving requiring the knowledge and application of psychological principles.

Graduates from the Program may work independently and collaborate in an interdisciplinary manner in the roles, functions and responsibilities inherent to work as individual, group or organizational consultants. Respect for personal dignity and human diversity are emphasized and efforts are made to eliminate barriers preventing optimum human development. Graduates from the Program will accept the responsibility required by the profession and will, therefore, respect others as well as their cultures and expressions.

General Objectives of the Doctoral Program in Psychology

The course of study is designed to strengthen skills and knowledge in scientific research in psychology as well as in theoretical and practical knowledge in each specialization: Psychological Counseling, School Psychology and Industrial/Organizational Psychology. Students are exposed to different experiences in courses and seminars that foment knowledge from a critical perspective, courses that offer theory and practice in research methods and courses in their specialization that will enable them to practice psychology in the private or public sector.

- To prepare professional psychologists at the doctoral level capable of providing a wide variety of psychological services to children, adolescents, families, adults, persons with special needs, and groups in different scenarios, such as educational institutions, communities, organizations, hospitals and public and private psychological service agencies.
- To foment, in students, the development of a sensitive attitude to the cultural and social diversity present in society and the manifestation of a professional behavior that respects individual dignity.
- To promote the development of a critical attitude towards the different theoretical perspectives explaining human conduct in accord with our socio-cultural context.
- To develop psychologists committed to offer high quality services in agreement with the ethical and professional standards and the roles they should engage in interventions with different populations and in different scenarios.
- To develop professionals capable of applying models and scientific strategies that contribute to the identification of psychosocial problems, create and evaluate alternatives and psychological interventions.

Competencies in Psychological Counseling

1. Design and evaluate psychological service programs, training and professional qualification.
2. Perform evaluations and psychological treatment of adults, couples, groups and families.
3. Establish differential diagnoses and intervention with special populations.
4. Develop scientific research relevant to psychological counseling.
5. Offer counseling at different scenarios: legal, clinical, school and governmental agencies, among others.
6. Reflect on clinical cases considering controversies related to social and cultural diversity.
7. Apply established ethical principles to all professional work.

Competencies in School Psychology

1. Offer counseling in different scenarios, fundamentally to educational, school and mental health programs.
2. Evaluate psychological and psycho educational operations and establish differential and multiple diagnoses.
3. Design and evaluate individual and group psychotherapeutic interventions with children and adolescents, considering the cultural and social diversity.
4. Consider, design, apply and evaluate service, training, and professional preparation programs, which serve children and adolescents.
5. Develop scientific research relevant to school psychology.
6. Apply established ethical principles to all professional work.

Competencies in Organizational Industrial Psychology

1. Evaluate the performance and effectiveness of organizations by means of diagnosis, planning and intervention at the individual, group and organizational levels.
2. Offer counseling and expertise in organizations and legal forums.
3. Create, review and develop models, systems and instruments in the organizational context.
4. Handle the diverse approaches in organizational design, their impact on the efficiency and the effective administration of the transformation processes.
5. Apply established ethical principles to all professional work.
6. Consider the controversies related to the cultural and social diversity in organizational interventions.
7. Develop scientific research relevant to organizational industrial psychology.

Admission Requirements to the Doctoral Program in Psychology

The Doctoral Program of Philosophy in Psychology (Ph.D.) provides two levels of admission: (1) students who have a master's degree or credits at a doctoral level and (2) students who have a Bachelor Degree in Psychology and are interested in direct admittance to the Doctoral Program through a combined curriculum of courses at master's and doctoral levels.

Admission Requirements for Students with a Master's Degree in Psychology

1. **Have earned a Master's degree in Psychology or its equivalent at an accredited university with a general** grade point index of at least 3.00 or have completed the Master's level courses required for this Program.
2. Be proficient in Spanish and English.
3. Have passed, with scores acceptable for the University, one of the following tests within the five years immediately preceding the requested admission date:
 - a) Graduate Record Examination (GRE)
 - b) Miller Analogy Test (MAT)
 - c) Examen de Admisión a Estudios de Posgrado (EXADEP)
4. Have requested that three letters of recommendation be sent to the University.
5. To submit a portfolio including an essay of personal interests, evidence of courses related to the fundamentals of psychology and the area of specialization. In the area of fundamentals of psychology, the candidate must

show evidence of knowledge of the biological basis of behavior, social and cultural basis, cognitive and emotional basis of behavior, statistics, research methodology, and ethical and legal aspects. Evidence of a minimum of 20 credits in the area of fundamentals of psychology, research and statistics and from 20 to 22 credits or their equivalent in courses of the area of specialization.

6. Be interviewed by the Admissions Committee for Doctoral Studies and have received a favorable recommendation.

Admission Requirements for Students with a Bachelor's Degree

1. Have a bachelor degree from an accredited university.
2. Have a minimum grade point average of 2.50 in the last 60 credits of academic work. Even though in general, these credits will be at the bachelor's level, in the case of a student who has another Master's awarded by an accredited university, the student may combine the credits at the Master's level with the last passed credits of the bachelor's level until completing the 60 stipulated credits.
3. Have passed with scores acceptable for the University, one of the following tests during the last five years prior to the date the admission was requested:
 - a) Graduate Record Examination (GRE)
 - b) Miller Analogy Test (MAT)
 - c) Examen de Admisión a Estudios de Posgrado (EXADEP)
4. Show through a test or by any other way the Department or Academic Division deems appropriate the ability to interpret professional material, both in Spanish and English, and to express correctly in writing in one of the two languages.
5. Have an interview with the Admission's Committee of the Doctoral Program in Psychology and to be favorably recommended.
6. Show evidence of having passed satisfactorily the following bachelor courses (or their equivalents):

PSYC 3001 Statistical Methods I	3
PSYC 3002 Statistical Methods II	3
PSYC 4200 Principles of Psychological Testing	3
PSYC 4600 Experimental Psychology	4
Two other psychology courses at bachelor's level	6

Admission of Transfer Students

The admission of transfer students to the Doctoral Program will be taken into consideration if they meet the conditions of the Program described in "Admission Requirements to the Doctoral Program in Psychology".

Candidates should request that the university where they studied send a copy of their transcript directly to the Admissions Office of the Campus to which they are requesting admission, so that they may receive credit for their studies as stipulated below:

1. Candidates for admission as transfer students to the doctoral program will be considered if they meet the conditions of the Program established in the section "Admission Requirements to the Doctoral Program in Psychology".
2. Students that have begun doctoral studies in another accredited university may transfer up to 15 credits passed with grades of A or B if the courses are equivalent to the courses offered in the Doctoral Program in Psychology of this University and if the Faculty of the Program approves them.

Graduation and Academic Progress Requirements

A. Academic Progress and Graduation Requirements for Candidates with a Master's Degree in Psychology

To obtain the doctoral degree in Psychology students must comply with the requirements of academic progress of the doctoral degree described in this Catalog. In addition they must comply with the following requirements:

1. Pass all courses of the Doctoral Program in Psychology with a minimum grade of B.
2. Pass the doctoral internship in School Psychology or Psychological Counseling.
3. Pass the doctoral candidate examination before the oral defense of the dissertation. The examination may be taken after the student has passed at least 30 doctoral credits.
4. Pass the dissertation proposal. At this time the student is considered a doctoral candidate.
5. Complete and pass the doctoral dissertation.

B. Requirements of Academic Progress and Graduation for Candidates with a Bachelor in Psychology

To obtain the doctoral degree in Psychology candidates who have a bachelor's degree must comply with the following requirements:

1. Pass 40 or 42 Foundation and Specialization credits at the Master's level in Psychology with a minimum grade of B before taking courses at the doctoral level.
2. Pass the operational courses at the Master's level in Psychology.
3. Comply with all the requirements of academic progress and graduation at the doctoral level.

C. Residence Requirements

- To complete the doctoral degree, students must complete a minimum of 60 percent of their credits at Inter American University.
- Students must complete a minimum of one-year full time residence or its equivalent.

D. Time Limit to Finish the Degree

Students admitted to the Doctoral Program have a minimum of four (4) academic sessions and a maximum of eight (8) natural years to complete the degree requirements of the Program starting from the date of admission.

Program of Studies: Academic Requirements

The Program permits the admission of students with a Master's degree in Psychology as well as those that have only completed a bachelor's degree in psychology. Students admitted at the doctoral level will take the academic requirements described part A below. Students with a bachelor's degree in psychology must meet the academic requirements described in Part B of this section.

The Metropolitan and San Germán campuses are authorized to offer this Program.

REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY DEGREE IN PSYCHOLOGY FOR STUDENTS WITH A MASTER'S DEGREE IN PSYCHOLOGY

Core Course Requirements	20 credits
Specialization Requirements	9-15 credits
Prescribed Distributive Requirements	6-12 credits
Operational Requirements	<u>12</u> credits
Total	53

Core Course Requirements – 20 credits

PSYC	7010	Human Diversity	2
PSYC	7020	Neuropsychology	3
PSYC	7030	Quantitative Research	2
PSYC	7035	Correlation and Regression	2
PSYC	7040	Qualitative Research	2
PSYC	7045	Analysis of Qualitative Data	2
PSYC	7050	Design and Evaluation of Psychological Programs and Services	2
PSYC	7971	Advanced Seminar in Research	2

PSYC	8515	Professional Consulting	2
PSYC	8912	Practice in Design and Evaluation of Psychological Programs and Services	1

Specialization Requirements 9-15 credits

Psychological Counseling - 9 credits

PSYC	8210	Adulthood: Psychological Perspectives	3
PSYC	8220	Psychotherapeutic Intervention with Families	3
PSYC	8230	Evaluation and Intervention in Populations with Special Conditions	2
PSYC	8913	Practice in Evaluation and Intervention in Populations with Special Conditions	1

School Psychology - 12 credits

PSYC	8220	Psychotherapeutic Intervention with Families	3
PSYC	8310	Professional Standards in School Psychology	3
PSYC	8320	School Organization and Operation	3
EDUC	8110	Design and Construction of Educational Programs	3

Industrial/Organizational Psychology - 15 credits

PSYC	8415	Design and Organizational Transformation	2
PSYC	8425	Measurement in Industrial Psychology	2
PSYC	8430	Seminar in Organizational Industrial Psychology	3
PSYC	8445	Decision Making and Conflict Management	2
PSYC	8455	Management of Knowledge in the Organization	2
PSYC	8465	Development of Highly Effective Workteams	2
PSYC	8490	Analysis of Organizational Environments	2

Prescribed Distributive Requirements - 6-12 credits

Psychological Counseling - 12 credits

PSYC	7970	Special Topics	1-3
PSYC	8240	Seminar in Psychological Evaluation	3
PSYC	8250	Psychotherapeutic Intervention with Couples	3
PSYC	8260	Seminar: Handling High Risk Psychological Cases	1-3
PSYC	8270	Group Psychotherapy	3
PSYC	8280	Alternating and Complementary Therapies	3
PSYC	8340	Neuropsychological Evaluation	2
PSYC	8915	Practice in Neuropsicológica Evaluation	1
EDUC	8370	Age, Sickness and Death: Acceptance Counseling	3
EDUC	8400	Women Counseling Seminar	3

School Psychology - 12 credits

PSYC	7970	Special Topics	1-3
PSYC	8260	Seminar: Handling High Risk Psychological Cases	1-3
PSYC	8270	Group Psychotherapy	3
PSYC	8330	Evaluation and Psychological Intervention with Infants and Pre-school Children	2
PSYC	8340	Neuropsychological Evaluation	2
PSYC	8915	Practice in Neuropsicológica Evaluation	1

Industrial/Organizational Psychology - 6 credits

Select 6 credits in Special Topics courses.

PSYC	7970	Special Topics	1-3
------	------	----------------	-----

Operational Requirements - 12 credits

Psychological Counseling and School Psychology

Full-time students will take:

PSYC	8917A	Internship	3
PSYC	8917B	Internship	3
PSYC	8991	Dissertation A	3
PSYC	8992	Dissertation B	3

Part-time students will take:

PSYC	8917C	Internship	1.5
PSYC	8917D	Internship	1.5
PSYC	8917E	Internship	1.5
PSYC	8917F	Internship	1.5
PSYC	8991	Dissertation A	3
PSYC	8992	Dissertation B	3

Industrial/Organizational Psychology

PSYC	8916	Practice in Industrial/Organizational Psychology I	3
PSYC	8918	Practice in Industrial/Organizational Psychology II	3
PSYC	8991	Dissertation A	3
PSYC	8992	Dissertation B	3

Ph.D. Program (Students with Bachelor’s in Psychology)

Depending on the specialization, either 43 or 44 credits must be passed at the level of the Master’s degree in psychology (5000 or 6000 level courses), before beginning to take courses at the doctoral level (7000 or 8000 level courses). The distribution of courses required follows:

Specialization (Industrial/Organizational Psychology) (students with Bachelor’s)

REQUIREMENTS FOR INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

Core Course Requirements	21 credits
Specialization Requirements	<u>23</u> credits
Total	44

Core Course Requirements - 21 credits

Twelve credits selected from the following courses:

PSYC	5010	History and Systems of Psychology	3
PSYC	5040	Physiological Psychology	3
PSYC	5050	Developmental Psychology	3
PSYC	5060	Psychology of Personality	3
PSYC	5100	Cognition, Motivation and Learning	3
PSYC	5200	Contemporary Social Psychology	3

Methodology and Statistics - 9 credits

PSYC	5150	Advanced Statistics	2
PSYC	5153	Principles of Measurement and Construction of Psychological Tests	3
PSYC	5220	Research Methodology in Psychology	2
PSYC	6925	Practice in Psychological Research	2

Specialization Requirements - 23 credits

PSYC	5030	Ethics and Legal Aspects in Psychology	3
PSYC	6300	Psychology of Personnel	4
PSYC	6303	Psychological and Social Aspects in Organizational Behavior	3
PSYC	6304	Strategies for Total Quality	3
PSYC	6306	Psychological Dimension in the Education and Training of Human Resources	4
PSYC	6314	Psychological Evaluation in the Industrial/Organizational Environment	3
PSYC	6316	Psychology of Leadership	3
PSYC	6930*	Practice I in Personal and Professional Development in Psychology	
PSYC	6951**	Practice II in Industrial/Organizational Psychology	
PSYC	6952**	Practice III in Industrial/Organizational Psychology	

Specialization (Psychological Counseling) (students with Bachelor's Degree)

REQUIREMENTS FOR PSYCHOLOGICAL COUNSELING

Core Course Requirements	21 credits
Specialization Requirements	<u>22</u> credits
Total	43

Core Course Requirements - 21 credits

Twelve credits selected from the following courses:

PSYC	5010	History and Systems of Psychology	3
PSYC	5040	Physiological Psychology	3
PSYC	5050	Developmental Psychology	3
PSYC	5060	Psychology of Personality	3
PSYC	5100	Cognition, Motivation and Learning	3
PSYC	5200	Contemporary Social Psychology	3

Methodology and Statistics - 9 credits

PSYC	5150	Advanced Statistics	2
PSYC	5153	Principles of Measurement and Construction of Psychological Tests	3
PSYC	5220	Research Methodology in Psychology	2
PSYC	6925	Practice in Psychological Research	2

Specialization Requirements - 22 credits

PSYC	5030	Ethics and Legal Aspects in Psychology	3
PSYC	5033	Interview Processes and Techniques	2
PSYC	6090	Psychopathology	3
PSYC	6113	Models of Counseling and Psychotherapy	3
PSYC	6114	Counseling and Psychotherapy Techniques	3
PSYC	6260	Cognitive Assessment	3
PSYC	6270	Personality Assessment	3
PSYC	6914	Practice in Cognitive Assessment	1
PSYC	6915	Practice in Personality Assessment	1

PSYC	6930*	Practice I in Personal and Professional Development in Psychology
PSYC	6931**	Practice II in Psychological Counseling
PSYC	6932**	Practice III in Psychological Counseling

Specialization (School Psychology) (Ph.D. students with Bachelor's)

REQUIREMENTS FOR SCHOOL PSYCHOLOGY

Core Course Requirements	21 credits
Specialization Requirements	<u>22</u> credits
Total	43

Core Course Requirements - 21 credits

Twelve credits selected from the following courses:

PSYC	5010	History and Systems of Psychology	3
PSYC	5040	Physiological Psychology	3
PSYC	5050	Developmental Psychology	3
PSYC	5060	Psychology of Personality	3
PSYC	5100	Cognition, Motivation and Learning	3
PSYC	5200	Contemporary Social Psychology	3

Methodology and Statistics - 9 credits

PSYC	5150	Advanced Statistics	2
PSYC	5153	Principles of Measurement and Construction of Psychological Tests	3
PSYC	5220	Research Methodology in Psychology	2
PSYC	6925	Practice in Psychological Research	2

Specialization Requirements - 22 credits

PSYC	5030	Ethics and Legal Aspects in Psychology	3
PSYC	5033	Interview Processes and Techniques	2
PSYC	5280	Roles and Functions of the School Psychologist	3
PSYC	6110	Psychological and Learning Problems in Children and Adolescents	3
PSYC	6214	Intervention and Psychotherapy Models with Children and Adolescents	3
PSYC	6260	Cognitive Assessment	3
PSYC	6270	Personality Assessment	3
PSYC	6914	Practice in Cognitive Assessment	1
PSYC	6915	Practice in Personality Assessment	1
PSYC	6930*	Practice I in Personal and Professional Development in Psychology	
PSYC	6941**	Practice II in School Psychology	
PSYC	6942**	Practice III in School Psychology	

* A fee equivalent to one credit

** A fee equivalent to three credits.

Religious Education (M.A.)

The Masters of Arts in Religious Education has as its goal to form educational personnel in the field of Religion. The program gives emphasis to the analysis of Christian Principles and their role in the formation of the ethical values of human being. This program aspires to prepare educational and research personnel in the field of Religious Education by using theological tools.

Admission Requirements

Besides satisfying the admission requirements for the study of Masters Degrees, the candidate who wishes to enter the Program in Religious Education must meet the following requirements:

1. Possess a Baccalaureate in Religious Studies or related areas or have approved, at the bachelor's level a minimum of twelve (12) credits distributed between the areas of Education and Religious Studies.
2. Pass an interview with the Admissions Committee of the School of Theology of the Metropolitan Campus.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN RELIGIOUS EDUCATION

Specialization Requirements – 42 credits

RELI	5010	History and Philosophy of Religious Education	3
RELI	5215	History of the Church	3
RELI	5320	Introduction to Theology	3
RELI	5430	Biblical Analysis	3
RELI	5540	Ecumenical Thought	3
RELI	5650	Religious Pluralism	3
RELI	5760	The Historical Jesus: Social Message	3
RELI	5870	Christian Ecclesiology	3
RELI	5990	Ethics and Pastoral Action	3
RELI	6020	Teaching Strategies in Religious Education	3
RELI	6030	Design and Evaluation of Curriculum in Religious Education	3
RELI	6040	Educational Leadership in Religious Education	3
RELI	6975	Integration Seminar	3
RELI	6910	Practicum	3

Risk Management in Health Care (Professional Certificate in Management)

The Professional Certificate Program in Risk Management is designed to develop professionals of different disciplines with interest in developing abilities related to the prevention, handling and reduction of risks in managerial, administrative and clinical health service roles. These professionals will be able to deal with adverse situations and risks from the health industry organizations with ethical awareness and within an interdisciplinary team. They will frame their conduct in the knowledge of state and federal laws, regulations and litigation processes; the financing of risks, patient security and quality of services while maintaining a proactive, objective and judicious attitude.

Graduate Competencies

Graduates of the Professional Certificate in Risk Management in Health Care will demonstrate the following competencies:

1. Incorporate fundamental concepts of risk handling management when taking care of prevention and reduction of risk needs in health care services in Puerto Rico.
2. Apply total quality concepts and skills to optimize organizational efforts in risk prevention, management and reduction.
3. Contribute effectively in developing a secure environment as an important custom within health care organizations in Puerto Rico.
4. Act with integrity and honesty based on the knowledge of state and federal laws, regulations and litigation processes applicable to Risk Management in Health Care Program.

5. Demonstrate the application of concepts and skills related to risk financing and control of losses when handling adverse events and risks while maintaining a proactive, objective and judicious attitude.

Admission Requirements

Any person with a Bachelors, Masters or Doctoral degree from an accredited university who has an interest in risk management in health care may request admission to the program. To be admitted to the Professional Certificate in Risk Management in Health Care Programs, the candidate must comply with the general admission requirements for a postgraduate degree, established by Inter American University of Puerto Rico in the Graduate Catalog.

Graduation Requirements

- a. Academic index: students must complete the program credits with a minimum index of 2.5.
- b. Pass certificate courses with a minimum grade of C.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE PROFESSIONAL CERTIFICATE IN RISK MANAGEMENT IN HEALTH CARE

Certificate Requirements	16_credits
Certificate Requirements - 16 credits	
RMHC 5000 Risk Management in Health Care	2
RMHC 5010 Risk Quality and Management in Health Care	3
RMHC 5020 Uncertainty and Risk in the Health Care Industry	3
RMHC 5030 Patient Security and Risk Management	4
RMHC 5040 Legal Aspects of Risk Management in Health Care	4

Social Work (M.S.W.)

The Master's Program in Social Work has the mission of preparing students to perform as advanced practitioners with the knowledge, skills and values of the profession. In addition, it aims to prepare persons committed to social and economic justice. In line with this objective, the course of studies is framed in the systemic and ecological approach and emphasizes the perspectives of empowerment and strengths to work with Puerto Rican families in their social context.

The general objectives of the Master's Program in Social Work are in harmony with its mission and are oriented toward the preparation of advanced practitioners capable of:

1. Using the perspectives of strengths and empowerment in social work practice for the promotion, restoration, maintenance and strengthening of the welfare of high risk families;
2. Examining and using findings and scientific methodologies in their professional practice, including the assessment of the effectiveness and the efficiency of their practice and who will be capable of involving themselves in the process of evaluating the goals of their agency (program assessment);
3. Developing and implementing strategies and techniques that promote social and economic justice for the benefit of high risk families sand populations that are historically oppressed and destitute within the context of the values and ethics of the social work profession;
4. Incorporating in their practice, respect and esteem for human diversity, and understanding how this diversity is related to high-risk families and their community.

Core Competencies of Graduates

The Program is designed to develop the core competencies, in agreement with the standards of the Council on Social Work Education (CSWE), of 2008 that will allow students at the graduate level, in harmony with their specialization, to:

1. Identify as a professional social worker and conduct oneself accordingly.
2. Apply social work ethical principles to guide professional practice.
3. Apply critical thinking to inform and communicate professional judgments.
4. Engage diversity and difference in practice.
5. Advance human rights and social and economic justice.
6. Engage in research-informed practice and practice-informed research.
7. Apply knowledge of human behavior and the social environment.
8. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
9. Respond to contexts that shape practice.
10. Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

The Program specializes in two areas: Direct Services and Administration in Social Work.

Professional practice at an advanced level focuses on the prevention of social problems and the promotion of social and family changes starting with strengths and empowerment perspectives in different types of systems.

The Administration of Social Work specialization is designed to prepare advanced level practitioners with the knowledge, skills and values that will enable them to work as professionals in human service organizations in fields such as: administration, supervision, development, and analysis of social policy and the planning, development and implementation of programs.

The Direct Services specialization aims to prepare advanced level social workers with the knowledge, skills and values for intervention in different processes with families affected by variables intimately related to oppression. Emphasis is given to the professional practice with groups and communities from a perspective of strengths and empowerment of the family members. Models of intervention with families are critically examined as well as their application and usefulness with different families in Puerto Rico within their sociocultural context.

In addition to meeting the requirements established in the section “Admission Requirements for Masters’ Programs” of this Catalog, students are required to have passed the following bachelor level courses or their equivalents for entering the Program:

Statistic Methods in Social Sciences	3 credits
Techniques in Scientific Social Research	3 credits
Both courses must have been passed with a minimum of a C.	

The Arecibo, Fajardo and Metropolitan campuses are authorized to offer this Program.

The Master’s Program of the Metropolitan Campus is accredited by the Council on Social Work Education, (<http://www.cswe.org>).

REQUIREMENTS FOR THE MASTER OF SOCIAL WORK DEGREE

Regular Program:

Core Course Requirements (Fundamentals)	22 credits
Specialization Requirements	27 credits
Prescribed Distributive Requirements	<u>6 credits</u>
Total	55

Advanced Program:

Specialization Requirements	27 credits
Prescribed Distributive Courses	<u>6 credits</u>
Total	33

Core Course Requirements (Fundamentals) - 22 credits

SOWO 5011	Human Behavior in the Social Environment I	3
SOWO 5012	Human Behavior in the Social Environment II	3
SOWO 5013	Fundamentals of Professional Practice I	3

SOWO	5014	Fundamentals of Professional Practice II	3
SOWO	5015	Social Policy and Social Welfare Systems	3
SOWO	5016	Research in Social Work	3
SOWO	5913	Practicum I	2
SOWO	5914	Practicum II	2

Students will be able to choose from one of the two specializations offered in the Master's Program in Social Work: Direct Services or Administration in Social Work.

Specialization Requirement - 27 credits

Specialization in Administration in Social Work

SOWO	6029	Diversity and Oppression	3
SOWO	6033	Evaluation of Professional Practice	3
SOWO	6036	Program Planning and Evaluation	3
SOWO	6037	Administration in Social Work	3
SOWO	6038	Human Resources Management and Development in Social Agencies	3
SOWO	6039	Proposals Formulation	3
SOWO	6043	Administration of Non-traditional Agencies	3
SOWO	6914	Practicum III Administration in Social Work	2
SOWO	6915	Practicum IV Administration in Social Work	2
SOWO	6916	Practicum V Administration in Social Work	2

Prescribed Distributive Requirements - 6 credits

All students should take six (6) credits in their specialization from the following courses, in accordance with their specialization.

SOWO	6044	Social Work and Women	3
SOWO	6045	Social Work and the Elderly	3
SOWO	6046	Identification and Use of Community Resources	3
SOWO	6047	Social Work and Human Sexuality	3
SOWO	6048	AIDS in the Work Environment	3
SOWO	6049	Managerial Information Systems in Social Work	3
SOWO	6053	Advanced Techniques in Prevention and Intervention with Families with Specific Needs	3
SOWO	6054	Social Work and Employee Aid Programs	3
SOWO	6055	Social Work and HIV/AIDS	3
SOWO	6056	Intervention with Families with Patients with Terminal Illnesses	3

Specialization in Direct Services (Social Work)

SOWO	6029	Diversity and Oppression	3
SOWO	6031	Strength Perspectives in Family Intervention	3
SOWO	6032	Working in Groups with Families	3
SOWO	6033	Evaluation of Professional Practice	3
SOWO	6034	Family Intervention Models	3
SOWO	6035	Community, Families and Social Change	3
SOWO	6036	Program Planning and Evaluation	3
SOWO	6911	Practicum III Direct Services	2
SOWO	6912	Practicum IV Direct Services	2
SOWO	6913	Practicum V Direct Services	2

Post Masters Degree Professional Certificate in Clinical Social Work

The Post Masters Degree Professional Certificate Program in Clinical Social Work aims to prepare social workers with a biopsycosocial and interdisciplinary approach to work in independent practice in diverse scenarios by integrating models for primary, secondary and tertiary prevention.

Current clinical social work deals with care of diverse human systems without excluding the possibility of intervening with broader social systems. Clinical social work with a biopsycosocial approach transfers its center of attention from the individual as the main client to the evaluation, diagnosis and intervention in and between human systems. It integrates diverse biological, psychological and social variables and associates them to explain behavior in family, group and interpersonal relations that individuals have with their environment. With this approach, social intervention moves, in addition, towards intervention centered on the family, consultation and evaluation of the professional practice. This can be conducted in public or private scenarios.

Admission Requirements

1. Have a Masters Degree in social work with a specialization in clinical, direct service or family from a university accredited by the Council on Social Work Education (CSWE).
2. If candidates have another specialization in social work; they must pass, prior to admission, the following courses of methodology in social intervention or their equivalents: SOWO 6032, 6034 and 6035.
3. Have a minimum of two years practical experience in direct service in public or private institutions.

Graduation Requirements

In order to complete the Post Masters Professional Certificate in Clinical Social Work, students must pass at least 18 credits with a general average of 3.00.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR POST MASTERS DEGREE PROFESSIONAL CERTIFICATE IN CLINICAL SOCIAL WORK

PROFESSIONAL CERTIFICATE REQUIREMENTS

18 credits

Certificate Requirements - 18 credits

SOWO	7130	Conceptual Approaches in Clinical Social Work	3
SOWO	7140	Coordinated Handling of Mental Health and Clinical Social Work	3
SOWO	7150	Family Therapy in Social Work	3
SOWO	7153	Social Work in Couples Therapy	3
SOWO	7154	Group Therapy in Social Work	3
SOWO	7156	Practicum in Clinical Social Work	3

Speech-Language Pathology (M.S.)

The Master of Science Program in Speech-Language Pathology aspires to prepare competent professionals who can offer prevention, evaluation, diagnosis and treatment services to children and adults with communication and swallowing disorders. It will also develop their skills in supervision and consulting, which are very important for this profession. The curricular design covers two (2) fundamental areas: Foundations of human communication and specialized courses in of Speech-Language Pathology.

Profile of the Competencies of Graduates

This Program is designed to develop the competencies that will permit students to:

Show Knowledge and Understanding of:

1. The biological, neurological, acoustic, psychological, linguistic, and cultural bases and of the development of the basic processes of human communication and swallowing.
2. The etiological factors, the anatomical/physiological, acoustic, and psychological characteristics and foundations, and the development involved in the disorders of speech, language, communication, hearing and swallowing.
3. The scientific literature related to communication and swallowing disorders, for the application and appropriate clinical intervention.
4. The particular characteristics of the diverse populations in the evaluation process, intervention and prevention of communication and swallowing disorders.
5. The technology developed to help people with communication disorders.

Skills

1. Establish diagnoses related to communication and swallowing disorders in children, adolescents and adults.
2. Design intervention and prevention plans for the communication and swallowing disorders in order to apply the findings in agreement with the conducted evaluations.
3. Critically evaluate the formal and informal instruments used in the evaluation of children and adults with of communication and swallowing disorders.
4. Use the technology and instrumentation in an innovating form in the services to patients with these disorders.
5. Apply the skills of supervision, administration and of consultancy in different scenarios of patient services.

Attitudes

1. Show an ethical behavior when performing the inherent functions to professional practice.
2. Value the need for continuous learning and professional development throughout life.
3. Show sensitivity and esteem by cultural and social differences and for the development of the diverse populations to which services are offered.

Admission Requirements:

To be admitted to the Master of Science program in Speech-Language Pathology, the candidate must meet the general admission requirements for a Master's Degree, established by Inter American University of Puerto Rico in the Graduate Catalog and must meet the following specific program requirements:

1. Have completed a Bachelor's degree from an accredited University with an academic index of 3.0 or above.

Students who have completed the Baccalaureate in Speech and Language Therapy must take a Statistics course before being admitted to the Program.

Students, who have completed a baccalaureate in another area, must take a course in each of the following areas:

- Biological Sciences
- Physical Sciences
- Social Sciences (Psychology/Anthropology)
- Human Development
- Basic Mathematics
- Statistics
- Grammar
- Nature and Needs of the Exceptional Child

These courses must to be passed with a grade of B or above before requesting admission to the Program.

2. Submit two letters of recommendation, one of them from a faculty member.
3. Have obtained a minimum score of 400 points in EXADEP test.
4. Write an essay related to their interest in the field of Speech-Language Pathology.
5. Submit a Professional Curriculum Vitae.
6. Have an admission interview with a faculty committee.

7. Submit an official transcript from their undergraduate institutions.
8. Complete and submit the admission application by the designated deadline.

Graduation Requirements:

The student of the Master of Science Program in Speech-Language Pathology must:

1. Complete and pass the 59 credits of the Program with a minimum grade of B.
2. Take the Examination PRAXIS I

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF SCIENCE IN SPEECH-LANGUAGE PATHOLOGY

Core Course Requirements		19 credits
Specialization Course Requirements		<u>40 credits</u>
	Total	59

Core Course Requirements - 19 credits

SPLP	5100	Anatomy, Physiology and Neurology of of the Mechanisms of Speech, Language and Hearing	3
SPLP	5105	Foundations of Audiology	3
SPLP	5110	Normal Development of Speech and Language	3
SPLP	5120	Seminar: Contemporary Topics and Multicultural and Methodological Considerations	1
SPLP	5215	Professional Ethics in Speech-Language Pathology	3
SPLP	6000	Introduction to Auditory Habilitation/ Rehabilitation	3
SPLP	6535	Supervision and Administration of Speech-Language Pathology	3

Specialization Course Requirements - 40 credits

SPLP	6100	Articulation and Phonology Disorders	3
SPLP	6101	Language Disorders in Children I	3
SPLP	6102	Language Disorders in Children II	3
SPLP	6210	Fluency Disorders	3
SPLP	6215	Voice Disorders	3
SPLP	6320	Diagnostic Methods in Speech-Language Pathology	3
SPLP	6325	Acquired Language Disorders	3
SPLP	6405	Augmentative and Alternate Aid for Communication	3
SPLP	6430	Dysphagia in Children and Adults	3
SPLP	6435	Motor Disorders in Speech	2
SPLP	6440	Written Language Disorders	2
SPLP	6910	Clinical Practice I	3
SPLP	6911	Clinical Practice II	4
SPLP	6970	Integration Seminar	2

Theology (Ph.D.)

The main purpose of the Program is to prepare specialists with advanced academic studies in the fields of Christian Education and Pastoral Theology. These studies train the graduates to contribute as researchers and instructors of the Christian faith in the spiritual, social and academic areas, in Puerto Rico, as well as in the Caribbean, Latin America and Hispanic communities in the United States. From an interdisciplinary and ecumenical approach, it fosters thought about theology and its relevance in contemporary society. The Program emphasizes the analysis of the theological foundations of Christianity and the essential role that they play in the formation of ethical values of human beings.

The student who completes the Program successfully will be able to:

1. Evaluate the religious phenomenon in humans at the individual and community levels.
2. Explain the concepts of Christian theology.
3. Critically evaluate the history and development of theology.
4. Justify and interpret the relevance of theological work in contemporary society.
5. Integrate research skills to theological thought.
6. Propose new perspective on the existing theological models in order to contribute to the knowledge of the discipline.
7. Analyze the influence of the different theological models in the Latin American context.
8. Create a critical interreligious and interdisciplinary dialog.
9. Apply knowledge to decision making processes in matters of an ethical nature.
10. Stimulate reflection of the Christian faith and its relation to the spreading of values and improvement of society.

Admission Requirements

Candidates for admission must:

1. Have received a Master's Degree in Religion, Masters in Theology, Masters in Divinity or its equivalent, or in related areas from an accredited university or from an accredited institution of graduate studies, with a grade point average of no less than 3.00. Candidates that have a Masters degree in other fields, who have approved a minimum of 15 credits at this level in Religion, will also be considered.
2. Complete the admission form, which will include an essay about their intellectual and professional career, highlighting the factors that made the candidate apply to the Program. It should also express the candidate's academic, vocational, and professional purposes.
3. Have a full knowledge of the Spanish language and competency in the English language.
4. Have taken one of the following examinations: Graduate Record Examination (GRE), Miller Analogy Test or Examen de Admisión a Estudios de Posgrado (EXADEP) [Graduate Studies Aptitude Test] within the last three years of the date admission is requested. The Program's Admission Committee will establish the acceptable minimum score levels for the degree.
5. Have taken the test for the Teaching of English as a Foreign Language (TOEFL) - Required for students whose first and second language is not English.
6. Have passed a statistics course.
7. Present three (3) letters of recommendation, preferably from Faculty members that can properly comment on their academic, intellectual and personal ability to develop doctoral studies.
8. Submit an essay, term paper, or critical exegesis (of no more than thirty pages) that shows competency in master's studies. Preferably, the work must be related to the major that is being requested at a doctoral level.
9. Have an interview with the Admission Committee of the Doctoral of Philosophy Program in Theology, and be favorably recommended by it.

Special cases of students who request admission by transfer from a foreign accredited university or institution of graduate studies will be evaluated according to their individual merits.

Academic Progress Requirements

In the Doctoral Program the student will progress through the following phases:

1. Pass a reading examination in a third modern language after completing 24 credits of the Program.
2. Comply with the following requirements:
 - a) Pass all courses with a minimum of B.
 - b) Pass the comprehensive examination. Students must pass this test after having passed at least 30 credits (9 credits in core courses and 21 credits in courses related to their specialization).
 - c) Pass the thesis proposal.

3. Comply with all the preparation and presentation requirements of the dissertation.
4. Complete the degree in a period of seven years. Annual extensions can be awarded up to a maximum of three. These will be awarded based only on significant progress and work demonstrated by the student during the year that is awarded.

At the beginning of the first academic term of studies, the Director of the Doctoral Program will assign the student a faculty member that will temporarily serve as an academic advisor. At the end of the first academic term the advisor that will work with the student during the rest of the study program will be assigned. The advisor will be responsible of guiding the student on the courses that should be taken, as well as other aspects of the Program until the time of the comprehensive examination. At the end of the second academic term of the first year, the advisor will evaluate the work of the student during that period, and will give a written copy of the evaluation to the student and to the Director of the Doctoral Program.

It is expected that from the beginning of the first year of studies the student explore topics from which the doctoral dissertation may be developed.

To be considered a Doctoral Candidate, the student must have passed all the courses of the Program, except THEO 8994 – Doctoral Dissertation. An exception to the rule could be made with a course that the student is taking the academic term when the comprehensive examination is requested.

Having being admitted to the Doctoral Program does not guarantee admission to the degree candidacy. During the period prior to the request of admission to degree candidacy, the student should consult with his advisor to choose the topic of the dissertation. Once the topic is determined with the approval of the advisor, the student will prepare the proposal for research and will submit it to the Director of the Doctoral Program. If the proposal is accepted, the Director will officially inform the student that he has been admitted as a candidate for the degree.

The Director of the Doctoral Program, with the prior agreement or the degree candidate, will name three faculty members to form the candidate’s Dissertation Committee, one of who will be designated as the candidate’s Dissertation Director. This faculty member will also chair the committee. The Director of the Doctoral Program will make available to this committee the candidate’s file which contains a record of the academic work done by the candidate to date, the results achieved on the comprehensive examination, the preliminary research proposal and any other documents academically relevant to the work of the candidate. The candidate’s Dissertation Committee will thenceforth be responsible for advising and directing the student until the Dissertation is completed. Its defense will be through an oral examination before the Committee, which will be integrated by the three faculty members appointed by the Director of the Doctoral Program. The Committee can also invite other qualified persons to participate during the defense of the dissertation.

The Committee must officially approve the dissertation before this requirement can be completed. The student must comply with all the requirements to obtain the degree in a period of seven (7) years of having started in the Program. After those seven (7) years, an annual extension may be awarded up to a maximum of three. The extensions will be awarded only based on the significant progress and work shown by the student during the year prior requesting the extension.

All candidates must be completely fluent in the Spanish language. They must also have sufficient competency in English to be able to carry out complex and long readings in this language. In addition, candidates must pass an examination certifying that they have the necessary reading skills in a third modern language. This examination must be passed after completing 24 credits of the Program. The student may not take more than one course per academic term until this requirement of the third modern language is met.

Graduation Requirements

1. Pass all the courses of the Program with a minimum grade of B.
2. Pass the comprehensive examination.
3. Show knowledge of a third modern language.
4. Successfully complete, present, and defend the doctoral dissertation.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY PROGRAM IN THEOLOGY

Core Course Requirements	18 credits
Prescribed Distributive Requirements	12 credits

Operational Requirements	9 credits
Elective Courses	<u>6 credits</u>
Total	45

Core Course Requirements - 18 credits

THEO	7000	Fundamental Themes of Christian Theology	3
THEO	7010	Biblical Studies	3
THEO	7020	Christian Ethical Perspectives	3
THEO	7030	History of Christianity	3
THEO	7190	Classic Exponents of Christian Spirituality	3
THEO	8020	Human Suffering, and the Problem of Evil and Love	3

Prescribed Distributive Requirements - 12 credits

Select 12 credits from the following courses in the area of dissertation.

Christian Thought

THEO	7016	Evangelisation in the Caribbean	3
THEO	7017	Theology: Colonial America	3
THEO	7019	Theology: Contemporary America	3
THEO	7220	New Religious Movements in the Americas	3
THEO	7250	Spanish-Caribbean Theological Methods	3
THEO	8000	Mission Theology	3

Practical Theology

THEO	7100	Contemporary Theories of Christian Education	3
THEO	7110	Theological and Philosophical Foundations of Educational Ministry	3
THEO	7260	Theology of Pastoral Action	3
THEO	7270	Christology and Pastoral Action	3
THEO	7290	Eclesiología and Pastoral Action	3
THEO	8010	Theory of the Theological Method	3

Operational Courses - 9 credits

EDUC	7060	Research Methods I	3
		or	
HIST	8970	Historical Research Methodology	3
THEO	8993	Dissertation Proposal	3
THEO	8994	Dissertation	3

University Teaching (M.A.)

The Master of Arts Degree in University Teaching is directed towards preparing professionals to perform as educators in higher education. This degree presents an academic offering in harmony with the educational needs of educators at the higher education level in different university contexts in Latin America. The curricular design comprises four (4) fundamental areas.

- Philosophical, Historical and Social Foundations of universities
- Theories and Methodologies for Educational Practice
- Research
- Technology

Students registered in the Program must have access to a computer with connection to the Internet. They must also have basic knowledge of computer handling and be able to work with word processing and electronic presentation applications and navigate the Internet.

Students desiring to enter the Master of Arts Degree in University Teaching may replace the admission tests stipulated in the Graduate Catalog with an equivalent test.

This Masters will be offered in the online education modality.

The Metropolitan Campus is authorized to offer this Program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN UNIVERSITY TEACHING

Philosophical, Historical and Social Foundations of Universities Requirements	6 credits
Theories and Methodologies for Educational Practice Requirements	9 credits
Research Requirements	9 credits
Technology Requirements	<u>6 credits</u>
Total	30

Philosophical, Historical and Social Foundations of Universities Requirements - 6 credits

EDUC	5200	Development and Future of Higher Education	3 credits
EDUC	6605	Current Problems and Controversies of Higher Education in Latin America	3 credits

Theories and Methodologies for the Educational Practice Requirements - 9 credits

EDUC	6024	Educational Measurements and Evaluation	3 credits
EDUC	6610	Learning Theories and Teaching Models in Higher Education	3 credits
EDUC	6620	Planning and Educational Design in Higher Education	3 credits

Research Requirements - 9 credits

EDUC	5111	Educational Research I	3 credits
EDUC	5112	Educational Research II	3 credits
EDUC	697A	Integration Seminar	3 credits

Technology Requirements - 6 credits

EDUC	6601	Virtual Learning Communities in Higher Education :Experience I	1 credit
EDUC	6602	Virtual Learning Communities in Higher Education: Experience II	1 credit
EDUC	6603	Virtual Learning Communities in Higher Education: Experience III	1 credit
EDUC	6615	Educational Technology in Higher Education	3 credits

Course Descriptions

Courses in Accounting (ACCT)

ACCT 5101 FINANCIAL ACCOUNTING

Analysis and application of the theory of financial accounting at an advanced level. Preparation of financial reports for corporations and partnerships, consolidation of financial statements, mergers and acquisitions, taxes, issuance and valuation of stocks and bonds, and financial report analysis and interpretation. Discussion and analysis of current topics developing within the accounting profession. Prerequisites: ACCT 2252.

3 credits

ACCT 6110 ACCOUNTING FOR NON-PROFIT ORGANIZATIONS

Application of accounting norms that apply to non-profit organizations. Emphasis on the accounting principles applicable to: government, hospitals, universities, health organizations, and social welfare, among others.

3 credits

ACCT 6120 COMMERCIAL LAW FOR ACCOUNTANTS

Study of the United States Uniform Code of Commerce. Emphasis on contractual law, commercial laws, labor laws, ethical-legal responsibility of Certified Public Accountants and other laws related to the practice of the profession.

3 credits

ACCT 6220 BUDGET PLANNING AND CONTROL

Study of the process of budget preparation and use as a tool for managerial decision making. Includes aspects related to the budget, from its initial stages to the control process once it is implemented. Prerequisite: BADM 5040.

3 credits

ACCT 6410 INTERNATIONAL ACCOUNTING

Analysis of the main topics in international accounting such as national accounting systems and their effect on financial statements, decision making, the development of international accounting principles, the conversion of foreign currency, accounting in time of inflation, conversion prices and their implication in taxes. Comparison and analysis of accounting of several countries, discussion of coordination of accounting, with emphasis on logic, profits, ethical practices, consequences and problems that this coordination entails.

3 credits

ACCT 6420 INTERNATIONAL FINANCIAL STATEMENTS AND THEIR ANALYSIS

View of international accounting in the context of multinational company management. Application of a practical analysis of international financial statements and analysis in special situations. Definition and discussion of the conversion of financial statements to the local currency, the accounting and economic risk in foreign currency transactions and accounting for protection strategies.

3 credits

ACCT 6430 ADVANCED INTERNAL AUDITING

Review of academic literature related to internal auditing. Use of an auditing cycle (planning, field work, findings report, recommendations and discussion of this). Description of the function of the internal auditor within the administrative structure of a company at the local and international levels. Establishment of the responsibilities of internal auditors and their relationship with external auditors, management and the board of directors. Discussion of auditing procedures in multinational dependencies.

3 credits

ACCT 6440 FORENSIC ACCOUNTING

Study of the research, manifestation, documentation and prevention of fraud. Analysis of fraud and the tools, techniques and methods of auditing it, and investigative accounting in multinational companies. Case studies and presentations by students will be used to recognize the different stages of the development of forensic accounting and its application in multinational companies.

3 credits

ACCT 6940 AUDIT SEMINAR

Analysis of special topics within the audit field by means of research, case analysis and related readings. Prerequisite: BADM 6300.

3 credits

ACCT 6945 SEMINAR ON TAXES

Analysis of special topics within the Puerto Rico and Federal Tax Laws. Analysis of the most recent changes in these codes, by means of research, case analysis and related readings.

3 credits

ACCT 6980 RESEARCH SEMINAR

Research methods and techniques applied to accounting. Includes the design of a research proposal.

3 credits

ACCT 6985 RESEARCH PROJECT

Design and development of a research project on a current topic or problem related to accounting.

3 credits

Courses in Anesthesia (ANES)

ANES 5105 BIOCHEMISTRY AND PHYSICS

Concepts related to biochemistry and physics. Biochemical elements that facilitate the comprehension of pharmacokinetics and pharmacodynamics of anesthetic agents. Application of the laws of physics in the use of equipment and instruments in anesthesia.

3 credits

ANES 5110 INTRODUCTION TO ANESTHESIOLOGY

Historical development of anesthesia and current status of the anesthetist nurse in relation to other health professionals. Emphasis on moral-ethical and medical-legal considerations of anesthetic nursing practice and professional aspects of the anesthetist nurse.

2 credits

ANES 5111 PATHOPHYSIOLOGY I: CELLULAR AND CIRCULATORY

Analysis of anatomy, physiology, cellular and cardiovascular pathophysiology with emphasis on the effects produced by the application of anesthesia.

3 credits

ANES 5112 PATHOPHYSIOLOGY II: BLOOD, CARDIOVASCULAR, RESPIRATORY AND RENAL

Analysis of the anatomy, physiology and pathophysiology of the cardiovascular, respiratory and renal systems and the implications related to anesthesia. Study of the ventilation and perfusion concepts and how these relate to oxygen, the administering of anesthesia and metabolism. Discussion of blood composition and the coagulation paths. Study of the effects in the cardiac and pulmonary commitment, renal function and its implications for administering anesthesia to the patient.

3 credits

ANES 5113 ADVANCED PATHOPHYSIOLOGY

Evaluation of the anatomy, physiology and pathophysiology of the conditions related to the acid-base imbalance of the endocrine and gastrointestinal systems. Analysis of the effects produced by the application of anesthesia. Prerequisite: ANES 5112.

3 credits

ANES 5121 PRINCIPLES OF ANESTHESIA I

Fundamentals of anesthetic management. Evaluation of pre and post anesthetic phase premedication, formulation of the anesthesia care plan, anesthetic techniques and procedures, endotracheal intubation equipment, documentation and prevention of complications. Mechanical principles governing the operation of anesthesia equipment and safety mechanisms. Corequisite: ANES 5122.

2 credits

ANES 5122 CLINICAL PRACTICE I: ADVANCED PHYSICAL ASSESSMENT OF HEALTH IN ANESTHESIA

Use of medical history data. Holistic evaluation of the patient. Preparation of the anesthesia care plan. Performance of the following skills: endotracheal intubation, induction and management of the patient under the effects of anesthesia. Practice in anesthesia equipment and safety mechanisms. Eight hours of clinical practice weekly. Corequisite: ANES 5121.

1 credit

ANES 5131 PHARMACOLOGY ANESTHETICS I: ANESTHETICS

Pharmacokinetics and pharmacodynamic of drugs used in premedication and anesthetic agents. Emphasis on determining dosage, mechanisms of action, characteristics of drugs effects, toxicity, secondary effects and interactions with other medications.

3 credits

ANES 5132 ADVANCED ANESTHETIC PHARMACOLOGY

Distinction of pharmacokinetics and pharmacodynamics in the advanced study of drugs used for multiple conditions of health, treatments and their side effect. Emphasis on oral antihypertensive, hypoglycemic, insulin, psychogenic, steroids, dysrhythmic, glycosides cardiac and antineoplastic drugs. Prerequisite: ANES 5131.

3 credits

ANES 5221 PRINCIPLES OF ANESTHESIA II: GENERAL SURGERY

Physical and mechanical bases for the management of monitors. Reading and interpretation of data obtained through monitors in the surgery room with patients with elective general surgery. Corequisite: ANES 5222. Prerequisites: ANES 5111, 5122.

2 credits

ANES 5222 CLINICAL PRACTICE ON PRINCIPLES OF ANESTHESIA II

Application of the physical and mechanical principles of monitors. Administration of anesthetics to patients on invasive monitoring, elective and ambulatory surgery and neurological procedures. Twelve hours of practice weekly. Corequisite: ANES 5132. Prerequisite: ANES 5122.

2 credits

ANES 5307 REGIONAL ANESTHESIA

Theoretical and practical considerations for the administration and management of regional anesthetics. Pharmacological aspects in the administration of anesthetic blocks: spinal, epidural and caudal. The use of local anesthetics is included.

2 credits

ANES 5331 PRINCIPLES OF ANESTHESIA III: OBSTETRICS AND PEDIATRICS

Fundamentals on anesthetic management in obstetrics with emphasis on the pathophysiological condition of pregnancy in the obstetric process. Anesthetic management in pediatrics including anatomic, physiological and pathological characteristics from infancy to late childhood. Corequisites: ANES 5222, 5332.

2 credits

ANES 5332 CLINICAL PRACTICE ON PRINCIPLES OF ANESTHESIA III

Practice on procedures to alleviate pain. Preparation of the patient for the administration of regional and general anesthesia. Assessment and management of the fetus, mother and the child. Tracheal intubation considering the quantitative and qualitative differences of the patient. Continuous monitoring during the perianesthetic procedure. Twelve hours of practice weekly. Corequisite: ANES 5331. Prerequisite: ANES 5222.

2 credits

ANES 5431 PRINCIPLES OF ANESTHESIA IV: CARDIOTHORACIC AND NEUROLOGICAL

Anesthetic management of emergency patients and patients with trauma and in cardiothoracic surgery. Includes specific procedures in cardiothoracic anesthesia and neuroanesthesia. Prerequisites: ANES 5313, 5331.

2 credits

ANES 5432 CLINICAL PRACTICE ON PRINCIPLES OF ANESTHESIA IV

Administration of anesthesia to emergency patients and patients in trauma and in cardiothoracic and neurosurgery. Practice in specialized settings. Twelve hours of clinical practice weekly. Corequisite: ANES 5431. Prerequisite: ANES 5332.

2 credits

ANES 5497 TRENDS AND CONTROVERSIES IN ANESTHESIOLOGY

Trends and controversial topics in modern anesthesiology, such as: practice standards, patients' bill of rights, new trends in anesthesiology; ethic-legal controversies, interaction with health organizations and other topics of particular interest.

2 credits

ANES 6390 CLINICAL ANALYSIS

Discussion of case studies chosen during the clinical practice. Emphasis on the analysis and decision-making in the perianesthetic process.

1 credit

ANES 6395 RESEARCH PROCESS

Introduction to the research process: methodology, techniques and statistical analysis. Research of a nursing anesthetic problem identified by the student through observation during the perianesthetic intervention. Oral and written presentation of the problem, methodology used, findings and recommendations to improve the practice of anesthetic nursing. Prerequisite: ANES 5432.

3 credits

ANES 6397 ADMINISTRATION AND SUPERVISION

Processes and techniques of administration and clinical supervision. Use of technology in clinical services. Theory and practice in quality control of personnel, equipment, materials and documents required in the anesthesia area.

2 credits

ANES 6911 INTEGRATED SUPERVISED PRACTICE I

Integration of knowledge and skills acquired from courses. Application of methods and techniques of administration of anesthetic and pharmacological agents. Intensive practice on pharmacological agents. Intensive practice in specialized settings under the supervision on an anesthesiologist and/or anesthetic nurse. Students begin with "on call" experiences. Sixteen hours of practice weekly. Prerequisite: ANES 5432.

2 credits

ANES 6912 INTEGRATED SUPERVISED PRACTICE II

Independent practice where the student acts as head anesthetist nurse under the indirect supervision of a clinical instructor (anesthesiologist or anesthetic nursing). Clinical experience at different levels of administration and supervision within the Department of Anesthesia. Sixteen hours of practice weekly. Prerequisite: ANES 6911.

2 credits

ANES 6970 SEMINAR

Analysis and concept integration of the physiology and pharmacology courses and basic and advanced principles of anesthesia that contribute to the professional development of students.

3 credits

Courses in Bilingual Education (BLED)

BLED 5020 SOCIOCULTURAL ASPECTS IN BILINGUAL TEACHING

Analysis of the factors that influence in the concept of multicultural and bilingual education. Emphasis on the selection and integration of teaching strategies, assessment and curriculum that reflect language, ethnic group, gender and other components of cultural diversity.

3 credits

BLED 5030 INSTRUCTIONAL CONTENT IN BILINGUAL PROGRAMS

Study of theories and approaches for bilingual teaching throughout the curriculum. Integration of language learning and the instructional content simultaneously.

3 credits

BLED 5040 MATERIALS AND TECHNOLOGY IN THE BILINGUAL CLASSROOM

Evaluation and preparation of resources for teaching in a bilingual and multicultural scene. Use of technology in teaching in a multicultural society and analysis of its implications for the teaching and learning process.

3 credits

BLED 6020 METHODS OF BILINGUAL TEACHING AT THE ELEMENTARY LEVEL

Analysis of models and strategies of teaching in a bilingual environment at the elementary level. Demonstration of teaching techniques. Evaluation of materials and resources available on the market.

3 credits

BLED 6030 METHODS OF BILINGUAL TEACHING AT THE SECONDARY LEVEL

Analysis of models and strategies of teaching in a bilingual environment at the secondary level. Demonstration of teaching techniques. Evaluation of materials and resources available on the market.

3 credits

BLED 6040 CONTEMPORARY TOPICS IN BILINGUAL EDUCATION

Exploration and discussion of contemporary topics in the field of the bilingual education.

3 credits

BLED 6510 ASSESSMENT IN A BILINGUAL EDUCATIONAL SCENARIO

Study of the basic principles and the innovating approaches to evaluation in bilingual education. Selection, adaptation, development and administration of a variety of evaluation techniques.

3 credits

Courses in Biology (BIOL)

BIOL 5001 INTEGRATED BIOLOGY I

Analysis of the structures of biomolecules and how these are related to their respective functions, their role in the regulation of the organelles, the cells and organisms in general.

3 credits

BIOL 5002 INTEGRATED BIOLOGY II

Analysis of the translation of signals that dictate the cellular function and embryonic development. Relation between the biomolecular aspects and the interaction of the organism with its environment. Prerequisite: BIOL 5001.

3 credits

BIOL 5010 MODERN BIOLOGY FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the principles of biological sciences in harmony with the elementary level curriculum. Emphasis on the organization of live beings from the atomic level to the ecosystems. Includes the kingdoms, life cycles, nourishing relations, inheritance, evolution and the preservation of the environment. Application of the biological concepts in daily life situations. Requires 30 hours of lecture and 30 hours of closed lab.

3 credits

BIOL 5017 BIOCHEMISTRY AND CELLULAR PHYSIOLOGY

Cellular metabolism from the structural and physiological points of view. The principal organic molecules that are important for living organisms and the vital metabolic processes related to these are studied.

3 credits

BIOL 5019 HISTORY AND PHILOSOPHY OF SCIENCE

Historical and philosophical circumstances related to the development in the study of the natural sciences. Emphasis on the study of ideas and concepts characterizing modern scientific thought. The conceptual problems of the natural sciences and their interrelationship with the social sciences are studied.

3 credits

BIOL 6003 MOLECULAR IMMUNOLOGY

Analysis of the molecular mechanisms used by the immunological system to recognize the antigens, to obtain their activation and the elimination of molecules, cells and organisms alien to the body. Clinical problems are included, mainly immunological ones. Emphasis on the interpretation of recent scientific readings presenting experimental studies in the field of molecular immunology.

3 credits

BIOL 6004 MOLECULAR GENETICS

Analysis of the hereditary characteristics, the relation between genes and the ruling of the genetic expression. Emphasis on molecular genetic research techniques. Includes topics such as structure and function of the genes, recombinant DNA, expression mechanism in prokaryotic and eukaryotic cells, genomic instability, cellular cycle control, proliferation, repair and apoptosis.

3 credits

BIOL 6005 BIOTECHNOLOGY AND BIOINFORMATICS

Analysis of the foundations of molecular biology that are the basis for the development and the applications of biotechnology. Includes the basic aspects of recombinant DNA technology, the methodology, techniques and processes that are necessary for the development of any biotechnological application. Emphasis on the studies of genomes, manipulation of genes, generation and handling of biological sequences and structural information, including the relation between sequence, structure and function of macro-molecules.

3 credits

BIOL 6006 BIOMOLECULAR TECHNIQUES LABORATORY

Training and development of the abilities of research and scientific thought by means of the accomplishment of experiments of a biomolecular nature. Application of the methodologies and use of equipment in research laboratories. Emphasis on experimental design and the fundamental skills of scientific writing. Requires 30 hours of lecture and 30 hours of closed laboratory.

3 credits

BIOL 6007 PLANTS BIOTECHNOLOGY

Analysis of the foundations of the molecular Biology of plants and the developments of technologies for genetic manipulation. Emphasis on the structure and function of the genes and genomes and the development of transgenic systems and metabolic genetic engineering, the environmental impact of the transgenic plants and the regulations that govern their use.

3 credits

BIOL 6008 ADVANCED VIROLOGY

Analysis of the general, physical and genetic characteristics of the main groups of viruses that infect humans with pathogenic interest. Emphasis on the cycles of infection and viral duplication at the molecular and cellular level. In addition, the fundamental aspects of the relation of the virus with the infecting cell guest and the immune response are discussed.

3 credits

BIOL 6009 BIOREMEDIATION

Analysis of the foundations of remediation of contaminated environments by means of the use of biological methods. Analysis of the development and use of microorganisms, and natural and genetically modified plants for the treatment of waters, land and sediments.

3 credits

BIOL 6010 PROTOZOOLOGY

Analysis of the main groups of protozoa that affect man and other animals. Emphasis on basic biological aspects, structure, ecology, survival strategies, their transmission and control.

3 credits

BIOL 6012 BIOLOGY AND CONSERVATION OF MARINE MAMMALS

Analysis and discussion of topics in biology, ecology, distribution, abundance, taxonomy, phylogeny, evolution, anatomy, physiology, natural history, development, and behavior of the marine mammals. Emphasis on the conservation programs of whales, dolphins and manatees in the Caribbean area.

3 credits

BIOL 6013 ENVIRONMENTAL MICROBIOLOGY

Analysis of the interactions between microorganisms and their biotic and a-biotic environment. Emphasis on the distribution, function and impact of microorganisms in the environment. Use of microorganisms as instruments of bioremediation and conservation. Requires 45 hours of lecture/lab.

3 credits

BIOL 6014 BACTERIOLOGICAL DIAGNOSIS

Analysis of the general principles that govern the identification of the organisms. Study of the selection, collection and transportation of clinical samples and other products. Includes the study of conventional and fast methods of identification of microorganisms. The systems of classification of organisms and the main groups of bacteria. Requires 45 hours of lecture/lab.

3 credits

BIOL 6016 EVOLUTIONARY PROCESSES

Analysis of the evolutionary mechanisms and the patterns of biological diversity that result from these. Focus on the genetic and ecological aspects of evolution. Discussion of the importance of evolution in the health, agriculture and conservation areas.

3 credits

BIOL 6102 ENVIRONMENTAL AND ECOLOGICAL SCIENCES

Analysis and discussion of environmental characteristics and their effect on the different ecological systems. Study of the main processes of environmental contamination of the soil, water and air. Emphasis on the strategies of conservation and restoration of the ecological systems by means of the use of the different trends of ethical-ecological thought.

3 credits

BIOL 6103 TROPICAL ECOLOGY

Analysis of the evolution of species in the tropics. Emphasis on tropical communities and ecosystems. Emphasis on the biotic and a-biotic interactions that influence the biodiversity of the tropics. Includes the flow of energy through the trophic network. Requires 45 hours of lecture/lab.

3 credits

BIOL 6104 POPULATION ECOLOGY

Analysis of the dynamics of populations and importance in the evolutionary mechanisms. Focus on demography, population growth and control of tropical organisms. Includes the techniques of population studies, marks and recapture, histories of life and genetics of populations. Requires 45 hours of lecture/lab.

3 credits

BIOL 6105 ISLAND BIOGEOGRAPHY

Analysis of the geologic origins and the biodiversity of islands. Focuses on the a-biotic and biotic processes that influence the ecological and evolutionary processes in islands. Emphasis on islands as models for the study of evolution and conservation.

3 credits

BIOL 6107 POLLUTION AND ECOLOGICAL SYSTEMS

Analysis of the main factors that govern the ecosystems and the impact of contamination on them. Analysis of the flow of polluting agents and toxic compounds through the environment.

3 credits

BIOL 6108 ENVIRONMENTAL PHYSIOLOGY OF ANIMALS

Analysis of the physiological aspects of ecology and conservation. Analysis of the evolution and operation of physiological systems in relation to the environment. Emphasis on the dynamics of the natural history of animals and their dependency of the environment in which they develop, with special attention to the hydro, energy, locomotion and thermoregulation balance of terrestrial vertebrates in islands.

3 credits

BIOL 6109 DEVELOPMENTAL BIOLOGY

Study of the development of multi-cellular organisms. Discussion of the anatomical perceptions of embryology and the life cycle of organisms. Emphasis on the relation between unicellular and multi-cellular organisms. Analysis of the genetic factors and their roles in the development of the embryo in the context of the specification of the different structures within the organism. Emphasis on the foundations of experimental embryology and the importance of cellular communication.

3 credits

BIOL 6204 METHODS OF RESEARCH IN ECOLOGY

Development of skills of research and scientific thought. Includes the discussion of theoretical aspects and field practice to prepare students in the planning and development of research in ecology. Emphasis on the experimental design and on the fundamental skills of the scientific document. Requires 30 hours of lecture and 30 hours of closed lab.

3 credits

BIOL 6904 CELLULAR BIOLOGY

Analysis of the function and structure of cells, tissue, organs and their organizational levels, including physical and chemical mechanisms. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 6905 MOLECULAR BIOLOGY

Comprehensive study and analysis of topics in structure and expression of nucleic acid, repair and genetic regulation, recombination and transcription of the DNA, the genetic code and protein synthesis, cellular division and carcinogenesis, in addition to the basic principles of biotechnology. Laboratory demonstrations are included. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 6906 HUMAN PHYSIOLOGY

Comprehensive study and analysis of human body function. Emphasis on the integration of basic functions from the cellular level to the total organism. Integration of physiological concepts for problem solving. Laboratory demonstrations will be included. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 6907 IMMUNOLOGY

Study and analysis of the cellular, humeral and molecular aspects of immune reactions. There will be an introduction to the immunocitochemistry. Emphasis on antigen-antibody reactions. Laboratory demonstrations will be included. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 6908 MARINE BIOLOGY

Comprehensive course that includes the general description of tropical marine ecosystems and the integrated study of oceanographic processes of the communities of the costal area, beaches, rocky coast, areas of marine grass, mangrove swamps and coral reef. The interactions of the plankton and bentikos ecosystems, nutrient cycle, productivity and trophic chains will be described. Field trips will be included. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 6909 BIOGEOGRAPHY

Study of space distribution patterns of flora and fauna on the earth's surface. Designed with a multidisciplinary approach with emphasis on the connection of ecology, geography, geology and the evolutionary history of earth organisms. Field trips will be included. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 6910 ENVIRONMENTAL SCIENCE

Study and analysis of the principle concepts and forms of teaching environmental science at the primary and secondary school levels. Emphasis on the scientific aspects of environmental studies, including the description and analysis of socioeconomic and cultural factors that affect the natural environment and ecosystems. Field trips will be included. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Biology.

3 credits

BIOL 697_SPECIAL TOPICS IN BIOLOGY

Analysis and discussion of different specific topics on Biology with emphasis on integration of the different levels of organization of life. Prerequisite: BIOL 5002.

3 credits

BIOL 6971 SEMINAR I

Analysis of recent scientific articles in the different areas of Biology. Emphasis on the discussion of the most recent techniques and the analysis of the results. Grade: P/NP.

1 credit

BIOL 6972 SEMINAR II

Preparation of an oral presentation of a topic in the area of biology, using as it basis recent scientific articles. Prerequisite: BIOL 6971. Grade: P/NP.

1 credit

BIOL 6990 SCIENTIFIC WRITING

Discussion of scientific articles focused on experimental design. Application of the principles of effective writing. Study of the appropriate styles of writing in the sciences. The development of scientific article and research proposals is required. Emphasis on the process of writing and the scientific and ethical principles associated to this. Prerequisites: BIOL 6006 or BIOL 6204 and BIOL 697_ according to the specialization.

3 credits

BIOL 6991 THESIS I

Development and presentation of a research proposal and the later conduct of a scientific research work based on this proposal. This proposal must have the approval of the thesis adviser. Grade: P/NP.

4 credits

BIOL 6992 THESIS II

Development of the scientific research work proposed in BIOL 6991. Grade: P/NP.

4 credits

BIOL 6993 THESIS III

Completion and presentation of the scientific research work initiated in BIOL 6991 and continued in BIOL 6992. Grade: P/NP or TP.

4 credits

Courses in Biotechnology (BIOT)**BIOT 5011 CELLULAR AND MOLECULAR BIOTECHNOLOGY**

Analysis of the basic metabolic routes associated with cellular growth and their regulation. Includes the principles on which the methods used in genetic engineering are based. Emphasis on the applications related to the selection and manipulation of DNA, the expression and the purification of proteins. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 5100 MOLECULAR GENETICS AND BIOINFORMATICS

Analysis of the flow of genetic information in molecular terms, from the duplication, transcription, translation and control of the genetic expression. Includes the search and analysis of sequences of nucleic acids and proteins through the use of public bioinformatics tools. Includes the development of bioinformatics projects. Requires additional time in an open lab.

3 credits

BIOT 6100 BIO-SECURITY

Critical review of current topics in the area of security and biotechnology. Analysis of findings, applications and pertinent implications of animal and plant biotechnology.

2 credits

BIOT 6105 BIOTECHNOLOGY OF MICROORGANISMS

Analysis of the concepts and of the applications of the microorganisms relevant to biotechnology. Includes the use of microorganisms in diverse genetic engineering techniques. Emphasis on their application in industry, agriculture and health. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 6115 BIOTECHNOLOGY OF PLANTS

Analysis of the principles associated to the use of plants in biotechnology. The implications of the biotechnology in modern agriculture, genetic engineering of plants, and in bio-fuels are examined. Identification of the challenges and opportunities in the use of plants in biotechnology. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 6116 MICRO-PROPAGATION OF PLANTS

Critical analysis of the principles and technologies associated with the micro-propagation of plants. Description of the requirements of culture rooms, sterile clothes, aseptic techniques and instrumentation to generate and maintain the plants in optimal growth conditions. Application of plant tissue, organs, cells and protoplasts cultures. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 6117 PLANTS AS BIOFACTORIES

Analysis of the principles and technologies associated with the use of plants as systems of expression and means to produce substances with biomedical and agricultural value, among others. Includes the use of plants to produce bio-fuels and the application of strategies for the development of plants as bioreactors.

3 credits

BIOT 6120 ANIMAL BIOTECHNOLOGY

Critical review of the genetic bases of features associated with health and animal production. Analysis of the potential of animal cells with regard to their selective and programmed alteration through genetic engineering. Integration of the technologies of genomic manipulation in animal cells. Includes strategies for the genetic improvement of animals and the different ethical-social perspectives and implications. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 6125 INSTRUMENTAL ANALYSIS OF BIOMOLECULES

Review of the theoretical aspects and the applications of the instrumental methods for the analysis of bio-molecules. Emphasis on ultraviolet spectroscopy, and visible and infrared spectroscopy of atomic absorption, liquid and gaseous chromatography, centrifugation, electrophoresis and mass spectrometry. Emphasis on the instrumental analysis of proteins and derivatives, carbohydrates, lipids and nucleic acids. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 6130 TISSUE CULTURE OF ANIMAL ORIGIN

Application of methods for the culture of cells coming from mammals, birds and insects. Review of the applications of tissue culture of animal origin in the biotechnology industry and its ethical implications. Emphasis on the requirements of clean rooms, sterile clothes, aseptic techniques, instrumentation, classification of cellular lines, detection of contamination and quality controls. Use of the techniques of cellular culture and of those used for the detection of cellular components or products. Requires 30 hours of lecture and 45 of closed lab.

3 credits

BIOT 6200 INDUSTRIAL AND COMMERCIAL BIOTECHNOLOGY

Critical analysis of the technologies involved in the production of biological products and the strategies for the planning and the organization of biotechnological industries. Emphasis on the technologies required in the bioprocesses for the production of secondary metabolites, enzymes, biopharmaceuticals, among others. Integration of examples of business plans, marketing and intellectual property regarding biotechnology.

3 credits

BIOT 6210 BIOTECHNOLOGY AND IMPROVEMENT OF CULTURES

Analysis of the theoretical aspects and the practical applications of the biotechnological methods for the improvement of cultures. Emphasis on the biotechnological strategies to improve cultures with biopharmaceutical purposes, food production and conservation of the environment.

3 credits

BIOT 6220 RESEARCH METHODS IN BIOTECHNOLOGY I

Application of the scientific method in the solution of a problem related to biotechnology. Includes the preparation of a research proposal, the training and the implementation of laboratory techniques, the interpretation and the analysis of scientific data. Grade: P/NP.

3 credits

BIOT 6221 RESEARCH METHODS IN BIOTECHNOLOGY II

Continuation of research in the biotechnology area. Application of the scientific method in the solution of a problem related to biotechnology. Includes follow-up to the development of a research topic, the interpretation and the analysis of scientific data in harmony with the thesis proposal. Selection of the thesis committee and defense of the thesis. Grade: P/NP.

3 credits

BIOT 6230 BIO-PROCESSES

Analysis of the technologies involved in the biological conversion of raw material, such as: plant-made pharmaceuticals, foods, fuels, secondary metabolites and chemical substances. Examples of biotechnological products and procedures to assure quality and compliance with the regulations of the industry are included.

3 credits

BIOT 6240 SPECIAL TOPICS IN BIOTECHNOLOGY

Critical analysis of recent and relevant topics in the area of biotechnology. Emphasis on findings and on biotechnological applications to solve biomedical, industrial, environmental and agricultural problems.

3 credits

BIOT 6970 SEMINAR

Critical analysis of current and relevant topics in the area of biotechnology and presentation of findings and applications. Emphasis on the analysis of research articles related to general and plant biotechnology.

1 credit

BIOT 6990 THESIS IN BIOTECHNOLOGY

Development of a thesis by means of the compilation and analysis of the experimental results of the research project. The student will work under the supervision of a thesis adviser and the thesis committee. Includes the defense of the thesis. Students will register as many times as necessary until finishing their research work. Grade: P/NP. Prerequisite: BIOT 6220.

3 credits

Courses in Business Administration (BADM)

BADM 5010 QUANTITATIVE METHODS FOR DECISION MAKING

Study of the quantitative methods for decision making, in particular the application of mathematical and statistical models in the analysis of problems related to economic and administrative sciences. The main topics include probability and decision making analysis, game theory, analysis under uncertain conditions, and network analysis. Includes simulations.

3 credits

BADM 5020 MANAGERIAL ECONOMICS

Nature of demand and economic aspects of production in firms. Optimization techniques and the use of analytical economic methods in the managerial decision-making process. Analysis of risk and decision-making under conditions of uncertainty.

3 credits

BADM 5030 ENTERPRISE RESEARCH METHODOLOGY

Application of the scientific method in the solution of enterprise problems. The quantitative and qualitative research methodology and terminology will be used. Study of the research process, methodology, techniques and statistical analysis. Includes the preparation of a research proposal.

3 credits

BADM 5040 ACCOUNTING FOR MANAGERS

Analysis of financial accounting as a managerial tool; the role of the accounting executive in the company or firm and financial statements interpretation. Use of cost accounting information as a managerial tool.

3 credits

BADM 5060 MANAGEMENT INFORMATION SYSTEMS

Management information systems and their impact on management problems as well as their effect on the organization. Development of analytical skills for selecting information systems based on electronic computers and their relationship to the managerial decision-making process.

3 credits

BADM 5070 PUBLIC POLICY TOWARDS BUSINESS

Analysis of the government's monetary, fiscal and regulatory policies regarding business cycles and their impact on firms. Study of current trends in these areas at the local, national and international government levels.

3 credits

BADM 5090 MARKETING MANAGEMENT

Marketing from the individual firm viewpoint. Interaction between the company, the market and the environment. Managerial marketing functions and their integration in conjunction with models of planning and decision-making.

3 credits

BADM 5100 ORGANIZATIONAL THEORY AND BEHAVIOR

Review of the major approaches to the study of organizations from a psychosocial point of view. Topics include small group behavior, system of power and influence, interpersonal conflict, individual motivation, organizational structure, dynamics and change and their implications for management, social welfare systems and the social and personal needs of the group and the individual.

3 credits

BADM 5120 OPERATIONS MANAGEMENT

Development of ways to define, analyze and solve complex operational problems in all types of organizations. Analysis of problems associated with the effective use of strategic resources.

3 credits

BADM 5130 ORGANIZATIONAL BEHAVIOR

Basic topics on organizational behavior, including motivation, communication, leadership, performance, organizational design, professional planning, power and conflict. The course aims to provide the knowledge and skills needed to work with individuals and groups as members of social and business systems.

3 credits

BADM 5140 LEGAL AND SOCIAL ENVIRONMENT IN BUSINESS

Legal systems focusing on the managerial decision-making process. Special attention is given to the relationship between firms and the government and on how laws and the environment affect business activities. Contemporary legal problems and lawmaking trends are considered.

3 credits

BADM 5150 ORGANIZATIONAL THEORY

Individual and group behavior in the organizational context, viewing the organization as a continuous social system. Analysis of organizational problems of change and development and of organizational processes.

3 credits

BADM 5190 MANAGERIAL FINANCE I

Review of the fundamental aspects of financial decision-making in its theoretical, technical and practical dimensions. Study of investment decision-making in working capital and short and long term financing.

3 credits

BADM 5470 FOUNDATIONS OF KNOWLEDGE MANAGEMENT

Description of the nature, evolution and theoretical concepts of the knowledge management in organizations, such as: tacit knowledge, explicit knowledge and learning.

3 credits

BADM 5480 ELECTRONIC BUSINESS AND MOBILE MARKETING

Analysis of digital marketing of companies and their products, by means of Internet, mobile technology and other emergent and convergent technologies. Integration of these technologies to the development of a mobile marketing campaign.

3 credits

BADM 5776 TRANSFORMATION OF THE LIBERAL STATE IN CURRENT GLOBALIZATION

Critical analysis of the transformations of the liberal state in comparison with the ideal of the democratic state. Study of these processes within the framework of the implementation of the neoliberal ideology in current globalization.

3 credits

BADM 6010 HUMAN RESOURCES MANAGEMENT IN THE INTERNATIONAL ENVIRONMENT

Critical analysis of the foundations, processes and policies inherent to the management of human resources in an international environment. Analysis of the fundamental vision of the dynamics of changes in the economic, political, socio-cultural and technological environment in the contemporary world. Evaluation of the impact of these transformations in the organizational structural models to obtain competitiveness in the globalized economy. Discussion of the characteristics of the recruitment, selection and development functions and the legal and financial responsibilities of personnel administration at the international level.

3 credits

BADM 6020 TRAINING, DEVELOPMENT AND ADMINISTRATION OF HUMAN RESOURCES

Design of training programs for the development and administration of human resources by applying the theory of life experiences in each specific situation.

3 credits

BADM 6030 DATABASE SYSTEMS

Fundamental concepts for the design and implementation of database systems from the perspective of different levels of abstraction and data models: conceptual, logical and physical. Algebraic and relational calculus operations, Structured Query language (SQL), Data Definition Language (DDL) and Data Manipulation Language (DML). Trends, technologies and most influential current models of databases, including object oriented, semantic and deductive models. Prerequisite: BADM 5060.

3 credits

BADM 6040 SYSTEM ANALYSIS AND DESIGN

Techniques and methodologies used to develop information systems in the organization, including steps and procedures to follow from the initiation of a new system until its implementation in the enterprise. Application of computerized tools that facilitate the analysis and design of an information system. Prerequisite: BADM 6030.

3 credits

BADM 6050 INTERNET: SUPERHIGHWAY FOR INFORMATION

World Wide Web (WWW) as the fundamental platform, its essential characteristics, tools and languages. Electronic business and recent developments in information services, including new work strategies, structural organizations and creative ways to reach customers. Challenges facing individuals, organizations and society due to the development of the superhighway for information. Prerequisite: BADM 5060.

3 credits

BADM 6060 BANKING ADMINISTRATION

Analysis of the principles and managerial processes required for the administration of commercial banks.

3 credits

BADM 6070 HUMAN RESOURCE ADMINISTRATION

Analysis of the philosophy, techniques and policies in the administration of human resources. Application of behavioral sciences to personnel problems.

3 credits

BADM 6080 SALARY ADMINISTRATION

Economic aspects in wage determination. Emphasis of job evaluation, incentive systems and the classification of activities related to the remuneration of employees for work performed.

3 credits

BADM 6090 SUPERVISION AND LEADERSHIP

Behavioral science research related to the functions and duties of management personnel with emphasis on line supervision. Role playing in supervisory problems.

3 credits

BADM 6100 INTRODUCTION TO INDUSTRIAL MANAGEMENT

Principles related to the effective use of the factors of production in manufacturing and non-manufacturing activities. Study of production organization and methods, facilities and the design of control systems of production operations.

3 credits

BADM 6110 WORK MEASUREMENT AND METHODS OF IMPROVEMENT

Job simplification and laborsaving, operation analysis, operation-time standards and their determination, performance rating and allowances, work measurement by statistical sampling and labor cost control.

3 credits

BADM 6120 ANALYSIS OF PRODUCTION SYSTEMS

Design and operation of manual, mechanized and automatic production lines: material movement, balancing stations, work-loads for flow production, physiological and psychological factors in task design, support activities and flexibility.

3 credits

BADM 6130 PRODUCTION PLANNING AND CONTROL

Inventory theories, production models and programming, quality and cost control, design of production information and control systems.

3 credits

BADM 6140 INDUSTRIAL PLANT MANAGEMENT

Case studies in industrial plant management and policy decisions related to the coordination of plant functioning and its organization.

3 credits

BADM 6150 PUBLIC FINANCE AND FISCAL POLICY

Use of public finance to analyze the decision making process in the public sector. Analysis of the economic effects of government activity; tax expenses and income. Discussion of current fiscal policy problems.

3 credits

BADM 6160 MARKETING RESEARCH

Application of research methods to marketing problems. Emphasis on the decision, sampling and information analysis theory for the solution of problems. Prerequisite: BADM 5090.

3 credits

BADM 6170 ADVANCED METHODS IN PRODUCTION PLANNING AND CONTROL

Application of operations research to production planning and control: linear programming, queuing theory, probability models; PERT, simulation and use of computers.

3 credits

BADM 6180 ADVANCED COST ACCOUNTING

Financial information analysis, planning, budget and other related aspects as instruments for managerial and production decision making. Emphasis on cost allocation, its distribution and breakeven analysis.

3 credits

BADM 6190 MANAGERIAL FINANCE II

Analysis of the company's financial administration. Emphasis on valuation concepts and approaches, factors and variables on decision making of investment in assets and capital structure and dividend policy. Study of portfolio investment theory and valuation of capital asset models. Prerequisite: BADM 5190.

3 credits

BADM 6200 INTERNATIONAL BUSINESS FINANCE

Study of the structure and functioning of foreign currency markets and of the factors that determine the exchange rates of currencies. Analysis of investment decision-making and the financing of companies and institutions from a global perspective.

3 credits

BADM 6210 FINANCIAL ADMINISTRATION OF RETIREMENT PLANS

Study of the characteristics and operations of defined benefits and tax plans. The processes of investment and financial administration are analyzed in detail from the point of view of duty and of the fiduciary process provided by the *Employee Retirement Income Security Act* (ERISA) and applicable norms.

3 credits

BADM 6220 MONETARY THEORY AND POLICY

Analysis of the economic interrelations between the monetary supply and demand and the influence of these on the general level of economic activity. Study of the formulation and implementation of today's monetary policies.

3 credits

BADM 6230 INVESTMENTS

Analysis of the factors and variables on decision making of financial instrument investment. Emphasis on the understanding of techniques and models of capital assets valuation, individually as well as in the context of instruments portfolios and of valuation relative to the market. Study of the different types of patrimony, debt and derivative financial instruments, as well as, of their respective markets. Prerequisite: BADM 5190.

3 credits

BADM 6240 FINANCIAL MARKETS

Study of the processes of change and innovations, instruments of value of public and private institutions in financial markets and the regulations to which they are subject. Emphasis on understanding the behavior of interest rates in the market, monetary policy and the financial administration of financial intermediaries.

3 credits

BADM 6250 TELECOMMUNICATIONS AND NETWORKS

Technologies, architectures, protocols and characteristics of network performance. Strategies, tools and techniques for planning, implementation, management, maintenance and security of networks. Recent developments and applications in the field of telecommunications and computerized networks. Prerequisite: BADM 5060.

3 credits

BADM 6260 ADVANCED PROGRAMMING

Advanced concepts in computer programming. Use, handling and practical application of a selected programming language and its impact within businesses and organizations. Prerequisites: BADM 5060, 6030, 6040.

3 credits

BADM 6270 DECISION SUPPORT AND EXPERT SYSTEMS

Techniques and modalities for the design and implementation of Decision Support Systems, Expert Systems, Group Support Systems, Executive Information Systems, Artificial Neural Networks and Diffuse Logic. Combination of these systems and their application in enterprises. Prerequisite: BADM 5060.

3 credits

BADM 6280 MANAGEMENT OF INFORMATION TECHNOLOGY

Information as a corporate resource. Relations between information, information technology, business strategies, and organizational design. Impact of the innovations in information technology and in organizations. Prerequisite: BADM 6040.

3 credits

BADM 6290 LOGISTICS OF TRANSPORTATION SYSTEMS

Fundamentals of terrestrial, aerial and marine systems of transportation management. Analysis of the economy, intermodal strategies, documentation, regulations and operation of transportation systems. Study of distribution systems of the supply chain, transportation of dangerous materials, safety and the operation of airports and seaports.

3 credits

BADM 6295 INTERNATIONAL OPERATIONS

Aspects of operations management in a global environment. Analysis of the production systems, chain of international supplies and strategies of operation competitiveness at the global level. Emphasis on global communication systems, resource allocation, capital investment and facility planning in a multinational environment.

3 credits

BADM 6300 ADVANCED AUDITING

Evaluation and application of the Generally Accepted Auditing Standards (GAAS). Analysis of trends in the practice of the profession. Study of the auditing process and other related services. Analysis of the external auditor's role in agreement with the norms and laws that regulate the practice of the profession.

3 credits

BADM 6310 CONTEMPORARY ASPECTS OF ACCOUNTING

Evaluation and application of the Generally Accepted Accounting Principles. Analysis of the declarations emitted by the Financial Accounting Standards Board (FASB).

3 credits

BADM 6320 ADVANCED FEDERAL TAXES

Study of the Federal Tax Law, based on the analysis and handling of cases, research, alternatives to file returns and readings on current tax practices.

3 credits

BADM 6330 ADVANCED PUERTO RICAN TAXES

Study of the Puerto Rican Tax Law, based on the analysis and handling of cases, research, alternatives to file returns and readings on current tax practices.

3 credits

BADM 6340 LEADERSHIP AND MOTIVATION

Analysis of the various styles of authority and leadership and their effectiveness on the different levels of the organization. Evaluation of the theories of personal motivation, their effectiveness and practicability.

3 credits

BADM 6350 STRATEGIC MARKETING

Introduction to problems in the decision-making process at managerial levels within the different marketing strategies that develop during the planning period.

3 credits

BADM 6360 MARKETING COMMUNICATION

Application of principles and concepts of communication in the managerial process. Analysis and solution of promotional problems arising in any organization. Emphasis on the five variables of the promotional program, their application and the implementation of marketing strategies. Prerequisite: BADM 5090.

3 credits

BADM 6370 SALES FORECASTING AND ANALYSIS

Study of the economic and socio-psychological determinants of the demand for goods and service as a forecast of general business conditions, the demand for the product of an industry and the sales of a particular company. Use of the sales forecast in business planning and decision-making.

3 credits

BADM 6380 CONSUMER BEHAVIOR

Evaluation of the personal and social factors that influence decision making in obtaining, consuming and purchase of products and services. Study of economic concepts and social sciences that help understand and forecast the behavior of the different types of consumers in the market. Prerequisite: BADM 5090.

3 credits

BADM 6390 GLOBAL MARKETING

Analysis of the world-wide markets of comparative systems and the process of marketing across political boundaries. Both macro and micro approaches are used in dealing with the interaction between international marketing and the cultural, geographic, economic and political features of major world regions. Emphasis on Latin America.

3 credits

BADM 6410 LABOR RELATIONS AND EXTERNAL ENVIRONMENT

Review of labor relations between management and labor organizations as well as the external environment that influences them. Analysis of the social, economic, political and technological factors that have affected the development of the labor movements and collective bargaining. The impact of relations on the general public and the news media is considered.

3 credits

BADM 6415 INTERNATIONAL ADMINISTRATION OF SALARIES, BENEFITS AND SERVICES

Demonstration of the components and strategies of an effective model of total compensation in organizations immersed in the contemporary globalized economy, from the macroeconomic and microeconomic perspectives. Discussion of the legal and taxing aspects that impact remuneration in multinational companies and special programs of incentives, benefits and services to personnel sent from their country on international assignments.

3 credits

BADM 6420 ORGANIZATIONAL PLANNING

Major administrative functions such as planning, direction, coordination and control. Study of objectives and techniques of planning and prediction. Evaluation of the effectiveness of different administration styles. The methods and intended purposes of control and coordination and their relationship with planning, directing, coordinating and controlling.

3 credits

BADM 6430 ADMINISTRATION OF INTELLECTUAL CAPITAL

Analysis of the essential components of intellectual capital and of management in the administration of companies. Estimate of the existing intellectual capital in the organization and in the market. Prerequisite: BADM 5470.

3 credits

BADM 6440 ADVANCED PERSONNEL ADMINISTRATION

Study of the objectives, functions and procedures of personnel administration by examining contemporary theories. The needs of personnel administration of large and complex organizations of both the private and public sector are examined. Use of a comprehensive personnel program as an example of the broad administration of the organization.

3 credits

BADM 6450 DECISION-MAKING

Economic and financial business problems and the techniques used in the decision-making process for their solution. Emphasis on the practical aspects of decision-making problems pertaining to the use of organizational resources. Discussion of business objectives, demand concepts, market structure, costs, capital flow as well as the different economic decision-making techniques.

3 credits

BADM 6460 RISK AND INSURANCE

Fundamental principles and practices in the management of insurance. Emphasis on terminology, expedition and contents of contracts. Study of the methods used to deal with economic risks.

3 credits

BADM 6470 STRATEGIES OF KNOWLEDGE MANAGEMENT

Evaluation of advanced topics and the research related to the knowledge management. Application of the practical knowledge on general management and the tactics to design, integrate and apply strategies based on the use of knowledge. Prerequisite: BADM 6430.

3 credits

BADM 6480 INTERNATIONAL PRICING

Analysis of the factors that determine the design of pricing strategies for international markets. Design of the pricing strategies, considering the characteristics of the markets, the competitive scenario and the type of product from a managerial perspective.

3 credits

BADM 6500 INTEGRATION SEMINAR ON ENTERPRENURIAL STRATEGIES

Analysis of the factors to be considered in the formulation and selection of strategies and policies for the development and operations of companies in local and international competitive markets. Prerequisite: Have completed all core courses. Grade P/NP.

3 credits

BADM 6510 INTERNATIONAL LABOR ECONOMICS

Analysis of the problems related to the labor market and labor relations in the new order of the globalized economy. Definition of microeconomic aspects and relationships on an individual and enterprise scale, macroeconomic matters as policies for employment and social welfare. Use of research of specific markets, demographic and migratory changes of the work force in an international environment, problems of cultural diversity and participation of minority groups in the labor market, labor supply and demands, unemployment and inflation. Discussion of governmental strategies of labor promotion and investment in human capital, industrial policies and protection against competition, salary scales, collective bargaining and trends in social security plans.

3 credits

BADM 6550 SEMINAR ON CURRENT MARKETING TOPICS

Analysis of general and specific current topics related to the marketing field. Study of managing situations and tendencies faced by marketing management, which impact short, medium, and long term strategies. Prerequisite: BADM 5090.

3 credits

BADM 6555 INTRODUCTION TO RESEARCH IN SOCIAL SCIENCES

Study of the research methods in the fields related to social sciences. Application of the techniques to undertake any type of research work, report or project related to the field of social sciences.

3 credits

BADM 6559 ANALYSIS OF REGRESSION APPLIED TO SOCIAL SCIENCES

Application of evaluation techniques of models applied to the different fields of economics. Study of statistical inference to carry out contrasts of hypotheses and selection of models. Description of the techniques needed to include explanatory factors in the models.

3 credits

BADM 6577 INTRODUCTION TO ECONOMETRY

Use of the necessary statistical and mathematical techniques for the analysis of regression applied to econometric models. Study of descriptive statistics and of statistical inference, of matrix algebra, the vectorial spaces, the quadratic forms and the techniques of optimization most common in economic applications.

3 credits

BADM 6580 GLOBALIZATION: INTERNATIONAL COMMERCE, CAPITAL FLOW, NEW GOVERNANCE AND FAIRNESS

Interpretation of the intensification process of international economic relations in the commercial, financial, production, technological and institutional levels that have been carried out in the last decades under the name of globalization. Study of the formulation of strategies of development and the measurement of fairness.

3 credits

BADM 6590 DIMENSIONS OF GLOBALIZATION AND INCIDENCES IN ECONOMIC, POLITICAL AND SOCIO LABOR RELATIONS

Analysis of the main trends in the distribution of production and employment among the great world-wide economic regions. Study of the basic differences in the job markets, migratory movements, the policies of employment as well as the role of education in the formation of the human and social capital at the global level.

3 credits

BADM 6600 POLICY OF INNOVATION IN GLOBALIZATION

Study of the meaning of technological activities at the international level. Analysis of the characteristics and importance of technological knowhow in the context of the development policies of the nations.

3 credits

BADM 6610 CULTURE, IDENTITY AND POLICY IN THE CONTEXT OF GLOBALIZATION

Analysis of the elements linked with globalization, identity and culture. Identification of the anthropological structures that make interaction possible among the different cultures.

3 credits

BADM 6700 GLOBAL BUSINESS

Analysis of global business and investments with emphasis on the Caribbean and Latin American regions. Comparative management approaches and business behavior in these areas. Prerequisite: BADM 5090.

3 credits

BADM 6780 THE MANAGER IN AN INTERNATIONAL ECONOMY

Principles and practices of behavior in businesses that extend beyond national boundaries. Discussion of important international agreements, considering the multiple roles that a manager can play at the international level.

3 credits

BADM 6820 MULTINATIONAL ENTERPRISES

Review of the interaction of forces that promote the formation and expansion of the multinational enterprise. Analysis of the relations between the private and public sector. Historical origin of these enterprises, the legal frame within which they operate and financial resources. Discussion of specific aspects of operation such as production methods, marketing, personnel administration, research and development.

3 credits

BADM 6910 PRACTICE IN HUMAN RESOURCES

Supervised practice in the tasks appropriate for human resource supervisors. Practice will be under the supervision of a faculty member and will consist of a minimum of 120 hours of practice. Includes periodic meetings and visits to a practice center with a faculty member. Prerequisites: Have passed three courses of the specialization and have the authorization of the Department Director.

3 credits

BADM 6945 SMALL BUSINESS INSTITUTE INTEGRATION SEMINAR

Designed to give the graduate student the opportunity to provide consulting services to clients of the Small Business Administration. Class work, field research, business analysis and report writing with recommendations and conclusions are integrated into the course.

3 credits

BADM 6957 INTEGRATION SEMINAR IN INFORMATION SYSTEMS

Research on topics related to the latest advances and developments in information systems, and on general information technology to integrate knowledge in this field and in related areas. Analysis of the impact of such advances in the management of information resources and the ethical implications within the organization. Prerequisite: Have completed all specialization courses. Grade P/NP.

3 credits

BADM 697A INTEGRATION SEMINAR IN ACCOUNTING

Application of the knowledge acquired in the different specialization courses. Includes aspects related to financial accounting, cost accounting, auditing and other related topics. Prerequisite: Have completed all specialization courses. Grade: P/NP.

3 credits

BADM 697B INTEGRATING SEMINAR IN FINANCE

Analysis of the financial decision making in the contemporary company. The financial decisions will be examined from an integrating perspective of the variables that affect them and that are included in the specialization courses: corporate finance, international finance, financial markets, public finances and fiscal policy, monetary theory and policy. Prerequisite: Have completed all specialization courses. Grade: P/NP.

3 credits

BADM 697C INTEGRATING SEMINAR IN HUMAN RESOURCES

Academic experience directed to students' mastery of the knowledge inherent to their specialization and their capacity to integrate it and to apply it to the solution of complex problems. Prerequisite: Have completed all specialization courses. Grade: P/NP.

3 credits

BADM 697D INTEGRATING SEMINAR IN INDUSTRIAL MANAGEMENT

Integrating Seminar in which cases are analyzed by applying the knowledge and skills acquired in the specialization. Includes analysis of operations, prognoses, costs and production, quality control, design, products and services, location of facilities, suppliers, planning, materials management, supplier chains and project management. Prerequisite: Have completed all specialization courses. Grade: P/NP.

3 credits

BADM 697E INTEGRATION SEMINAR IN MARKETING

Research on the decision making problems pertinent to the different marketing strategies. Application of marketing principles and concepts. Analysis of cases and situations of world-wide markets commercial conditions and marketing in different countries. Includes, in addition, the experimental design of surveys, experimental research, sampling, and analysis for the solution of marketing problems. Prerequisite: Have completed all specialization courses. Grade: P/NP.

3 credits

BADM 697F INTEGRATION SEMINAR FOR BUSINESS MANAGERS

Analysis of case studies related to significant managerial challenges that an executive manager faces and the practical solutions to these.

3 credits

BADM 697I SEMINAR IN BUSINESS SOCIAL RESPONSIBILITY

Analysis of the theory and practices necessary to achieve a socially responsible company or organization. Providing company managers and professionals with knowledge of the existing methodologies to analyze, practice and inform employees on the company's social responsibility.

3 credits

BADM 7000 ORGANIZATIONAL THEORY AND DESIGN

Review of the theories and practices related to the formal design of organizations. Analysis of the organizational problems of changes and development.

3 credits

BADM 7001 PROFESSIONAL SEMINAR

Review of the business administration field from a scientific perspective. Analysis of the ethical and legal aspects regarding the development of research related to the discipline. Guidance on the academic and administrative processes related to the Doctoral Program in Entrepreneurial and Managerial Development. Will be taken during the first semester of studies. Grade: P/NP.

1 credit

BADM 7010 ENTERPRISE DEVELOPMENT

Evaluation of the opportunities and risks that small and medium size organizations face in the international and global world. Review of the public policy that affects enterprise development in Puerto Rico, the Caribbean and Latin America. Emphasis on the ethical, social and cultural aspects of enterprise development for small and medium size companies. Includes the development of a plan for the establishment of a company.

3 credits

BADM 7020 RESEARCH METHODS

Evaluation of the different theories, research methods, principles and instruments that give direction to scientific research applied to business administration.

3 credits

BADM 7070 ORGANIZATIONAL BEHAVIOR

Analysis of individual and group behavior in organizations, procedures for providing and strengthening emerging behavior. Review of the organizational interaction with the environment. Research of selected topics in organizational conduct. Includes a practical study of individual and/or group behavior in the organization.

3 credits

BADM 7150 PUBLIC POLICY AND CORPORATIVE DECISIONS

Analysis of the philosophical and economic foundations of the enterprise activity and the enterprise function in the growth of capitalism. Analysis of the effects of public policies on the economic results of the financial and enterprise activity in the capitalist economic system.

3 credits

BADM 7201 QUANTITATIVE METHODS I

Formulation and solution of managerial and economic problems using quantitative and statistical methods. Application of matrix algebra, differential calculus, linear programming and differential equations in the economic analysis.

3 credits

BADM 7202 QUANTITATIVE METHODS II

Application of statistical methods to summarize and analyze economic and commercial data in the decision-making process. Review of descriptive and inferential statistics, probability theory, variables distribution, decision making under risk and uncertain conditions, sampling, estimation and hypothesis tests. Development of intuitive reasoning by the use of statistical programs. Consideration of ethical aspects when using these methods. Prerequisite: BADM 7201.

3 credits

BADM 7220 THEORY OF MICRO ECONOMY

Theoretical and empirical analysis of consumer behavior, the firm and industry within the framework of a free commerce economy. Study of the production theory, production costs, and different market structures. Includes development of empirical tests derived from theories discussed.

3 credits

BADM 7223 THEORY OF MACRO ECONOMY

Review of the macroeconomic theory and policy in open economies and the adjustment problems according to different approaches. Comparison of the macroeconomic policy in open economies under flexible and fixed exchange rates.

3 credits

BADM 7225 MANAGERIAL ECONOMETRICS

Analysis and construction of econometric models of micro and macroeconomics using transversal data and historic series. Analysis of stationary and non-stationary historical series, using different econometric models and computer programs.

3 credits

BADM 797_ SPECIAL TOPICS SEMINAR

Development of special topics in the area of business administration, according to the student's interest and under the supervision of a faculty member. Comparison of discipline studies and their application in business strategies in different scenarios.

3 credits

BADM 797A SPECIAL TOPICS SEMINAR IN ENTREPRENEURIAL AND MANAGERIAL DEVELOPMENT

Development of special topics in the area of entrepreneurial and managerial development, according to the student's interests and under the supervision of a faculty member. Comparison of discipline studies and their application in business strategies in different scenarios.

3 credits

BADM 797B SPECIAL TOPICS SEMINAR ON MANAGEMENT INFORMATION SYSTEMS

Development of special topics in the management information systems area, according to the student's interest and under the supervision of a faculty member. Comparison of discipline studies and their application in business strategies in different scenarios.

3 credits

BADM 797C SPECIAL TOPICS SEMINAR IN ACCOUNTING

Development of special topics in the accounting area, according to the student's interest and under the supervision of a faculty member. Comparison of discipline studies and their application in business strategies in different scenarios.

3 credits

BADM 797D SPECIAL TOPICS SEMINAR IN MARKETING

Development of special topics in the marketing area, according to the student's interest and under the supervision of a faculty member. Comparison of discipline studies and their application in business strategies in different scenarios.

3 credits

BADM 797E SPECIAL TOPICS SEMINAR ON FINANCE

Development of special topics in the area of finance, according to the student's interest and under the supervision of a faculty member. Comparison of discipline studies and their application in business strategies in different scenarios.

3 credits

BADM 8950 RESEARCH SEMINAR

Application of the different theories, research methods, principles and instruments in the preparation of research proposals. Critical analysis of ethical, legal and financing aspects of research projects. Development of style, forms and content of the proposal and dissertation. Prerequisite: BADM 7020.

3 credits

BADM 8991 DOCTORAL DISSERTATION I

Development of the doctoral dissertation proposal. Defense of the first three chapters before the dissertation committee. The student must submit the proposal approved by the committee to the Institutional Review Board and have its approval, as is applicable. Prerequisite: To have passed the comprehensive examination and course BADM 8950. Grade: P/NP, DP.

3 credits

BADM 8992 DOCTORAL DISSERTATION II

Writing of the dissertation. Defense of the doctoral dissertation in the specialization area of the student under the supervision of a doctoral dissertation committee. Prerequisite: BADM 8991. Grade: P/NP, DP.

3 credits

Courses in Business Education (BUED)

BUED 5000 ADMINISTRATION OF VOCATIONAL AND TECHNICAL PROGRAMS

Analysis of theories and principles governing the administration of vocational and technical programs. Emphasis on the participation of the administrator in the development and supervision of curriculum, budget preparation and personnel training. History of these programs and applicable federal and state laws.

3 credits

BUED 5010 METHODOLOGY IN THE TEACHING OF INFORMATION PROCESSING COURSES

Analysis of the instructional procedures, principles and techniques in developing skills for the selection and preparation of instructional material; measurement of achievement, and evaluation of student performance. Examination of the problems in developing high level skills in information processing.

3 credits

BUED 5015 TEACHING STRATEGIES FOR ENTERPRISE DEVELOPMENT, BUSINESS ADMINISTRATION AND MARKETING

Application of administrative theories, entrepreneurial principles, the process of formation or acquisition of companies, and the techniques and procedures in the managerial process. Application of marketing concepts and principles. Analysis and evaluation of teaching strategies applicable to the area of enterprise development, business administration and marketing at the different levels.

3 credits

BUED 5020 METHODS OF TEACHING ACCOUNTING

Analysis of the principles, techniques and resources governing the teaching of accounting. Development of instructional objectives, competencies, methods, activities and evaluation techniques. Integration of the computer in teaching accounting.

3 credits

BUED 5030 METHODOLOGY IN THE TEACHING OF SHORTHAND, TRANSCRIPTION OR ANOTHER SYSTEM OF ABBREVIATED WRITING

Study of instructional procedures, principles and techniques in developing skills, selection and preparation of teaching material, measurement of achievement and evaluation of student performance. Examination of the problems in abbreviated writing systems. Integration of the elements in the development of transcription skills.

3 credits

BUED 5035 COMPUTERS IN THE TEACHING OF BUSINESS EDUCATION

Analysis of principles, techniques and resources used in the evaluation of computers as instructional tools. Computer programs useful in teaching business education courses. Programs with educational applications, such as: calculus electronic sheet, database, word processing, advertising art, and tutorials.

3 credits

BUED 5040 CURRICULAR INNOVATIONS IN TEACHING

Analysis of the trends related to the principles, techniques and resources for teaching different disciplines in the area of business education. Evaluation of current topics and their implications for the development of pedagogical initiatives.

3 credits

BUED 5050 FUNDAMENTALS OF ONLINE LEARNING

Study through the discussion of the principles and theories on which online learning is based. Analysis of diverse scenarios and effective teaching techniques for the implementation of virtual offerings. Use of synchronous and asynchronous technological tools to achieve learning in virtual environments.

3 credits

BUED 5060 PREPARATION OF MATERIALS FOR ONLINE LEARNING

Application of design techniques and preparation of educational material directed towards learning through the Web. Elaboration of instruction modules and didactic material to be distributed through a Website or a management system of on-line courses. Requires additional time in an open laboratory.

3 credits

BUED 5070 INTERFACE DESIGN FOR INSTRUCTIONAL RESOURCES THROUGH THE WEB

Interface design for instructional resources through the Web. Principles of accessibility and on the design focused on the user; standards and guides of style and typography; formats and basic handling of images, sound and video. Requires additional time in an open laboratory.

3 credits

BUED 6000 ADMINISTRATION AND SUPERVISION OF BUSINESS EDUCATION

Introduction to the basic principles of administration and supervision; tendencies, strategies, history, laws, and purposes of business education.

3 credits

BUED 6010 CURRICULUM DESIGN IN BUSINESS EDUCATION

Development, utilization and evaluation of the business education curriculum; effective curricular practices; basic guides for the development and evaluation of a business education curriculum. Identification of content, program organization, preparation of instructional objectives, guides for the selection and development of instructional materials.

3 credits

BUED 6020 BUSINESS EDUCATION ASSESSMENT, MEASUREMENT AND EVALUATION

Analysis of the evaluation and assessment process in teaching Business Education courses with emphasis on skills courses. Emphasis on the construction, administration and interpretation of tests and the existing evaluation systems and electronic manuals in the area.

3 credits

BUED 6050 STRATEGIES FOR OFFICE PERSONNEL TRAINING

Application of the educational theories of learning to the training of office systems personnel. Analysis of the instructional designs, technology, implementation and evaluation of trainings in an office environment. Analysis of laws that apply to the training of personnel. Writing of proposals for training office personnel.

3 credits

BUED 6910 INTERNSHIP IN TEACHING BUSINESS EDUCATION AT THE SECONDARY AND/OR POST SECONDARY LEVEL

Supervised teaching of business courses at the secondary or post secondary level, coordinated by seminars. Students will be exposed to experiences within the classroom, under the direct supervision of a cooperating teacher with certification in the field. The internship will be conducted in public schools or in the approved scenarios that have business education programs.

3 credits

BUED 6911 SUPERVISED PRACTICUM IN COMMERCIAL EDUCATION

Supervised practicum in the tasks of an administrator of a vocational or technical school with a Business Education Department, under a supervision of a faculty member. A minimum of eight hours of practicum per week during the semester for a minimum of 120 hours is required. Includes meetings and seminars with the practicum coordinator.

3 credits

BUED 6970 INTEGRATING SEMINAR

Integration of the knowledge and skills acquired in the courses that compose the Masters in Business Education. Emphasis on case analyses and the research of current topics related to this field of study.

3 credits

BUED 7020 HISTORICAL, SOCIAL AND ETHICAL ASPECTS IN BUSINESS EDUCATION

Review of the development of business education and its impact on society. Discussion of the elements related to the shifts of institutional paradigms; personal, organizational and social responsibilities. Analysis of the ethical principles related to the use of technology in the educational environment.

3 credits

BUED 7030 CONTEMPORARY APPROACHES AND TEACHING STRATEGIES IN BUSINESS EDUCATION

Evaluation of contemporary teaching approaches and strategies applicable to Business Education. Critical review of instructional strategies for offering courses in traditional and nontraditional learning environments.

3 credits

BUED 7050 BUSINESS EDUCATION AT THE POST-SECONDARY AND UNIVERSITY LEVELS

Evaluation of faculty and administrative practices and responsibilities in post-secondary and university level institutions in which Business Education programs are offered. Review of research related to the effectiveness of these programs.

3 credits

BUED 797_ SPECIAL TOPICS IN BUSINESS EDUCATION

Research of special topics in the area of the Business Education, in accord with student interests and under the supervision of a member of the faculty.

3 credits

BUED 8500 BUSINESS EDUCATION IN THE GLOBAL CONTEXT

Evaluation of the trends in Business Education programs at the local, state and international levels. Review of the different geographic and cultural contexts in which these programs are developed.

3 credits

BUED 8520 EVALUATION AND SELECTION OF EMERGENT TECHNOLOGY IN BUSINESS EDUCATION

Evaluation of the emergent technology for business and vocational programs. Analysis of strategies for the effective selection of equipment and software for the development of academic programs.

3 credits

BUED 8525 ASSESSMENT AND EVALUATION OF BUSINESS EDUCATION PROGRAMS

Design of assessment and evaluation strategies for the development of Business Education programs. Analysis of research related to assessment processes. Requires the preparation of an assessment project for an educational scenario.

3 credits

BUED 8615 DESIGN AND ADMINISTRATION OF BUSINESS EDUCATION PROGRAMS

Evaluation of theories, principles, techniques and practices for the design and administration of academic programs based on competencies. Study and evaluation of the norms and regulations that govern these programs in public and private scenarios.

3 credits

BUED 8620 INSTRUCTIONAL DESIGN FOR ONLINE BUSINESS COURSES

Application of theories and techniques of instructional design for online skills courses. Preparation of an instructional module using a platform for course development.

3 credits

Courses in Chemistry (CHEM)

CHEM 5000 CHEMISTRY FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the fundamental concepts of chemistry that make up the curriculum of the natural sciences at the elementary level. Emphasis on the relevance of chemistry topics and their application to experimental measures, stoichiometry, the acid-bases balance, the gaseous state, the atomic theory, molecular geometry and thermochemistry. Analysis and interpretation of the results of basic experiments carried out in the laboratory. Requires 30 hours of lecture and 30 hours of closed lab.

3 credits

CHEM 5013 THEORIES AND MECHANISMS IN ORGANIC CHEMISTRY

Advanced study of organic chemistry with emphasis on physical-organic chemistry, the theory of molecular orbitals, stereochemistry, reaction mechanism, synthesis and path synthesis strategies. Prerequisites: EDUC 5009.

3 credits

CHEM 6904 ADVANCED INORGANIC CHEMISTRY

Advanced study in the chemistry of transition elements with emphasis on coordination complexes, and on organometallic and inorganic compounds. Discussions will include molecular symmetry, electronic mechanisms of spectrums, theories of acids and bases, kinetic reactions and oxidation and reduction reactions. Study of group symmetry and theorems of the group theory with application to chemical structure, the type of connection and spectroscopy. Basic knowledge of linear algebra is needed. This course aims to prepare students to carry out research tasks in organic chemistry. As a complement to the educational component, students will develop a curricular segment where they will demonstrate mastery of the educational theory and a clear understanding of the fundamental chemical principles. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Chemistry.

3 credits

CHEM 6905 INSTRUMENTAL METHODS FOR CHEMICAL ANALYSIS

Advanced and detailed consideration of the theory and practice of different methods of chemical analysis that use instrumentation in solving problems of chemical composition. The principles of different spectroscopic, electrochemical and chromatographic methods and their applications will be discussed. Applications of chemical analysis in areas such as molecular biology, science of materials, environmental science, earth science, pharmaceutical chemistry, and nutrition and public health will be discussed. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Chemistry.

3 credits

CHEM 6906 ORGANIC REACTION MECHANISMS

Detailed and intense revision of organic chemical reactions with emphasis on modern synthetic methods and their applications in the synthesis of complex organic compounds. Topics on stereochemistry, molecular structure, reaction mechanisms of organic molecules, and select reactions will be studied. Also considered will be reactions of enolates, reactions of condensation of carbonyl groups, interconversions of functional groups, reactions of electrophilic addition, reductions, organometallic reagents, arranged reactions, oxidations, synthesis strategies including retrosynthesis analysis in the context of multiple steps syntheses taken from recent specialized literature. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Chemistry.

3 credits

Courses in Computer Science (COMP)

COMP 5100 DESIGN OF ALGORITHMS

Analysis and design of algorithms and advanced data structures. Emphasis on the mathematical model of problem complexity. Development of methodologies, problems and the correct data structures for their solution. Requires an open lab.

3 credits

COMP 5110 AUTOMATA THEORY AND FORMAL LANGUAGES

Design of different types of automata. Visualization of the different concepts involved in automata theory. Use of the approach called learning from examples. Discussion of some aspects related to robots and formal languages. Study of the relations between formal languages and automata, as well as some of the forms of language specifications and their computer properties. Requires an open lab.

3 credits

COMP 5120 ARTIFICIAL INTELLIGENCE

Application of knowledge representation and use of algorithms for the solution of problems related to artificial intelligence. Analysis of the problems and solution techniques of artificial intelligence. Simulation of the processes of knowledge representation, search, control and learning in automatic systems. Introduction to the use of a language specialized for artificial intelligence. Requires 30 hours of lecture and 15 hours of virtual lab.

3 credits

COMP 5325 PROGRAMMING LANGUAGES

Discussion of the central concepts of programming languages and how they are manipulated into languages that follow certain paradigms. Analysis of languages in light of their semantic models. Application of structural, denotational, and axiomatic operational semantics. Detailed study of the nucleus of the Standard ML language. Includes the development of programs in that language and in some other current language. Requires 30 hours of lecture and 15 hours of virtual lab. Prerequisite: COMP 5110.

3 credits

COMP 5510 SOFTWARE DEVELOPMENT AND DESIGN

Analysis of the methodology that includes the development and design of systems to facilitate decision making. Emphasis on the development of prototypes to guide design activity. Discussion of the set of methods, techniques and tools of a software product. Prerequisite: COMP 5110.

3 credits

COMP 5525 SEMINAR I

Discussion and analysis of practices, current problems and trends in computation and related disciplines. This is a connect activity among professors, students and representatives of the industrial sector that provides students and the professor the elements to discern forms of application of the studied theory to the national reality. Prerequisite: COMP 5120.

3 credits

COMP 6010 OPERATIONS RESEARCH

Comparison of third and fourth generation languages. Learning and practice in a high-level language of visual programming. Development of a research plan under the supervision of a professor. Includes the operations, design and construction of logic models of programming for their implementation. Prerequisite: COMP 5525.

3 credits

COMP 6200 MULTIMEDIA AND HYPERMEDIA

Analysis of the fundamental concepts of multimedia and hypermedia, and their theoretical and practical aspects. Emphasis on the development of applications using Toolbook. Requires 30 hours of lecture and 15 hours of closed lab. Prerequisite: COMP 5525.

3 credits

COMP 6250 COMMUNICATION PROTOCOLS

Use of tools necessary for the design of data networks and use of the different communication protocols utilized by users. Requires an open lab. Prerequisite: COMP 5525.

3 credits

COMP 6300 NETWORKS I

Analysis of theoretical and methodological aspects typical of data transfer. Practice in installation, configuration and operation of a system local network administrator. Evaluation of the circumstances in which the local networks are viable solutions in data processing. Requires 30 hours of lecture and 15 hours of virtual lab. Prerequisite: COMP 5510.

3 credits

COMP 6315 OPERATING SYSTEMS

Analysis of the different operating systems and current trends in research and development. Evaluation and administration of the functions of an operating system. Requires an open lab. Prerequisite: COMP 5510.

3 credits

COMP 6400 NETWORKS II

Analysis of the problems of computer networks design and their implementation. Use of networks and data management. Implementation of networks. Emphasis on technologies similar to Internet. Requires 30 hours of lecture and 15 hours of virtual lab. Prerequisite: COMP 6300.

3 credits

COMP 6500 DATABASE WORKSHOP

Design, development and implementation of a relational data bank. Includes complex data models and advanced design tools. Requires 30 hours of lecture and 15 hours of virtual lab. Prerequisite: COMP 5325.

3 credits

COMP 6525 PROGRAMMING WORKSHOP

Practice in the skills and abilities acquired from the programming languages and the development and application of programs. Includes models of operations research and support systems in decision making. Requires 30 hours of lecture and 15 hours of virtual lab. Prerequisite: COMP 5325.

3 credits

COMP 6615 SEMINAR II: COMPUTATION AND SOCIETY

Study of the relation and the impact that computer technology has had and its products in diverse human activities and disciplines. Emphasis on the analysis of aspects related to ethics, the gender relations and current legislation, among others. Requires an open lab. Prerequisite: COMP 5525.

3 credits

COMP 6650 SYSTEMS ADMINISTRATION

Analysis of the function and processes of administration. Includes the technological resources related to Information systems. Development of a strategic plan that allows evolution, the administration and the evaluation of the Technology of Information in organizations. Requires an open lab. Prerequisite: COMP 6525.

3 credits

COMP 6970 INTEGRATED SEMINAR

Analysis and discussion of aspects related to information systems. Development of a research project under the supervision of a professor using the appropriate ethical criteria of the profession. Students will register in this course while they are working on the project. Grade P/NP. Prerequisite: Approval of the department director.

4 credits

Courses in Computer Science in Networks and Security (CSNS)

CSNS 5100 NETWORK ANALYSIS AND DESIGN

Analysis and design of computer networks. Use of different design methodologies of scalable networks. Emphasis on policies and costs when designing a computer network. Evaluation of the different types of network traffic and their importance when designing.

3 credits

CSNS 5110 PRINCIPLES OF RESEARCH

Application of the scientific method in problem solving. Emphasis on the use of the methodology and terminology of quantitative and qualitative research. Includes the preparation of a research proposal.

3 credits

CSNS 5121 ROUTING TECHNOLOGIES I

Application of the internal routing methods used in the connections between wide area networks. Emphasis on protocols, routing algorithms, and the identification methodology of three layer packages and their interaction with the other layers of the OSI model.

3 credits

CSNS 5131 NETWORK SWITCHING TECHNOLOGIES I

Review of network switching technologies protocols and standards. Includes the environmental configuration of local area networks and of virtual local networks. Analysis of plot structures. Emphasis on the transmission of point to point plots in a local area network and the administration of network switches at an operative system level.

3 credits

CSNS 5210 INTERNET PROTOCOL VERSION 6

Analysis of the architecture, operation, and development of the IP version 6 Protocol. Research on the uses of the IP version 6 protocol in traditional and non traditional network environments. Emphasis on the relation of the IP version 6 protocol with the network services in a client-server environment.

3 credits

CSNS 5222 ROUTING TECHNOLOGIES II

Application of exterior routing protocols and planning of scalable networks. Analysis of the routing protocol selection process between independent systems. Emphasis on the correct use of directions concerning local area networks and wide area networks. Prerequisite: CSNS 5121.

3 credits

CSNS 5232 NETWORK SWITCHING TECHNOLOGIES II

Application of protocols and standards in multi layer functional network switches. Emphasis on the configuration of the environment of the local area network and of the local virtual private area network in the diagnosis of operational failures of network switches, and on the application of audit and security techniques used in the management of network switch services. Prerequisite: CSNS 5131.

3 credits

CSNS 6100 FIREWALLS

Analysis of fundamental elements that make up a Firewall. Application of different design methodologies used in security network systems. Emphasis on the prevention plan for vulnerable situations to a security network system.

3 credits

CSNS 6110 SECURITY AND FORENSIC COMPUTING

Critical review of the vulnerability of information systems and the hacker profile. Analysis and control of risks. Includes the use of tools of open and commercial code to carry out simulated attacks and to protect information systems. Emphasis on the cryptography on forensic information, and on the characteristics of the specialist.

3 credits

CSNS 6120 REMOTE ACCESS NETWORK

Evaluation of network connection methods using remote access. Emphasis on dedicated, alternate, redundant and broadband methods of connection. Prerequisites: CSNS 5100, 5121.

3 credits

CSNS 6210 DESIGN, IMPLEMENTATION AND ASSESSMENT OF NETWORK SECURITY

Analysis of the elements of design and implementation of network security techniques and their tools. Assessment of security methodologies in networks. Design of safe remote access networks as well as small, medium and wireless networks. Evaluation of the failures in layers 2, 3, 4, and 7 of the Open Interconnection System (OSI) model. Use of assessment techniques to investigate the new trends in security, their application and design analysis. Prerequisites: CSNS 5222, 6110.

3 credits

CSNS 6220 INTRUSION DETECTION SYSTEMS

Evaluation of the operation of intrusion detection systems in local and wide area network systems. Emphasis on warning configuration through the use of traffic review policy techniques in networks. Prerequisites: CSNS 6100, 6110.

3 credits

CSNS 6310 NETWORK TROUBLESHOOTING TECHNIQUES

Evaluation of malfunctions in local and wide area networks. Emphasis on the techniques for identification of problems in the network by means of the use of OSI as a reference model. Analysis of common problems that can happen in a local or wide area network and the possible solutions to these problems.

3 credits

CSNS 6320 SATELLITE COMMUNICATIONS SYSTEMS

Review of the systems of satellite communications and their operation in data transmission. Emphasis on the Earth's orbits and the disruptions that affect the operation of a satellite system. Analysis of the components of a satellite system and their relation to computer networks systems.

3 credits

CSNS 6330 RESEARCH PROJECT

Identification of a research topic in the field of networks, telecommunications, or in network or information system security. Analysis of literature, selection of the methodology and the development of a research project. Application of research principles and methods. Creation and development of a research project to be evaluated and approved by the advisory professor of the project. The student will register in this course as many times as necessary until the research project is completed. Grade: P/NP. Prerequisites: CSNS 5110, 5221.

3 credits

Courses in Criminal Justice (CJUS)**CJUS 5010 LAW AND SOCIETY**

Analysis of the interaction of the legal system of Puerto Rico, the individuals and society. Includes the laws, procedural aspects and the deliberate or non-deliberate consequences of the creation and application of the law. Integration of the criminological theories that contribute to the understanding of the dialectic relation between laws, individuals, and society.

3 credits

CJUS 5023 ELEMENTS OF CRIMINAL LAW

Discussion of the principles, theories and problems common to criminal law and of its development through history. Includes the doctrines of criminal responsibility and the legal capacity to commit crimes. Review of the elements of

the crimes considering the infractions presented by the several fields of the penal legislation of Puerto Rico. Emphasis on the analysis and interpretation of legal cases.

3 credits

CJUS 5055 CRIMINOLOGY

Historical analysis of the scientific and interactive development of criminology and the creation of the formal and informal norms to take care of deviated and criminal behavior. Emphasis on the nature of the crime, the trends and the possible explanations of criminality from a biological, sociological, psychological and economic perspective. Review of social reactions to the social problem of criminality.

3 credits

CJUS 5060 METHODOLOGY OF SOCIAL-SCIENTIFIC RESEARCH

Analysis of the methodology of social-scientific research and its philosophical, theoretical and ethical aspects in the area of criminal justice. Application of the methodology studied in the design of the research proposal.

3 credits

CJUS 5070 SOCIAL-SCIENTIFIC RESEARCH APPLIED TO CRIMINAL JUSTICE

Application of the qualitative or quantitative designs of social-scientific research to a problem in the criminal justice area. Includes the integration of emerging technology in the field of research. Prerequisite: CJUS 5060.

3 credits

CJUS 5080 PUBLIC POLICY AND THE STATE AND FEDERAL JUSTICE SYSTEMS

Analysis of the governmental structuring at the federal and state level. Emphasis on the criminological foundations of federal and state public policy in Puerto Rico.

3 credits

CJUS 5237 JUVENILE JUSTICE

Analysis of the historical development of the social and legal aspects and of juvenile delinquency. Review of the theories, factors and conditions associated with this social problem, preventive strategies and modalities of treatment for minors who commit infractions. Emphasis on the procedural aspects.

3 credits

CJUS 5299 LAW AND CORRECTION

Analysis of the recent legal developments related to the correctional, institutional and community alternatives. Includes the rights that people under correctional supervision have.

3 credits

CJUS 5310 CRIMINAL PROCEDURE AND EVIDENCE LAW

Discussion of the principles of procedural and evidentiary law from the criminal or forensic investigator's perspective. Analysis of applicable jurisprudence.

3 credits

CJUS 5320 CONSTITUTIONAL AND ADMINISTRATIVE LAW

Discussion of the application of the constitutional rules established by the Constitution of the United States and the Constitution of the Commonwealth of Puerto Rico and their relation with the administrative procedure in governmental agencies. Includes the analysis of the laws applicable to citizens in the administrative procedure, as well as the applicable review of applicable jurisprudence and doctrines.

3 credits

CJUS 5340 CRIMINALISTICS AND THE LAW

Technical and legal aspects of scientific techniques and instruments in the trial of criminal cases. Emphasis on the evidential value and assistance of applicable scientific aids to prosecutor and defender. Among others, the following will be considered: firearm identification, examination of questioned documents, physical and chemical evidence, dactiloscopical identification and instrumental detection of fraud.

3 credits

CJUS 5410 WHITE COLLAR CRIME

Analysis of white collar crime: its origin, development, philosophy and its effects on the economy of Puerto Rico and the United States. Emphasis on the study of the topic from a sociological and practical theoretical perspective. Includes the discussion of state and federal laws to combat white collar crime and the functioning of investigative organisms.

3 credits

CJUS 5420 FORENSIC SCIENCE

Analysis of the scope of forensic sciences, criminology, and the evaluation of physical and biological evidence in violent crimes. Discussion of the most important scientific-forensic disciplines in criminal investigation. Includes the approbatory value of evidence and its impact on the state and federal governmental institutions of the criminal justice system.

3 credits

CJUS 5430 INTERVIEW AND INTERROGATION TECHNIQUES

Discussion of the importance of interrogation in all stages of the Criminal Justice System. Emphasis on the basic methods, skills, techniques and principles in penal litigation. Includes the processes used in the different stages of the procedure according to the Approbatory Law of the interrogation of witnesses in the penal process.

3 credits

CJUS 5510 ALTERNATE METHODS OF ADJUDICATION

Discussion of the theoretical and practical aspects of alternate methods of adjudication. Identification of the necessary regulations, procedures and skills applicable to each one, with emphasis on the mediation of conflicts.

3 credits

CJUS 5520 MANAGERIAL ASPECTS IN PUBLIC AND PRIVATE SECURITY

Analysis of the managerial aspects in the administration of public and private security, such as the organization and operation of security services. Emphasis on counseling in security that includes budget preparation, planning, recruitment and training, the preparation of reports, proposals and prevention strategies. Includes the analysis of the ethical and responsibility aspects in public and private security, as well as the benefits and limitations for the Criminal Justice System. Review of the jurisprudence and applicable laws.

3 credits

CJUS 5613 ADDICTION, CRIMINALITY AND REHABILITATION

Analysis of the factors and conditions that induce people to depend on psychoactive or illegal substances and criminal behavior. Evaluation of the effectiveness of the prevention, treatment and rehabilitation strategies of persons with deviated behavior.

3 credits

CJUS 5634 PSYCHOPATHOLOGY

Systematic study of those forms of behavior traditionally treated as pathological by the psychiatric model of human behavior and contrast of the medical and psychosocial viewpoints. Emphasis on the juridical viewpoint of deviant behavior, especially as it affects criminal responsibility and the criminal justice process.

3 credits

CJUS 5900 SPECIAL ASSIGNMENT

Participation in a supervised practice experience in an agency of the State or Federal Criminal Justice System or the completion of an investigation project in areas of criminal justice. The nature of the practice or the investigation will be determined by the Faculty of the Program that will supervise both activities.

3 credits

CJUS 5970 SPECIAL TOPICS

Review of selected areas of contemporary importance in aspects related to criminal justice in regard to new social, legislative and judicial considerations in preventive, investigative, procedural, adjudicative, dispositive, and correctional processes for adults and minors who come in conflict with the law.

3 credits

CJUS 6970 INTEGRATION SEMINAR

Integrating seminar of an interdisciplinary character with general and specific material proportional to the distribution of these parts in the totality of credits required for the degree. The course will be developed by means of a methodology of readings, lectures, group discussions, case studies and others to address the relevant topics.

3 credits

Courses in Economics (ECON)

ECON 5300 STATISTICAL AND ECONOMIC ANALYSIS OF LABOR MARKETS

Analysis of the factors affecting the development and trends of labor markets in a capitalist economy. These include work supply and demand, economic analysis of compensation, income distribution and public policies. Application of the concepts and methodology of basic statistic and sampling.

3 credits

ECON 6320 ADVANCED LABOR ECONOMICS

Advanced study of economic problems in the labor market, population and labor force; the economic impact of bargaining, automation and change; and the effects of wages and wage bargaining on employment, the business cycle and industrial growth.

3 credits

ECON 7200 LABOR ECONOMY

Critical examination of the production functions of business and the contractual relationship of employment in corporate and non-corporate markets. Analysis of the collective action efforts in the work environment: workers unions and employment contracts.

3 credits

ECON 8000 ECONOMY OF THE LABOR MARKET STRUCTURE

Critical analysis of the economic theory and empirical evidence related to work distribution, salary determination, employment and unemployment.

3 credits

ECON 8150 REGIONAL AND GLOBAL ECONOMIC DEVELOPMENT

Review of economic theories, models and policies for economic development. Analysis of the aspects related to economic development planning and models most frequently used. Development of strategic factors for regional and global growth. Comparison of interregional disparities between developed and developing nations, as well as the policies designed to alleviate the problems arising from this disparity.

3 credits

ECON 8312 THEORY OF CAPITAL AND ECONOMIC CYCLES

Economical analysis of the nature and value of money, as well as of the deposits of money. Evaluation of the process of credit expansion and its effects in the formation of capital, in the structure of production, and in the generation of economic cycles.

3 credits

Courses in Education (EDUC)

EDUC 5000 GEOGRAPHY FOR TEACHERS

Individual/environmental systems from the perspective of processes and spatial relationships. Physical systems and their interaction in terms of dimensions, scales, associations and patterns. Includes topics of physical geography taken from geomorphology, hydrology, climatology and education. Emphasis on the teaching of these topics.

3 credits

EDUC 5003 ECOLOGY FOR TEACHERS

Ecological factors, processes and mechanisms facilitating the movement of organisms and limiting colonization. Attention is given to the biology of islands and the natural phenomena related to the environment. Emphasis on the techniques and strategies for teaching these topics. Includes practical experience.

3 credits

EDUC 5009 CHEMISTRY FOR TEACHERS

Specialized topics of modern chemistry including structures, mechanisms and chemical reactions as well as their historical development and applications. Emphasis on the techniques and strategies of teaching chemistry. Prerequisite: CHEM 3132.

3 credits

EDUC 5011 PHYSICS I FOR TEACHERS

Advanced study of the basic topics of classical physics: mechanics, thermodynamics and electromagnetism. Considers especially the basic concepts and principles of physics that give unity to physics and the natural sciences. Emphasis on the techniques and strategies in teaching physics. Includes practical experience.

3 credits

EDUC 5012 PHYSICS II FOR TEACHERS

Advanced study of the theory of waves and classical optics and introduction to the modern theories of physics as the special theory of relativity, quantum mechanics and topics of particle physics. Emphasis on the techniques and strategies of teaching physics. Includes practical experience.

3 credits

EDUC 5013 SOCIOLOGICAL FOUNDATIONS OF EDUCATION

Systematic study of the interaction between the society and education, the school and the community as institutions which generate social change.

3 credits

EDUC 5015 BIOLOGY FOR TEACHERS

Basic areas of modern biology, especially cellular biology, genetics, evolution, ecology and behavior. Emphasis on the techniques and strategies in teaching biology. Includes practical experience.

3 credits

EDUC 5024 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION

Psychological principles of development, personality, learning and assessment and their application to the teaching-learning process within the socio-cultural context.

3 credits

EDUC 5035 VALUES AND PERSPECTIVES IN CONTEMPORARY EDUCATION

Analysis of the principal philosophical schools and examination of the axiological premises justifying contemporary educational purposes. Study of modern focuses on the teaching of values. Review of the Puerto Rican situation: Past, present and future perspectives.

3 credits

EDUC 5046 THE INDIVIDUAL, SOCIETY AND EDUCATION

Theoretical principles explaining and/or describing the influence of the physical, psychological and sociocultural environment on human behavior within the educational context.

3 credits

EDUC 5045 THE FAMILY, SCHOOL, COMMUNITY AND ETHICAL-MORAL AWARENESS

Study of the interaction and ways of family, school and community participation, and their impact in the integral development of children. Review of the role of curriculum for the development of ethical-moral intelligence. Value of family-school-community interaction to promote responsible citizenship in view of the cultural diversity of the society.

3 credits

EDUC 5047 PSYCHO-SOCIAL FOUNDATIONS OF EDUCATION

Discussion and analysis of the psycho-social applications and implications of the principle theories of learning. Discussion of the contributions, applications and implications of neurosciences to the teaching and learning processes.

3 credits

EDUC 5057 COMPARATIVE EDUCATION

Analysis of the psychological and sociological foundations that include the theories of learning, the concept of intelligence, the styles of learning, the models of education and neuroscience. Valuation of the contributions, the applications and the implications of the psycho-social foundations of the education.

3 credits

EDUC 5068 WESTERN WORLD EDUCATION

Historical development of educational ideas, institutions and practices in the Western world. Begins with the invention of writing and follows the development of the Judean-Greek-Roman civilization up to education in Puerto Rico.

3 credits

EDUC 5100 THE COMPUTER IN THE TEACHING OF SCIENCE AND MATHEMATICS

Computers and useful languages for teaching science and mathematics. Students will examine existing software to conduct experiments, simulations and demonstrations of topics discussed in class. Criteria for assessing the effectiveness of educational software are examined. Requires additional time in the computer laboratory.

3 credits

EDUC 5105 USE OF TECHNOLOGY IN TEACHING OF MATHEMATICS

Integration of calculators and computers in the teaching of mathematics. Development of learning activities that require their use. Emphasis on the use and evaluation of educational software in mathematics as a means of support in the teaching-learning process.

3 credits

EDUC 5111 EDUCATIONAL RESEARCH I

Application of the scientific method to solve educational problems. Use of the methodology and terminology of quantitative and qualitative research. Includes the preparation of a research proposal.

3 credits

EDUC 5112 EDUCATIONAL RESEARCH II

Practical study of an educational problem requiring the development of a research project under the supervision of a professor. Prerequisite: EDUC 5111.

3 credits

EDUC 5114 CURRICULUM AND TEACHING OF SOCIAL STUDIES AT THE ELEMENTARY LEVEL

Study of the curricular content of social studies in the elementary level. Emphasis on the exchange and the continuity; people, places and the environment; personal development and cultural identity; production, distribution and consumption; ethical, democratic, global, scientific and technological awareness. Development of methods, strategies and activities for the teaching of social studies, sustained by theoretical foundations and research of the discipline.

3 credits

EDUC 5115 CURRICULUM AND TEACHING OF SCIENCE AT THE ELEMENTARY LEVEL

Study of the curricular content of science at the elementary level. Emphasis on the scientific method, the matter, energy, its manifestations and its transformations, conservation and change, the systems and models and their interactions. Development of methods, strategies and activities for the teaching of science, sustained by the most recent research in the discipline. Includes laboratory activities that will be developed and integrated to the course.

3 credits

EDUC 5116 CURRICULUM AND TEACHING OF SPANISH AT THE ELEMENTARY LEVEL

Analysis of the curricular content of the subject of Spanish in the areas of the oral and written communication and the understanding of reading at the elementary level. Development of methods, strategies and activities, based on the new models of teaching of the language arts for their application to pedagogical practices.

3 credits

EDUC 5117 CURRICULUM AND TEACHING MATHEMATICS AT THE ELEMENTARY LEVEL

Study of the curricular content of mathematics for the elementary level. Emphasis on the strategies for problem solving, numbers, arithmetic operations, fractions, ratio and proportion, measurement, the basic concepts of geometry, the solution of equations, the analysis of data and probability. Development of methods, strategies and activities for the teaching of mathematics at the elementary level, sustained by the most recent research in the discipline.

3 credits

EDUC 5118 ENGLISH AS A SECOND LANGUAGE AND TEACHING IT AT THE ELEMENTARY LEVEL

Study of the theories and new models in the curricular content of teaching English as a second language and its application to pedagogical practices at the elementary level. Emphasis on the development of methods, strategies and activities.

3 credits

EDUC 5119 TOPICS IN HEALTH AND TEACHING THEM AT THE ELEMENTARY LEVEL

Study of topics in health and the development of methods, strategies and activities for teaching them. Emphasis on the prevention of things affecting health from the psychological, physiological the social perspective at the elementary level.

3 credits

EDUC 5120 STATISTICS APPLIED TO THE FIELD OF EDUCATION

Study of the techniques of descriptive statistics and basic techniques of inferential statistics. Emphasis on solving practical problems and statistics applied to the field of education.

3 credits

EDUC 5121 ENVIRONMENTAL SCIENCES AND THEIR EDUCATION IN THE ELEMENTARY LEVEL

Study of environmental sciences with emphasis on the conservation of natural resources. Design and evaluation of methods, strategies and activities that demonstrate the systemic, cyclical and holistic nature of the ecosystems and the importance of these principles in conservation.

3 credits

EDUC 5122 CRITICAL ANALYSIS OF CHILDREN'S LITERATURE AT THE ELEMENTARY LEVEL

Critical analysis of children's literature from its origins, evolution, definition, characteristics and typology, with the purpose of using this as a pedagogical resource in the classroom. Study of recent research: its implications and applications.

3 credits

EDUC 5123 CREATIVITY AND CORPORAL EXPRESSION

Analysis of recent research and models of creative thinking: their implications and applications to diverse scenarios. Theoretical and practical study of the possibilities of corporal expression. Emphasis on the development of methods, strategies and activities for teaching.

3 credits

EDUC 5124 APPRECIATION AND INTEGRATION OF ART AT THE ELEMENTARY LEVEL

Study of design, history of art, the vocabulary and the strategies for its integration in the curriculum of the elementary school. Applied approach to the different facets of art appreciation in the elementary school. Emphasis on the development of methods, strategies and activities for teaching.

3 credits

EDUC 5125 THE FINE ARTS AND CORPORAL EXPRESSION IN TEACHING AT THE ELEMENTARY LEVEL

Understanding of artistic languages as the fine arts and the corporal expression. Analysis of its contribution for cultural enrichment and the development of creativity. Synthesis by means of the integration of the fine arts and corporal expression in the curriculum at the elementary level for the development of creative thought. The importance of the fine arts and corporal expression as a representation of ideas and feelings.

3 credits

EDUC 5130 FUNDAMENTALS OF THE ACQUISITION OF READING AND WRITING

Review of the theories and the historical perspectives on the learning of reading and writing. Analysis of the psychological, linguistic and sociological bases of this learning. Emphasis on the development of the process of reading and writing, the understanding of reading, the written production, the social use of language and the appropriation of the writing system.

3 credits

EDUC 5133 STATISTICS

Statistical methods applied to educational research. Application of descriptive and inferential statistics to data interpretation. Use of the computer in statistical analysis. Requires additional time in an open laboratory.

3 credits

EDUC 5142 MEDICAL AND PSYCHOLOGICAL ASPECTS FOR THE REHABILITATION AND SPECIAL EDUCATION PROFESSIONAL

Medical and psychiatric principles in rehabilitation. Analysis of population trends, basic principles of medical and clinical sciences, common mental and physical disabling conditions, recent research, legal aspects, medical service programs in government and private vocational rehabilitation agencies.

3 credits

EDUC 5144 INTRODUCTION TO REHABILITATION

Basic concepts in rehabilitation as a social movement. Historical, philosophical and legislative background in vocational rehabilitation with emphasis on the latest legislative changes at the federal and state levels and their repercussions in public and private service programs for handicapped persons. Analysis of the participation of community organizations in the development of rehabilitation services.

3 credits

EDUC 5145 VOCATIONAL EVALUATION OF PERSONS WITH SPECIAL NEEDS

Analysis of the Theory of Work Adjustment and intervention in vocational evaluation. Service models, types of cases and the role of the vocational evaluator.

3 credits

EDUC 5146 TESTS AND METHODS IN VOCATIONAL EVALUATION I

Critical examination of the psychometric tests applicable to vocational evaluation and work samples. Development of an Individualized Vocational Evaluation Plan and the procedures for vocational clinical services. Prerequisite: EDUC 5145.

3 credits

EDUC 5147 TESTS AND METHODS IN VOCATIONAL EVALUATION II

Use of occupational factors derived from the Occupation Titles Dictionary to analyze the vocational profile of cases. Application of interviewing techniques and observation and report format. Discussion of cases with professionals related with the field. Prerequisite: EDUC 5146.

3 credits

EDUC 5148 PRACTICUM IN VOCATIONAL EVALUATION

Laboratory in the use of selected psychometric tests; work samples, analysis of occupational, medical and educational interviewing techniques and clinical observation. A minimum of 80 hours of laboratory is required. Prerequisite: EDUC 5147.

3 credits

EDUC 5200 DEVELOPMENT AND FUTURE OF HIGHER EDUCATION

Analysis of the purpose and historical development of higher education institutions in Europe, United States, Puerto Rico and other Latin American countries to the present and their future trends. Review of their moral, philosophical, social and psychological foundations.

3 credits

EDUC 5210 TEACHING MANAGEMENT IN HIGHER EDUCATION

Identification, description and analysis of the pedagogic and research capabilities that the higher education teacher must have. Analysis of faculty hiring and retention procedures. Review of models, approaches and techniques for faculty development, retraining, and evaluation.

3 credits

EDUC 5220 HIGHER EDUCATION MANAGEMENT

Management theories, processes, models and their applications to higher education scenarios. Includes the study of conductive processes and supervision as a process for assistance and improvement. Emphasis on systems theories, educational leadership, decision making processes for problem solution and program planning and development.

3 credits

EDUC 5230 INSTITUTIONAL PLANNING, BUDGET AND ASSESSMENT

Analysis of theories, models and planning and evaluation of the quality of organizational results. Includes financing sources and the budget as a planning tool.

3 credits

EDUC 5250 TEACHING OF READING AND WRITING

Study and analysis of the teaching of reading and writing. Study of the processes of text composition, reading from the interactive and transactional perspective. Emphasis on the impact of the new technologies in the processes of reading and writing and their pedagogical implications.

3 credits

EDUC 5320 PROMOTION OF READING

Study of the policies to foment reading and the practices of the task of the promoter or mediator of reading in the 21st century. Emphasis on the main existing policies for the promotion of reading. Design of animation strategies to reading to stimulate the taste and the pleasure of reading in the school, family and community. Material administration and selection, in both printed and virtual forms.

3 credits

EDUC 5370 PRINCIPLES OF COUNSELING

Introduction to the field of counseling as a profession. Emphasis on the analysis of the compatibility between the characteristics, roles and functions of a professional counselor and of the student in training. Introduction and practice of the attention skills.

3 credits

EDUC 5410 EVALUATION OF READING AND WRITING

Study of the theories and methodological approaches that serve as the basis for evaluation of reading and writing. Design and evaluation of instruments for assessment of reading and writing in all disciplines.

3 credits

EDUC 5610 SOCIAL CONDITIONS AFFECTING THE INDIGENT

Description and analysis of value development and of behavior in urban society and its impact on non-urban societies. Emphasis on social conditions affecting the health, well being and nutrition of the indigent.

3 credits

EDUC 5700 SCHOOL AND COMMUNITY

Review of the place, function and authority of the school as a social institution and its relationship to non-school agencies.

3 credits

EDUC 5730 PROMULGATION AND ADOPTION OF EDUCATIONAL INNOVATIONS

Evaluation of educational innovations and their potential for promulgation and adoption in schools.

3 credits

EDUC 5740 EDUCATION OF EXCEPTIONAL STUDENTS

Analysis of the nature of the condition and characteristics of exceptional students and an introduction to the teaching methods and strategies for these students. Case studies are required.

3 credits

EDUC 5750 EDUCATIONAL MEDIA

Educational materials laboratory. A practical course in the use and production of audiovisual materials and other media. Consideration of the specific value and applicability of these media in various subject matter areas.

3 credits

EDUC 5760 ALTERNATIVES FOR THE FUTURE AND EDUCATIONAL POLICY

Philosophy of futurism and its application in the formulation of educational policy. Interdisciplinary approach to educational planning and program development from the futuristic point of view.

3 credits

EDUC 597_ SPECIAL TOPICS IN ELEMENTARY EDUCATION

Critical analysis and discussions of readings and recently published specialized research on subjects related to teaching and learning at the elementary level.

3 credits

EDUC 6000 HUMAN RESOURCES MANAGEMENT AND LABOR RELATIONS IN EDUCATIONAL SCENES

Analysis of the laws and processes that affect effective human resources administration in the educational scenario. Includes programs of professional development, motivation and satisfaction in the workplace.

3 credits

EDUC 6001 FISCAL MANAGEMENT

Analysis of the fundamental elements of budgeting and finance in educational scenarios. Includes the preparation and control of budget in educational institutions.

3 credits

EDUC 6004 INFORMATION SYSTEMS IN EDUCATIONAL MANAGEMENT

Application of existing technology and cybernetic information to administrative processes; logical functional design for processing, use of networks and their application and storage of information. Analysis and use of different useful computerized programs in educational management.

3 credits

EDUC 6013 ORGANIZATIONAL BEHAVIOR IN EDUCATIONAL INSTITUTIONS

Analysis of individual, interpersonal and group behavior in the context of educational organizations, by using different models and theories. Includes the development and evolution of organizational theory. Application of the theories to the sociocultural setting in which educational management and instructional supervision occur.

3 credits

EDUC 6024 EDUCATIONAL MEASUREMENTS AND EVALUATION

Evaluation of the academic achievement by means of the interpretation of the results of the forms of measurement used by the teacher. Analysis of the use of evaluation techniques, measurement and assessment in the teaching-learning process. Construction, administration, correction and interpretation of evaluation instruments and assessment. Application of technology in the evaluation process.

3 credits

EDUC 6035 EDUCATIONAL PLANNING

Application of the principles of educational planning. Study of practical situations in educational planning. Requires the design of an educational project.

3 credits

EDUC 6043 THE STUDENT WITH MENTAL RETARDATION

Analysis of the behavior of students with mental retardation. Aspects of etiology. Contemporary problems in the services and opportunities for social, emotional, cognitive, vocational or occupational development as well as the development of attitudes and values. Emphasis in the quality of life of these people. Research analysis.

3 credits

EDUC 6044 STUDENTS WITH SPECIFIC LEARNING PROBLEMS

Analysis of contemporary theories and concepts, issues and future trends in teaching students with specific learning problems. Research analysis.

3 credits

EDUC 6045 STUDENTS WITH SUPERIOR INTELLIGENCE AND TALENTS

Analysis of contemporary theories and concepts on students with superior intelligence and talent. Special service models. Analysis of research related to the superior abilities of this population and current educational practices.

3 credits

EDUC 6046 CURRICULUM DEVELOPMENT

Study of the foundations of the curriculum and their application to curriculum development. Includes different models of curriculum design, the study of the development of curriculum as a system; needs, content and strategies for teaching, implementation, evaluation and improvement of curriculum and the design of a curricular segment.

3 credits

EDUC 6047 NATURE AND NEEDS OF HANDICAPPED INFANTS AND PRESCHOOL CHILDREN

Nature and needs of handicapped infants and preschool children. Discussion of the normal developmental process and deviations from it. Includes the study of the basic areas of physical, cognitive, social, emotional, language and self-help development.

3 credits

EDUC 6048 ASSESSMENT AND PROGRAMMING FOR HANDICAPPED INFANTS AND PRESCHOOL CHILDREN

Methods and techniques for evaluating and programming services and individualized instruction for infants and preschool children. The importance of the parents' participation in service and educational programs. Emphasis on the provision of guidance and counseling for parents and their participation in the preparation of individualized service programs for the family and of individualized teaching programs.

3 credits

EDUC 6049 THE STUDENT WITH SEVERE BEHAVIORAL DISORDERS

Different models explaining the origin of behavioral disorders. Ways in which the teacher can intervene according to the different models. Practical experience provided. Emphasis on the quality of life of these persons.

3 credits

EDUC 6050 CURRENT ISSUES IN INTERDISCIPLINARY SPECIAL EDUCATION

Comparison of regular and special educational programs. Identification of variables promoting the union of both fields of study. Study of federal and state laws related to education from early childhood to high school, program models, community resources, and program development. Knowledge of appropriate teaching practices and the factors that promote education in natural and inclusive environments.

3 credits

EDUC 6053 INTERVENTION WITH FAMILIES IN INCLUSIVE ENVIRONMENTS

Analysis of dynamic in family systems. Study of factors that affect family structure, impact of the presence of children with disabilities in the family, techniques for identifying the strengths and needs of the family and strategies for facilitating communication. Students will assist families in obtaining information and available services in the community.

3 credits

EDUC 6054 ASSESSMENT IN INTERDISCIPLINARY SPECIAL EDUCATION

Study of methods and techniques for assessing children with or without disabilities from infant to high school students in natural environments. Analysis of assessment instruments for infants, pre-school and high school students with or without disabilities. Students will develop evaluation instruments and participate in the process of transdisciplinary assessment.

3 credits

EDUC 6055 SEMINAR IN INTERDISCIPLINARY SPECIAL EDUCATION

Development of the Individualized Service Plan and the Individualized Educational Plan. Study of teamwork models with emphasis on the transdisciplinary model. Preparation of students of different disciplines to occupy direct intervention roles and provide a collaborative system for offering service to infants and students with special needs and to their families in inclusive environments.

3 credits

EDUC 6056 CURRICULUM EVALUATION

Analysis of the models, phases and principles of the curricular evaluation. Analysis of the functions and responsibilities of the curriculum specialist and other school personnel in curriculum evaluation. Practice in the design and construction of instruments for the curriculum evaluation at the different school levels. Evaluation of current educational programs and projects in our educational system.

3 credits

EDUC 6057 TEACHING MODELS AND STRATEGIES

Analysis and assessment of teaching models and the selection of instructional strategies applicable to different disciplines and levels.

3 credits

EDUC 6058 LEGAL FOUNDATIONS OF EDUCATION

Analysis and evaluation of the laws and regulations that govern education in Puerto Rico. Study of the local and federal courts decisions and their implications in education.

3 credits

EDUC 6059 DESIGN AND DEVELOPMENT OF INTERDISCIPLINARY SPECIAL CURRICULA

Analysis of curricular principles from the pre-school level to high school and their application in Puerto Rico. Emphasis on the development of appropriate curriculum models that may be used for teaching preschool children, and elementary and high school students in inclusive programs and natural environments.

3 credits

EDUC 6060 TEACHING, INTERVENTION METHODS AND MATERIALS FOR SPECIAL STUDENTS

Study of the principles, techniques and innovative teaching strategies, materials, design and environment management for promoting inclusion at all levels. Analysis of appropriate practices and interventions, programming, and health factors that affect the inclusion of students with disabilities.

3 credits

EDUC 6066 TECHNOLOGICAL AID IN TEACHING EXCEPTIONAL STUDENTS

Application of the use of technology to facilitate the teaching and learning process of exceptional students. Includes the necessary adaptations of this technology for the home, school and learning communities.

3 credits

EDUC 6068 ADVANCED LANGUAGE AND READING

Advanced laboratory course in the procedures and practices of teaching language and reading. Clinical practice with individuals and small groups of children at the elementary and secondary levels. Emphasis on the development of practical and informal techniques and materials, diagnosing reading difficulties and the development of adequate reading skills and interests.

3 credits

EDUC 6079 INSTRUCTIONAL LEADERSHIP

Analysis of the competencies related to the application of supervision and instructional leadership to improve the teaching-learning process and other services related to teaching. Practical experiences in the educational scenario are required.

3 credits

EDUC 6094 WORKSHOP IN EDUCATIONAL MANAGEMENT

Integration of theory and practice in the different areas of educational management. Emphasis on the relationship of theory and practice in the implementation and management of programs.

3 credits

EDUC 6113 EDUCATIONAL ADMINISTRATION (PK - 6)

Application of theories and models related to the basic strategies of decision-making in the principal work areas of educational administration at the elementary level. Areas include personnel management and supervision, finance, school organization, school population, educational programs and interaction between the school and the community. Includes case studies and school visitations for the purpose of creating an administrative and supervisory environment.

3 credits

EDUC 6124 EDUCATIONAL ADMINISTRATION (7-12)

Application of theories and models related to the basic strategies of decision-making in the principal work areas of educational administration at the secondary level. Areas include personnel management and supervision, finance, school organization, school population, educational programs and interaction between the school and the community. Includes case studies and school visitations for the purpose of creating an administrative and supervisory environment.

3 credits

EDUC 6143 TRANSITION PROCESS AND EMPLOYMENT IN SPECIAL EDUCATION AND VOCATIONAL REHABILITATION

Employment of persons with severe handicaps; definition and concepts, vocational adjustment and legal basis. Emphasis on current employment models in vocational rehabilitation agencies at the state and federal levels and in the transition of students with handicaps into the world of work.

3 credits

EDUC 6210 HUMAN RESOURCES AND LABOR RELATIONS

Practical applications of theories, principles, legal aspects, techniques, and modern procedures in faculty and administrative personnel management in higher education. Strategies aimed at satisfying professional and occupational competencies required by such institutions.

3 credits

EDUC 6220 DEVELOPMENTAL PROCESS

Theories of human development. Conceptual focuses and paradigms facilitating the interpretation of studies and the application of findings in the field. Emphasis on the critical analysis of research studies. Current trends in research methods of human development. Practical experience is provided.

3 credits

EDUC 6230 STUDENT SERVICES

Student needs in Higher Education communication and motivational processes and the support services offered. Discussion of laws and regulations that affect students. Analysis of the nature and roles of student organizations, and the cultural activities that nurture and contribute to the integral development of students.

3 credits

EDUC 6240 TECHNIQUES IN BEHAVIOR ANALYSIS

Application of learning principles and techniques in behavior analysis to the exceptional population. Students will apply these techniques to groups and individually. Direct experience in the application of knowledge acquired.

3 credits

EDUC 6270 EVALUATION AND DESIGN OF TEACHING FOR EXCEPTIONAL STUDENTS

Application of formal and informal instruments in the evaluation of exceptional students. Use of the evaluation results to design and implement the Individual Teaching Program.

3 credits

EDUC 6281 SUPERVISED PRACTICE I

Practical experience in a rehabilitation or educational service setting or in a related community agency. Includes, under the supervision of the professor, individual interventions in the planning, administration, correction and interpretation of tests and the writing of reports. Students are required to complete a minimum of 160 hours of practice at their assigned center at the rate of eight hours weekly, and are required to devote 2.6 hours of reading and writing outside the center. The supervised practice will be conducted from Monday to Friday within the regular work schedule of the center. Prerequisite: EDUC 5148.

3 credits

EDUC 6282 SUPERVISED PRACTICE II

Culmination of the supervised practical experience in the application of the techniques and methods of vocational evaluation. The student will perform all the functions of a vocational evaluator. A minimum of 160 hours, including eight hours weekly of direct service is required. Prerequisite: EDUC 6281.

3 credits

EDUC 6300 TEACHING READING AND WRITING TO EXCEPTIONAL STUDENTS

Analysis of formal and informal methods used to detect reading-writing difficulties. Application of remediation strategies. Includes practice in detecting needs for individual programming, by case studies and direct experiences.

3 credits

EDUC 6310 METHODOLOGY IN TEACHING MATHEMATICS

Analysis of the methods and strategies of teaching mathematics. Discussion of the trends in the educational system, the philosophical bases: behaviorism and constructivism, and controversies in the teaching of mathematics. Review of documents of the Puerto Rico Department of Education and of professional associations related to the teaching of mathematics.

3 credits

EDUC 6320 TEACHING MATHEMATICS TO EXCEPTIONAL STUDENTS

Application of methods used to detect difficulties in teaching and learning mathematics. Includes the study of formal and informal teaching methods, the use of remediation strategies and the application of technology. Provides practice in the detection of needs as well as for the individual programming, through case studies and direct experiences.

3 credits

EDUC 6340 SPEECH DEVELOPMENT AND DISORDERS

Analysis of theories and principles on the acquisition and development of speech; and the relation between speech, learning and thought. Study of speech disorders, language and communication. Teacher participation in the coordination of related services. Analysis of related research.

3 credits

EDUC 6345 METHODS OF EVALUATION

Planning and design of evaluation of educational projects. Practice in compiling, coding, processing and analyzing evaluation information. Identification of difficulties in the evaluation project and training to avoid them in practice. Prerequisite: EDUC 6024.

3 credits

EDUC 6360 THE FAMILY IN THE EDUCATION OF HANDICAPPED CHILDREN

Analysis of the problems associated with parents and families involved in rearing handicapped children. Techniques for effective communication between parents and teachers are presented as well as the resources available for assisting the parents. The importance of parents in the educational process, the rights and importance of values and professional ethics in the interaction process. Includes field experience, contacts with parents and simulated experiences.

3 credits

EDUC 6380 ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS

Principles of special education administration. Analysis of administrative problems inherent with the compliance of the requirements established by state and federal laws governing service and providing protection to the public. Discussion of the principles of professional ethics and value conflicts in providing special education services.

3 credits

EDUC 6400 STUDENT ASSESSMENT

Analysis of assessment instruments used to understand the individual in an integrated way. Administration and interpretation of standardized tests and other normalized instruments and their integration into the evaluation process. Includes the ethical and legal aspects that govern the evaluation process.

3 credits

EDUC 6420 LIFE AND CAREER DEVELOPMENT

Analysis of the life and career development theories, sources of information, occupational trends, decision making processes, and techniques to facilitate the development of life and career. Emphasis on the attention to the different groups in the population. Includes the ethical and legal aspects that govern life and career counseling. Practical experiences are provided. Prerequisite: EDUC 6220.

3 credits

EDUC 6451 THEORIES OF COUNSELING

Analysis of the theoretical frames that support the counseling practice. Review of classic and contemporary theories that serve as a base for developing an individual system of intervention, conceptualized in the ethical-legal aspects of the profession. Includes the study of the psychodynamic, behavioral, humanistic and cognitive approaches. Prerequisite: EDUC 5370.

3 credits

EDUC 6452 INDIVIDUAL COUNSELING SKILLS

Analysis of the concepts, models, strategies and techniques of individual intervention in the counseling process. Emphasis on the practice of techniques and skills that will be demonstrated through practical simulations, recordings and other experiences with consideration of the ethical and legal aspects. Includes 30 hours of practical application. Prerequisite: EDUC 6451.

3 credits

EDUC 6456 DEVELOPMENT AND EVALUATION OF COUNSELING PROGRAMS

Analysis of organizational principles, personnel interaction patterns and their function in counseling programs. Includes the planning, organization, initiation and promotion of the programs. Emphasis on adequate procedures and methods for the evaluation of counseling programs.

3 credits

EDUC 6460 COUNSELING AT THE ELEMENTARY LEVEL

Analysis of the traits of the elementary school population and their implication in the planning and offering of counseling services in this level. The course requires the practical participation in simulations, recordings and practical experiences.

3 credits

EDUC 6470 GROUP COUNSELING SKILLS

Analysis of the theories, techniques and procedures used to develop an intervention system in group counseling, considers the ethical and legal aspects of the profession. Participation in activities that facilitate the development of the competencies and skills necessary for group counseling. Includes 30 hours of practical application. Prerequisite: EDUC 6452.

3 credits

EDUC 6472 THEORY OF FAMILY AND COUPLES COUNSELING

Analysis of the theories, research and models for family and couples counseling. Discussion of the formation of genre and its relation with the couple and the family. Review of strategies and techniques for intervention.

3 credits

EDUC 6480 SEMINAR: CONTEMPORARY PROBLEMS AND TRENDS

Topics selected according to the problems, challenges and demands of current society.

3 credits

EDUC 6580 INTEGRATION OF TECHNOLOGY IN INSTRUCTIONAL DESIGN

Study of the technological resources for instructional design at the elementary level. Emphasis on the discussion of the contents of the disciplines by integrating technology to facilitate experiences that optimize the educational process, and critical and creative thought. Assessment of the importance of ethical and legal behavior, in a global and digital society.

3 credits

EDUC 6601 VIRTUAL LEARNING COMMUNITIES IN HIGHER EDUCATION: EXPERIENCE I

Analysis of the principles, foundations and applications of online learning technology, the typology and characteristics of virtual learning communities and the trends and controversies in this type of educational environment. Reflection, analysis and construction of a proper significance with respect to the experiences obtained as university online program students. Bibliographical search on the development of virtual communities, discussion of ethical aspects of online learning and reflection on the experience of participating in a virtual learning community.

1 credit

EDUC 6602 VIRTUAL LEARNING COMMUNITIES IN HIGHER EDUCATION: EXPERIENCE II

Planning and development of a virtual learning community and reflection on the experience of using educational technology. This experience continues in course EDUC 6603. Prerequisite: EDUC 6601.

1 credit

EDUC 6603 VIRTUAL LEARNING COMMUNITIES IN HIGHER EDUCATION: EXPERIENCE III

Discussion of strategies for maintaining virtual learning communities and creation of a portfolio where the masters degree experiences related to the use of technology and online education are compiled. Prerequisite: EDUC 6602.

1 credit

EDUC 6605 CURRENT PROBLEMS AND CONTROVERSIES OF HIGHER EDUCATION IN LATIN AMERICA

Analysis of the current problems of higher education, such as: teaching in the globalized world, innovation and use of new technologies, university government and policies adopted by Latin American countries, efficiency, quality and fairness in higher education. Discussion of the external and internal factors that affect the university's government and its effects on teaching.

3 credits

EDUC 6610 LEARNING THEORIES AND TEACHING MODELS IN HIGHER EDUCATION

Study of the learning theories and the teaching models that guide the educational practice in diverse contexts of higher education. Educators become qualified in using pedagogical approaches that facilitate the development of significant learning experiences applicable to determined social and cultural contexts. Analysis of the implications of integrating technology and research as a mean to reflect on educational practices.

3 credits

EDUC 6615 EDUCATIONAL TECHNOLOGY IN HIGHER EDUCATION

Analysis of the uses of educational technology utilized in the teaching and administration of higher educational institutions in Latin America and the Caribbean. Study of the applications and equipment most used for integrating technology in higher education. Planning, design and evaluation of technology use in higher education.

3 credits

EDUC 6620 PLANNING AND EDUCATIONAL DESIGN IN HIGHER EDUCATION

Integration of knowledge and skills used to plan educational programs in higher education. Emphasis on the development of educational designs that promote dynamic learning environments in response to the social, political and economic changes that contemporary higher educational institutions face in different contexts.

3 credits

EDUC 6624 MANAGERIAL PRACTICES IN EDUCATIONAL SCENARIOS

Application of organizational theory and research in the major task areas of educational management. Critical analysis of problems in actions with the community, personnel management, finances, facilities, equipment, program and other areas of interest. Includes case studies, simulation and role playing in order to create a suitable management environment.

3 credits

EDUC 6850 SEMINAR IN SPECIAL EDUCATION

Analysis of practices, current problems and modern trends on teaching exceptional students.

3 credits

EDUC 6861, 6862 FIELD STUDY SEMINAR

Student participation, either independently or as part of a team in a program of educational development or reform which is underway in the field and partially or wholly supervised by the University. Weekly or biweekly meetings with a seminar director and preparation of a report with particular emphasis on evaluation. Prerequisite: Permission from the advisor.

3 credits per course

EDUC 6900 THESIS SEMINAR

Identification of a research topic in the field of education; analysis of literature and development of the thesis proposal. Grade: P/NP.

3 credits

EDUC 6910 PRACTICE TEACHING

One semester of teaching experience under the direction of a special education teacher in a public school or in other appropriate scenarios which have handicapped children and have been approved by the University.

3 credits

EDUC 6911 PRACTICUM

Integration of the knowledge, skills and attitudes of the counseling profession in organizations, corporations, institutions, government agencies or educational institutions under the supervision of a licensed professional adviser. Requires completing a minimum of 200 hours of practice. Prerequisite: Have passed all specialization courses.

3 credits

EDUC 6914 INTERNSHIP

Under the supervision of a faculty member, each student is assigned to a school director, superintendent of schools or an administrator of an educational organization. In this situation, the student obtains experience in administration and supervision, making a work plan for a year, a daily program, case reports; additionally, the student participates in actual organization and supervision and carries on research, thus developing competence and leadership. Prerequisite: Permission from the advisor.

3 credits

EDUC 6915 INTERNSHIP IN MANAGEMENT AND EDUCATIONAL LEADERSHIP

Supervised practice in management related tasks. This will be performed under the supervision of a faculty member and will consist of a minimum of 135 hours of managerial experiences. Includes periodic meetings and seminars with the faculty member.

3 credits

EDUC 6916 INTERNSHIP IN EDUCATIONAL MANAGEMENT (7-12)

Supervised practice in management related tasks. This will be performed under the supervision of a faculty member and will consist of a minimum of 8 hours of practice weekly during the semester. Includes periodic meetings and seminars with the faculty member.

3 credits

EDUC 6917 INTERNSHIP IN HIGHER EDUCATION

Student placement in academic, administrative and student affairs scenarios at the higher education level, under the guardianship of a higher education administrator and the supervision of a faculty member. The student will be placed in a position that will allow the application of the program's acquired competencies. The internship requires a minimum of 130 hours. Prerequisite: a minimum of 18 credits approved in the program with a grade point average of 3.00 or more.

3 credits

EDUC 691A INTERNSHIP IN INTERDISCIPLINARY SPECIAL EDUCATION

Integration of the knowledge and skills acquired through a supervised clinical experience in inclusive environments with infants, preschool children and students at the elementary, junior and high school levels. Students will analyze the importance of collaboration centered on the family, the placement in appropriate and inclusive environments and the empowerment of the family to make decisions. Two hundred twenty-five (225) hours at the rate of 15 hours weekly in a center selected by the University professor are required. The center should actively promote the inclusion of children with disabilities. Prerequisites: have approved 27 credits of the Specialization Requirements.

3 credits

EDUC 6923 INTERNSHIP IN ADMINISTRATION AND SUPERVISION OF OCCUPATIONAL PROGRAMS

Internship in educational settings under the supervision of a faculty member from the Education Program. Students will acquire experience in the administration and supervision of vocational and technical schools by preparing a yearly work plan, a daily schedule and case reports. Students will be assigned to a school director, a school superintendent or an administrator of an educational organization. A minimum of eight hours of practice per week is required. Includes periodic meetings and seminars with the faculty supervisor.

3 credits

EDUC 6931 RESEARCH OR APPLICATION PROJECT IN THE AREA OF SPECIALIZATION I

Analysis of the theoretical, historical, ethical, moral and political bases of the field of the scientific and educational research. Analysis of the design for a research or application project in the field of the selected specialization. The course will be governed by the guide: General Considerations for the Elaboration of Research or Application Projects. An oral and written presentation of the project. Grade: P/NP.

3 credits

EDUC 6932 RESEARCH OR APPLICATION PROJECT IN THE AREA OF SPECIALIZATION II

Academic experience directed to the development of a research or application project of the specialization under the supervision of a professor. Emphasis on the findings, conclusions and recommendations of the research or application

project developed in EDUC 6931. Defense of the research or application project in the specialization area. The course will be governed by the guide: General Considerations for the Elaboration of Research or Application Projects. Prerequisite: EDUC 6931. Grade: P/NP.

3 credits

EDUC 6933 CONTINUATION OF THE PREPARATION OF THE RESEARCH OR APPLICATION PROJECT

The course will provide for the completion of the requirements of course EDUC 6932, when the student receives the grade of NP.

3 credits

EDUC 697_ INTEGRATION SEMINAR IN SPECIAL EDUCATION

Evaluation of theories, concepts and principles that support the practice of special education and the educational services offered to exceptional students. Synthesis and evaluation of models and design of planning, teaching and evaluation of students of diverse exceptions. Includes research analysis and special projects.

3 credits

EDUC 697A INTEGRATION SEMINAR

This course is for meeting the Requirements of Comprehensive Examinations and Other Options for Masters' Programs.

3 credits

EDUC 6990 THESIS

Research project on a problem that will add information to existing knowledge in the area of education. This project requires the use of statistical methods to analyze gathered data. Prerequisite: Permission from the advisor. Grade: P/NP.

3 credits

EDUC 7003 FORMATION AND DEVELOPMENT OF EDUCATIONAL THOUGHT IN PUERTO RICO

Analysis of the formation and evolution of the educational thought that has guided education in Puerto Rico from the nineteenth century to the present.

3 credits

EDUC 7010 SOCIO-SCIENTIFIC CONCEPTS OF EDUCATION

Analysis of the relationship that exists between scientific strategies, theories and models and their application in identifying solutions for the educational problems society faces today.

3 credits

EDUC 7020 CULTURE, EDUCATION AND PHILOSOPHY

Analysis of anthropological and philosophical theories that give direction and illustrate the function and purposes of education in the transmission, preservation and change of culture and its elements within a local and global context.

3 credits

EDUC 7030 ANALYSIS OF HUMAN BEHAVIOR

Analysis of the philosophical and psychological background of learning, personality and human development theories as instruments for understanding human behavior. Emphasis on the application and implication of the theories in the teaching and learning processes.

3 credits

EDUC 7040 LOGIC AND LANGUAGE

Analysis of the foundations of the logical structure of discursive language and its relevance to understanding the process of communication in the dynamics of teaching. Emphasis on the practice of logical analysis to strengthen attitudes and critical thinking skills.

3 credits

EDUC 7050 STATISTICS

Analysis and application of descriptive, inferential and non-parametric statistics in different types of computing systems and their application to scientific investigation.

3 credits

EDUC 7060 QUANTITATIVE RESEARCH

Analysis and application of quantitative methods and techniques in educational research. Elaboration of a design for quantitative research.

3 credits

EDUC 7070 QUALITATIVE RESEARCH

Analysis and application of the qualitative methods and techniques in educational research. Elaboration of a design of qualitative research.

3 credits

EDUC 7100 FOUNDATIONS OF DESIGN OF TEACHING PROGRAMAS

Comparative analysis of the principles and historical, philosophical, psychological and social foundations that sustain the teaching programs in variable scenarios. Discussion of the implications of the diverse curricular approaches for the identification, selection and planning of educational activities.

3 credits

EDUC 7205 HISTORICAL FOUNDATIONS OF HIGHER EDUCATION

Analysis of the historical development of the institutions of higher education in Europe, United States, Latin America and Puerto Rico up to the present. Discussion of the philosophical, social and psychological elements.

3 credits

EDUC 7500 WORKSHOP ON COMPETENCY-BASED CURRICULUM DEVELOPMENT

Each student will undertake a project and present a curriculum based on the competencies developed.

3 credits

EDUC 7510 COMPARATIVE EDUCATION

Comparative analysis of educational policies, models and practices of educational systems in different countries. Emphasis on the philosophical, sociological and psychological foundations of the process of internationalization in areas of organizational change, curricular innovation, professional development of educational and administrative personnel and student mobility.

3 credits

EDUC 7530 EDUCATION FOR PEACE: THE INDIVIDUAL, SELF-MANAGEMENT AND SOCIAL DEVELOPMENT

Analysis of the role education holds for peace in contemporary societies and their educational systems. Emphasis on contemporary trends and future projections on massive communications and technologies to encourage and develop social and cultural equality.

3 credits

EDUC 7540 EDUCATION AND ECONOMIC AND SOCIO-POLITICAL DEVELOPMENT IN PUERTO RICO

Analysis of economic and socio-political development in Puerto Rico since the beginning of Spanish colonization. Emphasis on the changes that took place from the twentieth century to the present. Includes their implications for educational purposes, values and conditions of life in the Puerto Rican context.

3 credits

EDUC 7550 ACADEMIC PLANNING SYSTEMS FOR POSTSECONDARY INSTITUTIONS

Study and analysis of academic planning systems according to the theories and models upon which they are based. Each student must make a comparative analysis of at least two planning systems for postsecondary educational Institutions.

3 credits

EDUC 7560 INSTITUTIONAL RESEARCH

Study and analysis of theories and principles upon which institutional research is based. Emphasis on the development of a project of institutional research.

3 credits

EDUC 7570 AUTHORITY AND POWER IN EDUCATIONAL ADMINISTRATION

Concepts of authority and power and implications for administration in exercising both. Analysis of the foundations from which authority and power spring and of the different kinds of authority and power that characterize educational institutions together with their corresponding implications.

3 credits

EDUC 7580 COMPARATIVE ORGANIZATIONAL STRUCTURES IN EDUCATIONAL ADMINISTRATION

Diverse structures for organizing educational administration. Comparison in terms of the variables that condition them and their effects on administration.

3 credits

EDUC 7590 WORK, MOTIVATION AND OCCUPATIONAL SATISFACTION IN EDUCATIONAL ADMINISTRATION

Analysis of occupational factors in educational administration and their relationship to the interest, availability, satisfaction and motivation of employees.

3 credits

EDUC 7600 JOB OPENINGS IN EDUCATIONAL ADMINISTRATION

Existing and future job openings in educational administration. Analysis of the competencies needed to fill these jobs. Study of techniques and strategies to develop the competencies needed in the changing world within which educational administration functions.

3 credits

EDUC 7610 FACULTY EVALUATION AND DEVELOPMENT

Principles, models and strategies upon which the establishment of faculty evaluation and developmental systems are based. Experience in the analysis of evaluation systems and developmental programs is offered.

3 credits

EDUC 7620 EDUCATIONAL POLICY AND ALTERNATIVES FOR THE FUTURE

Philosophy of “futurism” and its application to the formulation of educational policy. Interdisciplinary approach to educational planning and program development from the “futuristic” point of view.

3 credits

EDUC 7630 DESIGN OF EDUCATIONAL FACILITIES AND SYSTEMS

Design of educational systems that include the physical facilities needed for the achievement of goals. Needs, evaluation, individual participation, the development of long and short-range plans and educational specifications.

3 credits

EDUC 8100 THEORETICAL PRINCIPLES FOR THE STUDY OF CURRICULUM AND TEACHING

Analysis of the economic, political and social forces that serve as a base for the historical evolution of the curriculum as a field of study and which sustain curricular changes. Comparison of the diverse theoretical perspectives that explain the relation between research curriculum, teaching and the research paradigms.

3 credits

EDUC 8103 CONTEMPORARY THEORETICAL PERSPECTIVE FOR THE STUDY OF CURRICULUM AND TEACHING

Critical analysis of the theories and approaches that guide discussion of contemporary curriculum and their implications for the development of curricula, teaching programs and educational research.

3 credits

EDUC 8120 THE SCIENCE OF “FUTURISM” AND EDUCATION

Review of “futurism” as an alternative in the search for solutions to problems posed by contemporary education. Implications for the design of educational programs, their implementation and evaluation.

3 credits

EDUC 8130 LEARNING AND TEACHING

Analysis of the concept of learning, its principles and their relation with the processes of thought and teaching from different theoretical perspectives. Review of learning as a contextual experience of transformation, construction and search FOR meaning. Discussion of research regarding the internal and external factors that affect the learning and teaching processes.

3 credits

EDUC 8135 DEVELOPMENT OF TEACHING MODELS

Evaluation of the trends and research related to the creation of learning environments by means of the use of teaching models at different levels, contexts and scenarios. Requires the development of one’s own teaching model.

3 credits

EDUC 8140 READING AND WRITING AT COMPLEX LEVELS OF KNOWLEDGE

Analysis of social, linguistic, psychological and technological factors that condition the learning of reading and writing. Recent strategies and approaches to stimulate the student to understand and apply reading and writing processes at complex levels of knowledge. Development of taste in and appreciation for reading and writing as a means of personal enrichment.

3 credits

EDUC 8150 CURRICULUM AT THE POSTSECONDARY LEVEL

Analysis of the theoretical approaches and the models for the planning and development of curricula at the post-secondary level. Research on controversies and contemporary matters related to the curricula and teaching in diverse types of programs and postsecondary institutions.

3 credits

EDUC 8151 CHANGE AND CURRICULAR INNOVATION

Analysis of the theories and models of change and innovation related to curricular transformations, educational reforms and new pedagogies. Comparison of research on processes of change and educational innovations at different educational levels and countries. Design of an educational innovation project.

3 crédits

EDUC 8152 EDUCATIONAL POLICY AND CURRICULAR IMPLEMENTATION

Analysis of institutional educational policies that affect the practices of implementation of new curricula. Review of research related to the formulation of educational policies and curricular implementation.

3 credits

EDUC 8153 NEUROSCIENCE APPLIED TO CURRICULUM AND TEACHING

Analysis of the theories and scientific research related to educational neuroscience and their implications for the development of curricula and brain-appropriate environments of learning. Elaboration of a project based on research of educational neuroscience.

3 crédits

EDUC 8154 TECHNOLOGY, CURRICULUM AND TEACHING

Analysis of the subjects and the controversies related to education, integration and use of technology in the curriculum and their implications for learning. Research of the historical, social and scientific uses of technology in education from different perspectives and approaches.

3crédits

EDUC 8160 DESIGNS OF CURRICULAR EVALUATION

Analysis of the theories, principles and practices of evaluation models and their application in diverse educational scenarios. Requires the design of a model of curricular evaluation.

3 credits

EDUC 8163 CONSTRUCTION AND VALIDATION OF TESTS AND EVALUATION AND RESEARCH INSTRUMENTS

Analysis of diverse methods of evaluation and measurement applied to the field of education. Emphasis on effective development of scales, construction of questionnaires, administration of tests and systems of interpretation, as well as the validity and reliability of the instrument. Includes discussion of tests of diverse content, their use and application for the evaluation of capacities, attitudes and interests and the search for data and objective information.

3 credits

EDUC 8165 MODELS FOR CURRICULAR DEVELOPMENT

Critical review of different curricular models from the analysis and evaluation of educational projects in diverse social and cultural contexts. Requires the construction of a model for curricular development.

3 credits

EDUC 8170 FOUNDATIONS OF VIRTUAL TEACHING

Critical analysis of the principles and theories that serve as foundation for virtual education and the research of diverse scenarios and effective teaching techniques for the implementation of virtual offerings. Discussion of the technological resources, synchronous as well as asynchronous, used to promote learning in virtual environments.

3 credits

EDUC 8173 MODELS OF INSTRUCTIONAL DESIGN FOR ONLINE COURSES

Review of the models of instructional design applicable to virtual education, with emphasis in online courses. Analysis of the systematic process of instructional specifications to promote quality of instruction. Evaluation of distribution systems for didactic materials and of the implementation of online courses.

3 credits

EDUC 8175 CREATIVE THOUGHT IN EDUCATION

Analysis and integration of theories, models, approaches and research related to creative thought in aspects such as teaching, development of learning programs and curricular change. Includes the application of strategies, techniques and means to develop and strengthen creative thought, at the personal as well as the educational level.

3 credits

EDUC 8190 DESIGN AND CONSTRUCTION OF EDUCATIONAL PROGRAMAS

Analysis of the principles and models that guide the design of educational programs. Design and construction of curricular projects to take care of specific needs. Prerequisite: have approved all the required courses of the specialization.

3 credits

EDUC 8200 EARLY INTERVENTION WITH EXCEPTIONAL CHILDREN

Analysis of research and contemporary issues in the education of young children with handicapping conditions and their families. Curricula, methods, materials and intervention strategies.

3 credits

EDUC 8210 CURRICULUM DEVELOPMENT IN SPECIAL EDUCATION

Basic elements in curriculum development in general education and specifically in special education. Identification and examination of the forces which shape curriculum theory and practice. Consideration of problems facing contemporary professionals who design and evaluate curriculum.

3 credits

EDUC 8215 PUBLIC POLICY IN HIGHER EDUCATION

Analysis of the policies and processes of actions related to globalization of higher education. Discussion of the external and internal environmental factors that affect public policies and university government.

3 credits

EDUC 8220 INCLUSION OF CHILDREN WITH DISABILITIES

Current research and practice of inclusion. Issues related to public opinion on inclusion, misconceptions and the controversies surrounding this reform initiative.

3 credits

EDUC 8225 LEGAL FOUNDATIONS OF HIGHER EDUCATION

Evaluation of the legal norms that govern higher education. Analysis of the local and federal laws, rules and legal doctrines as well as their implications in decision making in higher education.

3 credits

EDUC 8230 STUDENT POPULATION IN HIGHER EDUCATION

Analysis of the recent research related to individual, institutional and social factors that affect the performance and retention of students at the post-secondary level. Emphasis on the study of the needs of the different student populations in the context of the diverse types of post-secondary institutions.

3 credits

EDUC 8240 INSTITUTIONAL EVALUATION IN HIGHER EDUCATION

Analysis of the principles, models and theories of evaluation to determine the effectiveness in post-secondary institutions. Application of analytical technical aspects to measure the goals and objectives that are considered in the mission of the university and post-secondary systems, as well as in their plans and strategies.

3 credits

EDUC 8300 COUNSELING AND CONSULTING PROGRAM DESIGN

Evaluation of programs in terms of goals, purposes, operation, congruencies and effectiveness. Analysis of the procedures for the organization and administration of counseling and consulting programs and customer services. Includes the theories of operational organization of programs and the coordination of services. Requires the preparation of a proposal for the creation of counseling or consulting program.

3 credits

EDUC 8320 INTERACTION LABORATORY

Laboratory work to emphasize the establishment of effective interpersonal relationships, self-understanding, understanding the psycho dynamics of human conduct and the interpretation of tests, as well as preparation for establishing a counseling relationship. Didactic and experimental approaches and limited experience with clients. Topics include discussion of moral dilemmas, motivation, emotion and attitudes and their relationship to personality development and character integration.

3 credits

EDUC 8330 STRATEGIES, METHODS, AND TECHNIQUES IN INDIVIDUAL COUNSELING

Analysis and practice of interventions in the process of individual counseling from different approaches. Critical evaluation of research made in this area. Emphasis on preventive intervention and development, in addition to remediation. Includes practical experiences in the counseling process, in the development and administration of cases, taking into consideration the stages of human development and the ethical and legal aspects of education. Requires 40 hours of practical experience.

3 credits

EDUC 8350 BEHAVIOR MODIFICATION AND ITS USE IN GUIDANCE

Study of the theory and application of processes of behavior modification in individual and group counseling. Approach is directed toward research done in the field, applied conduct, preparation of materials for guidance, assertiveness training, biofeedback, systematic desensitization and elimination of self-destructive habits.

3 credits

EDUC 8360 MARRIAGE AND FAMILY COUNSELING

Analysis of theories and research dealing with marriage and the family; exploration of critical issues in strategies for intervention in regard to marriage and family problems and tensions.

3 credits

EDUC 8370 AGE, SICKNESS AND DEATH: ACCEPTANCE COUNSELING

Discussion and analysis of problems, crises and themes in human development that offer multidimensional perspectives of the process of counseling mature adults, sick people and individuals in the terminal phases of life, using technical, biological, social, cognitive and emotional frameworks. Emphasis on therapeutic research that helps adults accept the realities of life.

3 credits

EDUC 8380 COUNSELING FOR THE INTEGRAL DEVELOPMENT OF THE EXCEPTIONAL INDIVIDUAL

Analysis of the biological, psychological and social needs of the exceptional population. Includes the current trends, approaches and intervention modalities in counseling for that population. Emphasis on the application and implication of the most adequate counseling theories to enable positive changes in the quality of life of people with handicaps, to facilitate their normalization process within our socio-cultural context. Requires practical experience.

3 credits

EDUC 8390 GROUP COUNSELING SEMINAR

Selection and use of group counseling theories in the assisting process with groups of special populations. Emphasis on the application of counseling strategies and techniques to facilitate the solution of human development problems. Requires 30 hours of lecture and 40 hours of practical experience.

3 credits

EDUC 8400 WOMEN COUNSELING SEMINAR

Study and analysis of the circumstances that affect the life of contemporary women; design and application techniques and strategies to develop the talent, capacity and personality of women and enable them to participate as equals in society. Discussion of situations such as rape, single mothers, discrimination in employment, inequality of opportunities, divorce, separation and family planning. Includes limited experiences with clients and research in different aspects of this topic.

3 credits

EDUC 8410 SEMINAR OF TRENDS AND CONTROVERSIAL MATTERS IN COUNSELING

Critical review of the trends and of controversial, ethical and legal matters, in the counseling field. The seminar offers students the opportunity to enrich their attitudes, knowledge and experiences by means of readings, analysis and discussion of topics of interest, relevant to the counseling profession.

3 credits

EDUC 8430 SPIRITUALITY IN COUNSELING

Review of the concept of spirituality and its difference with religion, philosophy, values and the concept of well-being. Emphasis on the importance and relation of spirituality with counseling. Includes the historical, theoretical and philosophical foundations to integrate spirituality in counseling.

3 credits

EDUC 8440 ADVANCED SEMINAR IN LIFE AND CAREER PLANNING

Analysis and application of the theories and models that prepare support professionals to attend to the needs of adult clients when confronting changes/transitions and adjustments in their career and in their developmental challenges. Emphasis on the competences for intervention with the supervisor/manager as facilitator for the development of careers of those supervised and as a manager of development and succession plans in an organization and in the planning for retirement.

3 credits

EDUC 8460 COUNSELING FOR CHILDREN AND ADOLESCENTS

Analysis of the strategies for the counseling of children and adolescents from the perspective of development, prevention and remediation. Emphasis on the research and application of counseling approaches and models to the children and adolescent population. Requires 30 hours of practical experiences in scenarios that offer counseling to children and adolescents.

3 credits

EDUC 8490 FAMILY VIOLENCE: THEORY AND INTERVENTION

Review of the macro systemic factors associated with family violence in the context of the cultural phenomenon of the Puerto Rican society. Analysis of the research and theories of social violence. Includes the studies of gender as a framework for the conceptualization and interventions in counseling, among others. Emphasis on relevant ethical and legal aspects. Prerequisite: EDUC 8360.

3 credits

EDUC 8500 MODELS, NORMATIVE AND DESCRIPTIVE THEORIES IN EDUCATIONAL MANAGEMENT AND LEADERSHIP

Analysis of theories, principles and models that support management of educational institutions. Comparison of normative and descriptive theories, and their implications in the effectiveness of the educational manager and other leaders.

3 credits

EDUC 8505 INFORMATION PROCESSING IN EDUCATIONAL MANAGEMENT

Critical analysis of the theories and practices applied to the dynamic of information processing for problem solving in educational management.

3 credits

EDUC 8515 EDUCATIONAL MANAGEMENT AND LEADERSHIP SEMINAR

Critical analysis of contemporary literature and research in the educational management and leadership field.

3 credits

EDUC 8520 HUMAN RESOURCES MANAGEMENT IN EDUCATIONAL INSTITUTIONS

Analysis of theories, principles, techniques and practices in personnel management in the educational scenario. Discussion of human behavior and its repercussions in organizational effectiveness.

3 credits

EDUC 8530 THE EDUCATIONAL LEADER: CHANGE AND THE DECISION-MAKING PROCESS

Ways, manners and practices of developing the administrators' capacities as educational leaders in today's society. Review of problems of contemporary society and their implications for schools and other institutions.

3 credits

EDUC 8540 LABOR RELATIONS IN EDUCATIONAL MANAGEMENT

Analysis of legal and labor foundations: their repercussions in educational management. Emphasis on the knowledge and administration of collective bargaining.

3 credits

EDUC 8545 PLANNING OF THE EDUCATIONAL BUDGET

Analysis of the basic foundations that control the preparation of a budget. Emphasis on the relations and functions of the budget and its implications in educational management.

3 credits

EDUC 8550 CONTEMPORARY PROBLEMS IN EDUCATIONAL MANAGEMENT SEMINAR

Critical analysis of contemporary managerial problems in educational institutions.

3 credits

EDUC 8560 EVALUATIVE PROCESS IN MANAGEMENT AND INSTRUCTIONAL LEADERSHIP

Analysis of the theories, principles and models of evaluation. Application of technical, analytical and statistical aspects for the interpretation of the evaluative process and their effects in determining the efficiency and effectiveness of management.

3 credits

EDUC 8565 INDUCTION IN EDUCATIONAL MANAGEMENT AND LEADERSHIP SEMINAR

Analysis of real situations by visits and observations in the educational scenario. Includes the study of managerial principles and strategies that offer imaginative and creative solutions to the educational problems of these scenarios.

3 credits

EDUC 8570 CONTEMPORARY AND OPERATIONAL APPROACHES OF EDUCATIONAL MANAGEMENT

Analysis of new approaches in educational management. Creation of novel and viable strategies for application to current educational scenarios.

3 credits

EDUC 8645 TEACHING METHODOLOGIES AND STRATEGIES FOR STUDENTS WITH SPECIAL NEEDS

Evaluation of the different methods and educative strategies of teaching students with special needs. Analysis of systematic planning with the methodologies and teaching strategies in the transition process in the different stages of the school life of the student with special needs.

3 credits

EDUC 8650 SEMINAR: SPECIAL EDUCATION PROBLEMS IN ADMINISTRATIVE PROCESSES

Critical evaluation of problems in the organization and administration of special education programs. Alternatives for improving administrative processes in these programs. Analysis and interpretation of readings in special education administration and supervision, with emphasis on the results of scientific research.

3 credits

EDUC 8655 CURRICULAR ADAPTATION AND ACCOMMODATIONS IN SPECIAL EDUCATION PROGRAMS AND TRANSITION SERVICES

Evaluation in the development of the curricular adaptation and arrangements in Programs of Special Education. Analysis of transition services, their function in the Individualized Educative Plan and its application in the Transition Services Plan. Prerequisite: EDUC 8645.

3 credits

EDUC 8660 THE EVALUATION PROCESS IN ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION

Study of models, theories and principles of evaluation. Application of proper technical, analytical and statistical aspects for the interpretation of the evaluation process and its effects in the determination of efficiency and effectiveness in special education administration and supervision.

3 credits

EDUC 8665 PRACTICES AND PROCEDURES OF SPECIAL EDUCATION AND TRANSITION SERVICES

Evaluation of the practices and service procedures of special education and transition that students with special needs receive. Comparison of transition services between the different government agencies with an educative and vocational approach. Design and writing of individual transition plans and their integration in the individualized educative plan.

3 credits

EDUC 8670 ORGANIZATION AND ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS

Survey of topics that directly affect the quality of the organization and administration of programs for students with disabilities.

3 credits

EDUC 8680 TECHNOLOGICAL ASSISTANCE APPLIED TO SPECIAL EDUCATION AND VOCATIONAL REHABILITATION

Analysis of the processes of offering services of technological assistance for people with handicaps. Integration of general knowledge on reactive equipment and services of technological assistance according to the handicap categories. Consideration of the impact of federal and state regulations on technological aid in Special Education and Vocational Rehabilitation Programs.

3 credits

EDUC 8690 ASSESSMENT IN SPECIAL EDUCATION AND TRANSITION SERVICES

Evaluation of the assessment process in Special Education and transition services. Integration of assessment methods and procedures used for decision making, planning of individualized services and placement of the handicapped student. Diagnosis of needs and application of services through case studies in available special education and transition service programs.

3 credits

EDUC 8700 METHODS OF EDUCATIONAL PLANNING AND EVALUATION

Principles, theories and strategies that underlie educational planning and evaluation, practice in gathering, processing and analyzing educational information. Conceptualization and formulation of designs for educational planning and evaluation.

3 credits

EDUC 8710 SIMULATION AND FORMULATION OF EDUCATIONAL POLICIES

Theories, models and principles of simulation. Analysis and application of simulation techniques in the formulation of educational policies.

3 credits

EDUC 8730 QUANTITATIVE METHODS IN EDUCATIONAL PLANNING AND EVALUATION

Development and analysis of models for planning and evaluation. Study of technical, analytical and statistical aspects of educational experimentation.

3 credits

EDUC 8740 ANALYSIS OF READINGS AND RESEARCH IN PLANNING AND EVALUATION

Critical analysis of advanced, specialized readings and of recent research in educational planning and evaluation.

3 credits

EDUC 8900 TECHNOLOGICAL RESOURCES IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE

Development and use of audiovisual materials; use of the language laboratory; television, radio and movies in TESL.

3 credits

EDUC 8910 INTERNSHIP

Integration of the knowledge, skills and attitudes in work scenarios such as organizations, corporations, institutions, and government or private agencies under the supervision of a licensed professional advisor in the specialization. Emphasis on the role as consultant, with the professionals of the center as well as with community clients. Includes intensive experiences in the conceptualization of cases and intervention with individual and group counseling at the personal, family and occupational level. Requires a minimum of 300 hours.

3 credits

EDUC 8915 INTERNSHIP IN SPECIAL EDUCATION AND TRANSITION SERVICES

Integration experience of the knowledge, skills and the attitudes acquired in the specialization courses under the supervision of the professor. This teaching experience becomes full when the student assumes the role of consulting specialist with the personnel of the work scenario selected, the parents and the community. Requires a minimum of 125 hours of internship and a plan of activities agreed upon by the professor and the student. Prerequisite: Approval of all specialization courses.

3 credits

EDUC 8920 DEVELOPMENT AND EVALUATION OF TEACHING METHODS IN TESL

Theories of language acquisition (first and second) theories and methods of teaching; design of evaluation instruments; formative and summative evaluation; curriculum development.

3 credits

EDUC 8960 RESEARCH SEMINAR

The beginning and development of the research proposal by the student. This proposal includes the first three chapters, which will be used as a working document for the student's doctoral dissertation. Prerequisites: Have passed all the required and elective courses. In addition, have passed the comprehensive examination in all its parts, if applicable.

3 credits

EDUC 8991 DISSERTATION I

Review of the dissertation proposal. Requires the defense and approval of the dissertation proposal by the Doctoral Dissertation Committee. The proposal can be presented before the Institutional Review Board or (IRB) to be approved, if necessary. Once such approval is received, the student can begin the work of data summary. Prerequisite: EDUC 8960. Grade: DP/P/NP.

3 credits

EDUC 8992 DISSERTATION II

Search, organization, analysis of data and writing of the Doctoral Dissertation. Includes the oral defense of the dissertation and the approval of the final document by the Dissertation Committee and the Defense Committee. Prerequisite: EDUC 8991 and have received the approval of the Institutional Review Board or (IRB) if necessary. Grade: DP/P/NP.

3 credits

Courses in Education in Diabetes (DIAB)

DIAB 5000 FUNDAMENTALS FOR CARE OF THE PERSON WITH DIABETES

Analysis of the concepts of normal metabolism, such as: glucose homeostasis, diabetes physiopathology, etiology, diagnosis criteria and classification in the health care of people with diabetes mellitus. Emphasis on the administration of therapies of diabetes mellitus.

4 credits

DIAB 5010 ADMINISTRATION OF AN EDUCATIONAL PROGRAM IN DIABETES

Analysis of the concepts in the training of self administration of diabetes. Includes bio-psycho-social and mental assessment and the formulation of an educational plan for a metabolic control of diabetes mellitus. Requires 30 hours of lecture and 90 hours of lab.

4 credits

DIAB 5020 DIABETES IN DIFFERENT STAGES OF GROWTH AND DEVELOPMENT

Study of diabetes mellitus in the different stages of growth and development in the human being. Emphasis on prevention, detection and the differences in the modalities of treatment and self handling of diabetes mellitus. Requires 30 hours of lecture and 90 hours of lab.

4 credits

DIAB 5030 DIABETES AND ITS COMPLICATIONS

Analysis of the different complications that people with diabetes or those that are in risk of developing the condition may present. Emphasis on preventive measures to prevent their development. Application of the suitable treatment modalities for the diverse complications.

3 credits

Courses in Educational Computing (ECMP)**ECMP 5100 FUTURE AND LEADERSHIP OF COMPUTER CHANGES IN EDUCATION**

Analysis of the historical development and future trends, the forecast of computerized technological changes and their implications in educational computing. Includes general concepts about cognition and artificial intelligence, constructivism and the learning paradigm in education. Review of the philosophy of educational computing within the legal, educational, and social framework. Emphasis on the basic concepts of assistive technology, motivational principles and techniques, human relations, leadership and collaborative learning.

3 credits

ECMP 5105 DESIGN AND EVALUATION OF EDUCATIONAL SOFTWARE

Application of fundamentals of instructional design and their application to the development and evaluation of computerized educational materials and comparison of different design models. Includes techniques for the evaluation of programs and computerized equipment. Review of recent research that helps promote modern design techniques and evaluation of educational software.

3 credits

ECMP 5130 COMPUTER ASSISTED EDUCATIONAL MANAGEMENT

Analysis of the use of computers in academic administration. Study of techniques that may be used in the integration of computers for the academic task of evaluation. The use of software for performing administrative tasks. Includes logistics and implementation of a management information system and networking within an educational environment. Requires additional time in an open lab.

3 credits

ECMP 5200 AUTHORIZING LANGUAGES

Application of an authoring language program. Requires additional time in an open lab. Prerequisites: ECMP 5100, 5105.

3 credits

ECMP 5240 SPECIAL PERIPHERALS, TELECOMMUNICATIONS AND NETWORKS

Application of basic concepts of telecommunications, devices, local networks and other networks. Use of communication software. Includes techniques of teleconferencing, distant learning, external database query and electronic mail. Management of some peripherals and computerized media such as videodisc, video camera, projectors, scanners, voice and music synthesizers. Emphasis on projects for handicapped persons and special education with computers. Requires additional time in an open lab. Prerequisite: ECMP 5100.

3 credits

ECMP 5245 COMPUTER PROGRAMMING

Application of a high-level structured programming language, programming oriented to the object and its fundamental principles. Use of subroutines using visual or object programming for the development of quality applications. Requires additional time in an open lab. Prerequisite: ECMP 5200.

3 credits

ECMP 5250 KNOWLEDGE BASES AND EXPERT SYSTEMS

Discussion of Artificial Intelligence (AI) and Expert Systems (ES). Includes historical aspects of AI and ES, as special types of software that try to emulate problem solving, rational decisions making, agents, search methods, and the construction and maintenance of the ES structure. Emphasis on the main structures for the representation of the knowledge: trios OAV (Objects, Attributes and Values), semantic networks, frames, rules and logical representation. Requires additional time in an open lab. Prerequisite: ECMP 5245.

3 credits

ECMP 6160 COMPUTER ASSISTED INSTRUCTION

Application of methods and techniques of computer assisted instruction: tutorials, drill and practice, simulation and discovery games. Integration of computerized topics in the curriculum. Practices with authoring languages, programming languages and software packages. Review of some examples of courseware. Requires additional time in an open lab. Prerequisite: ECMP 5245.

3 credits

ECMP 6170 TRAINING AND COMPUTERIZED PRACTICE

Analysis of problems and personnel training tasks in a business environment. Design programming and evaluation of training courses with computers and audiovisual materials. Personnel training in a business environment. Creation of user manuals and tutorials for self-learning. Use of simulations in personnel training. Requires additional time in an open lab. Prerequisite: ECMP 5200.

3 credits

ECMP 6300 INTERACTION BETWEEN THE USER AND THE COMPUTER

Critical analysis of the interaction of users with the computer taking into account the program design strategies, the user's level of experience, interaction styles and the use of engineering. Formal evaluation of the software and of its utility. Review of recent research that helps to promote the effective use of new technologies of information and communication in educational environments. Requires additional hours in an open lab. Prerequisite: ECMP 5105.

3 credits

ECMP 6310 GRAPHICS SYSTEMS AND ANIMATIONS

Application of the principles of assisted graphics design, data flowcharts and design supported by computer. Implementing graphics, drawing and animation with high resolution and color in the computer. Interactivity management of graphics. Use of painting packages, pad and the combination with video images. Includes rotation, hidden lines, shading, fading and texture. Requires additional time in an open lab. Prerequisite: ECMP 5200.

3 credits

ECMP 6320 ADVANCED PROGRAMMING FOR INTERNET

Analysis of languages, methodologies and advanced programming techniques for Internet. Application of new trends in programming: object oriented, logical and concurrent. Review of techniques in software engineering. Requires additional time in an open lab. Prerequisite: ECMP 5245.

3 credits

ECMP 6350 ARTIFICIAL INTELLIGENCE

Analysis of the principles and techniques of artificial intelligence. Includes the spaces of states and search processes, the representation of knowledge, automated inference: Boolean and diffused. Emphasis on the main applications: expert systems, natural language processing, vision, speech recognition, machine learning, and robotics. Requires additional time in an open lab. Prerequisite: ECMP 5250.

3 credits

ECMP 6355 KNOWLEDGE ACQUISITION AND INTELLIGENT TUTORS

Techniques for knowledge acquisition, domain mapping, and knowledge structuring. Induction methods, statistical applications and decision trees. Test analysis, evaluation and debugging of a knowledge base. Application of an intelligent tutor within a group design. Review of problems associated with intelligent tutors. Requires additional time in a computer laboratory. Prerequisite: ECMP 5250.

3 credits

ECMP 6400 ONLINE LEARNING

Application, planning, evaluation and management of technological system and human resource in online learning. Includes practical experience related to the creation and administration of a course on line and a videoconference course by using the platforms for managing online education courses available at the Institution. Analysis of recent research that helps promote student learning in a distant educational environment. Requires additional hours in an open lab. Prerequisites: ECMP 5130, 5200.

3 credits

ECMP 6970 SEMINAR: ADVANCED TOPICS IN EDUCATIONAL COMPUTING

In-depth study of a problem associated with the field of educational computing. Prerequisite: ECMP 6260 or approval from the Program Director.

3 credits

ECMP 6975 RESEARCH SEMINAR IN EDUCATIONAL COMPUTING

Analysis of the procedure to follow in educational research. Identification of a research topic in the field of the educational computing. Use of computerized tools for research, revision of literature, selection of methodology and preparation of a research proposal. Prerequisites: ECMP 5100, 5105, 5130. Corequisite: ECMP 6160.

3 credits

ECMP 6980 PROJECT DEVELOPMENT FOR EDUCATIONAL COMPUTING

Analysis, design, development and implementation of a computerized project with educational applications. Includes the theoretical frame, storyboard, flowcharts, validation, references, conclusions and recommendations. Prerequisites: ECMP 6975 and authorization of the department director. Grade: P/NP.

3 credits

ECMP 6990 THESIS IN EDUCATIONAL COMPUTING

Development of a research theme or implementation of an original practical complex project in the area of educational computing. The theme as well as the thesis advisor should be approved by the department chairperson. Prerequisite: ECMP 6975. Grade: P/NP.

3 credits

Courses in Educational Neuroscience (NEUR)**NEUR 5010 EDUCATIONAL NEUROSCIENCE**

Critical analysis of the key variables of learning that have been documented by research in the neurosciences and their application to education. Emphasis on the findings regarding the relation among the neurosciences, neuropsychology, the learning processes and education.

3 credits

NEUR 5020 NEURODEVELOPMENT

Analysis of human neurodevelopment from the prenatal stage to the young adult. Emphasis on the biophysical, cerebral and mental systems that prepare the human being for the complex tasks of learning which they characterize the entire life cycle. Practical experience in the phenomenological analysis of the conduct of the apprentice with real populations. Prerequisite: NEUR 5010.

3 credits

NEUR 5030 NEUROPSYCHOLOGY OF LEARNING

Critical review of the scientific studies on brain-learning relations. Analysis of the implications of neuroscientific knowledge for classroom teaching. Design and application of brain-appropriate teaching strategies with real populations. Prerequisite: NEUR 5010.

3 credits

NEUR 5040 EDUCATIONAL PHYSIOLOGICAL PSYCHOLOGY

Review of the anatomical and physiological foundations of conduct and the psychological, cognitive and emotional processes. Emphasis on the study of the central nervous system and its relation with educational models and theories.

Application of the physiological foundations of conduct and the psychological, cognitive and emotional processes that take part in teaching. Prerequisite: NEUR 5010.

3 credits

NEUR 6010 DISORDERS OF NEURODEVELOPMENT

Analysis of the systems of classification and diagnosis of neurodevelopment disorders in children and adolescents. Emphasis on those conditions that make learning and student performance in school and in other academic settings difficult. Practical experience in the use of measures to differentiate and classify neurodevelopment disorders in children and adolescents. Prerequisites: NEUR 5020, 5030.

3 credits

NEUR 6020 NEUROLEARNING ASSESSMENT

Analysis of common problems in assessment of classroom learning and the importance of the information generated for the intervention with students. Application of neurolearning assessment strategies with a variety of measures and quantitative and qualitative instruments. Prerequisite: NEUR 6010.

3 credits

NEUR 6970 INTEGRATION SEMINAR

Study of general and specific topics related to the field of educational neuroscience and the integration of the knowledge developed throughout the program. Prerequisite: Have approved 18 credits of the specialization. Grade P/NP.

3 credits

Courses in English (ENGL)

ENGL 5030 PRINCIPLES OF LINGUISTICS

Application of the principles and characteristics of human language. Analysis of the fundamental concepts and descriptive techniques of the subdisciplines of linguistics: phonetics, phonology, morphology, syntax and semantics.

3 credits

ENGL 5040 ENGLISH PHONOLOGICAL SYSTEM

Study and descriptive analysis of the English phonological system. Aspects of pronunciation in the teaching of English as a second language and interference with Spanish.

3 credits

ENGL 5050 ENGLISH MORPHOLOGY AND SYNTAX

Syntactic and morphological patterns of contemporary varieties of English. Semantic functions as reflected in syntax and morphology. Analysis of typical learning patterns of students of English as a second language.

3 credits

ENGL 5110 ENGLISH CLASS LITERARY TEXT READING

The teaching and assessment strategies of reading and composition of literary texts. Application of literary criticism and theory in teaching English as a second language.

3 credits

ENGL 5210 DRAMATIC LITERATURE

Analysis of dramatic literature representative of the principal categories of genre and period. Application of the foundations and the literary theories in the teaching of English as a second language.

3 credits

ENGL 5220 ACADEMIC TEXT WRITING

Strengthening and practice of advanced writing and composition skills useful for the preparation of professional projects and research. Emphasis on the norms and practical aspects of the language.

3 credits

ENGL 5230 LITERATURE FOR YOUNG READERS

Teaching strategies for teaching literature to young readers studying English as second language (ESL) students. Exploration of the literary foundations necessary for instruction; survey of available materials and criteria for selection.

3 credits

ENGL 5240 WRITING THEORIES AND THEIR APPLICATIONS

Analysis of theories and methods of teaching writing and their practical application to the study of ESL.

3 credits

ENGL 5290 PSYCHOLINGUISTICS

Analysis of the psychological aspects of linguistic behavior. Evaluation of the development of language in children and adults, speech perception and production, the reading process, comprehension and memory. Includes the recognition of expected functions in the developmental areas of language at the cerebral level.

3 credits

ENGL 5320 SOCIOLINGUISTICS

Analysis of the use of language. Includes the following topics: pragmatics; the structure of speech; sociocultural differences in the communicative strategy and linguistic forms; multilingualism and its function in language when constructing and maintaining social relations, whether symmetrical or asymmetrical, between and within social groups. Emphasis on the use of English in Puerto Rico.

3 credits

ENGL 5330 FIRST AND SECOND LANGUAGE ACQUISITION

Theories and description of the process of acquisition of morpho-semantic, lexico-semantic, phonological and paralinguistic systems in a first and second language. Comparison and contrast between the acquisition of a first and second language.

3 credits

ENGL 6090 READING IN A SECOND LANGUAGE

Analysis of the process that serves as a base to develop reading in a second language. Includes: psycholinguistic, sociolinguistic and neuro-linguistic perspectives.

3 credits

ENGL 6100 THEORIES AND PRINCIPLES OF TESL

Analysis of the traditional and innovating approaches, methodologies and trends in the teaching of English as a second language. Analysis of how these agree with recent findings on the nature of language and with language teaching and learning, specifically when learning English as a second language.

3 credits

ENGL 6113 MATERIALS AND TECHNIQUES FOR EISI AT THE ELEMENTARY, SECONDARY, POST SECONDARY AND ADULT LEVELS

Evaluation, adaptation and preparation of materials based on the techniques used to develop the language skills of elementary, secondary, post secondary, or adult level students who are learning English as a foreign language or as a second language. Language arts instruction is included in the areas of content, learning of skills, communication practice, and in the use of technological resources.

3 credits

ENGL 6120 SOCIO-CULTURAL ASPECTS OF PUERTO RICO AND THE UNITED STATES

Interdisciplinary course designed to provide teachers of migrant students with information about the socio-cultural, historical, political, legal, demographic and linguistic aspects of Puerto Rico and the United States.

3 credits

ENGL 6130 FUNDAMENTALS OF BILINGUAL EDUCATION

Fundamentals of bilingual education in Puerto Rico and the United States. Curriculum development for bilingual education.

3 credits

ENGL 6150 TRANSLATION

Analysis of the linguistic resources used in effective translations. Includes translation practice in a diversity of specific areas, primarily from Spanish to English. Application of translation theories to the practice process.

3 credits

ENGL 6170 ASSESSMENT OF LINGUISTIC ABILITIES

Study of the development of standardized tests and criteria for measuring language ability; statistical analysis and evaluation of tests; current theories of the measurement of language ability; measurement of linguistic mastery; effect of text format on teaching and learning.

3 credits

ENGL 6180 USING THE COMPUTER IN TESL

Preparation of educational material using a computer; evaluation and adaptation of computer programs; integration of this technology in curriculum and in the evaluation of learning.

3 credits

ENGL 6260 CONTEMPORARY LITERATURE OF THE UNITED STATES

Analysis of the works of literary significance in the United States today. Application of the foundations and literary theories in the teaching of English as a second language.

3 credits

ENGL 6310 CONTEMPORARY FICTION

Analysis of texts and critiques of fiction representative of the postwar period (World War II), excluding the literature of the United States. Application of the foundations and literary theories in the teaching of English as a second language.

3 credits

ENGL 6350 REPRESENTATIVE WORKS OF ENGLISH LITERATURE

Analysis of representative works of English Literature and their location within the literary movements to which they belong. Interpretative analysis of techniques, styles and subjects. Application of the foundations and literary theories in the teaching of English as a second language.

3 credits

ENGL 6530 RESEARCH METHODS

Analysis of the basic methods of research in the teaching of English as a second language, using up-to-date topics and pertinent approaches to research in this field. Application of knowledge in the writing of a proposal for an original research project or a review of literature.

3 credits

ENGL 6600 SUPERVISION IN TESL

Theory, methods and techniques in TESL: methods and techniques for measuring teaching effectiveness; teacher evaluation; theory and principles of supervision.

3 credits

ENGL 6610 CURRICULUM AND DEVELOPMENT IN ENGLISH AS A SECOND LANGUAGE

Theory and practice in the design of curricula for ESL programs. Needs assessment of language learners, identification of goals and evaluation of curricular effectiveness.

3 credits

ENGL 6904 APPLIED LINGUISTIC IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE

Analysis of the applications of the disciplines of linguistics, psycholinguistics and sociolinguistics in the process of teaching a first and second language. The course includes the study of contributions these fields have made to the understanding of how language functions in the classroom setting and how language develops in children. Emphasis on the study of the non-English speaker's linguistic behavior. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of English as a Second Language.

3 credits

ENGL 6905 A SECOND LANGUAGE ACQUISITION AND SOCIOCULTURAL ANALYSIS

Application of principles and trends of contrastive linguistics and socio-cultural analysis to the understanding and improvement of the teaching of English in non-native speaking areas. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of English as a Second Language.

3 credits

ENGL 6906 FUNDAMENTALS OF TEACHING OF ENGLISH AS A SECOND LANGUAGE: THEORY, PRACTICE AND ASSESSMENT

Application of linguistics, psychology and anthropology to the teaching of English as a second language. Exploration of how to design traditional evaluation tools and assessment that yield information on student progress to parents, administrators and the community. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of English as a Second Language.

3 credits

ENGL 6907 ADVANCED RESEARCH AND TECHNIQUES IN READING INSTRUCTION AND ASSESSMENT

Study of current research, methods and materials of reading instruction. Diagnosis of reading difficulties and remedial treatment techniques in working with non-English speaking children and adults. Emphasis on the student population whose first language is not English. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of English as a Second Language.

3 credits

ENGL 6908 ADVANCED RESEARCH AND TECHNIQUES IN WRITING INSTRUCTION AND ASSESSMENT

Study of current research, methods and materials of writing instruction. Diagnosis of writing difficulties and remedial treatment techniques in working with non-English speaking children and adults. Emphasis on the student population whose first language is not English. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of English as a Second Language.

3 credits

ENGL 6909 LITERARY CRITIQUE: ANALYSIS, TECHNIQUES AND ASSESSMENT

Intensive study of assessment techniques in the analysis of literary genres. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of English as a Second Language.

3 credits

ENGL 6970 INTEGRATION SEMINAR

Integration of the knowledge and skills acquired in the courses that make up the Masters in TESL. Emphasis on case analysis and on the research of current topics related to this field of study.

3 credits

ENGL 6992A RESEARCH PROJECT IN MA-TESL

Research project and writing on a theme that will contribute to the existing knowledge in the TESL area. Students will have a consecutive academic year to complete their research project. Grade: P/NP.

3 credits

Courses in Environmental Sciences (EVSC)

EVSC 5010 ENVIRONMENTAL CHEMISTRY

Application of chemical concepts to evaluate and correct environmental problems related to the management, control and preservation of water, air and soil. Evaluation of technologies and chemical production that affect the environment or that are used for environmental restoration.

3 credits

EVSC 5020 BIOSTATISTICS

Application of descriptive and inferential statistical processes to the organization, analysis and interpretation of data related to health and environment.

3 credits

EVSC 5030 ENVIRONMENTAL HEALTH

Environmental health problems and ways to solve them, rationally and adequately by using the biological, physical and social components of the external ecological universe. Application of scientific knowledge in the control and adjustment of external factors that promote the health and well-being of the human race.

3 credits

EVSC 5040 URBAN ECOLOGY

Relationship between the technological equilibrium and urban ecology. Emphasis will be placed on the human impact created in satisfying human needs without jeopardizing the natural resources of the environment.

3 credits

EVSC 5050 ENVIRONMENTAL PROBLEMS IN PUERTO RICO

Origins and phases of environmental problems in Puerto Rico within a scientific, social and ethical context and rational ways to solve them adequately. The biotic components that govern the environmental network in Puerto Rico, their relation to urban development and the application of scientific knowledge to their reconciliation and control.

3 credits

EVSC 5100 BIOCHEMISTRY

The chemical study of the live material constituents including carbohydrates, lipids, proteins, nucleic acids, vitamins and minerals. The relationship of these constituents with life processes and environmental contamination will be studied.

3 credits

EVSC 5105 GEOGRAPHIC INFORMATION SYSTEMS AND APPLICATIONS IN ENVIRONMENTAL SCIENCES

Analysis of the particular properties of spatial data, structures and accesses to existing spatial data by means of advanced applications of Geographic Information Systems in environmental sciences. Application of Geographic Information Systems in making maps and in investigation and analysis of space environmental information. Requires 45 hours of lecture-lab.

3 credits

EVSC 5110 ECOLOGICAL ENVIRONMENT

Analysis of the characteristics of the ecological network, natural selection, the ecological niche and succession. Vision of the human being as a species and its impact on the environment. Relation between the technological balance and the urban ecology.

3 credits

EVSC 5165 ENVIRONMENTAL INSTRUMENTATION

Evaluation of the foundations, characteristics and applications of the typical instrumentation used for the quantitative analysis of environmental samples. Includes methods of treatment of the samples, calibration and validation.

3 credits

EVSC 5180 LIMNOLOGY

Study of different bodies of water, the live ecology of rivers, lakes and marine environments. Identification of changes in bodies of water caused by contamination and biotic and abiotic effects in the ecosystem.

3 credits

EVSC 5200 ENVIRONMENTAL BIOLOGY

Aspects related to the contamination of water and land due to poor management of solid waste. Included are sources, environmental destiny, transformers and biological effect of contaminants in aquatic organisms and humans. Discussion of techniques for sampling and evaluating the effects of contamination.

3 credits

EVSC 5220 ENVIRONMENTAL MICROBIOLOGY

Principles and application of ecology, the physiology and the kinetics of microbiological growth in the solution of the environmental problems.

3 credits

EVSC 5250 CONTROL OF CONTAMINATION AND CURRENT ANALYSIS

Fundamental applications of limnology and ecological response in natural systems to organic and inorganic contaminants. Includes mathematical models to evaluate estuaries and stream currents.

3 credits

EVSC 5255 WATER ANALYSIS AND CONTAMINATION

Analysis of the facets that dominate the water cycles and the human intervention in the contamination of the resource. Includes rivers, currents, lakes and the littoral as environmental systems and the characteristics that control them. Application of mathematical models to evaluate currents and estuaries.

3 credits

EVSC 5275 ENVIRONMENTAL TOXICOLOGY

Analysis and application of toxic agents according to their chemical characteristics. Includes the branches of toxicology and their relation to environmental health.

3 credits

EVSC 5285 PUERTO RICAN POLICY REGULATIONS

Evaluation of the laws and regulations that apply to the management of environmental problems and the legal limitations related to environmental issues. Includes general principles that govern public policy, planning and environmental management.

3 credits

EVSC 5310 WATER TREATMENT: OPERATION OF PHYSICAL AND CHEMICAL UNITS

Principles of the operation of units with chemical and physical processes for the treatment of wastewater. Emphasis on the evaluation of the processes to attain safe drinking water, and quality plant effluent.

3 credits

EVSC 5330 WATER TREATMENT: BIOLOGICAL OPERATION UNITS

Application of biology in the treatment of contaminated water. Study of the relationship between biological treatment and the effectiveness of water treatment units.

3 credits

EVSC 5510 RISK ASSESSMENT

The relationship between the exposure to contaminants and health risks. Concepts of toxicology and the movement of contaminants throughout the ecosystem will be discussed.

3 credits

EVSC 5515 DISPOSAL OF CONTAMINANTS

Physical and chemical mechanisms that define the disposal of contaminants. Discussion of the theoretical background on which existing models of the movement of contaminants is based. Prerequisite: EVSC 5010.

3 credits

EVSC 597__ SPECIAL TOPICS IN ENVIRONMENTAL SCIENCE

Critical analysis of current relevant topics in the area of environmental science. Prerequisite: Authorization of the department.

3 credits

EVSC 6101 RESEARCH METHODS APPLIED TO ENVIRONMENTAL SCIENCES I

Analysis of research methodologies in Environmental Sciences. Includes critical evaluation of literature and contemporary scientific research. The student must select the subject of a preliminary proposal related to the environment. Prerequisite: EVSC 5020. Grade P/NP.

3 credits

EVSC 6102 RESEARCH METHODS APPLIED TO ENVIRONMENTAL SCIENCES II

Design and planning of a thesis related to the environment. Selection of the research methodology, compilation and analysis of scientific information and the elaboration of a proposal. The student organizes the thesis committee, completes the proposal and makes the oral defense before his committee. Prerequisite: EVSC 6101. Grade P/NP.

3 credits

EVSC 699_ THESIS

Development of the thesis based on the written proposal of a topic related to the environment. Qualitative scientific research, meta-analysis or quantitative research that adds to knowledge in a study area, under the supervision of a thesis committee. The student must defend his thesis in a formal oral presentation. The student can register in Continuation of Thesis courses until completing the research work. Prerequisites: EVSC 6102 and authorization of the professor. Grade: P/NP.

3 credits

Courses in Family Counseling (FACO)**FACO 6020 ETHICAL AND LEGAL ISSUES OF FAMILY COUNSELING**

Development of the necessary skills to handle situations involving ethical and/or legal aspects in the exercise of the Family Counseling profession. Emphasis on Puerto Rico laws that affect the services provided by the professional counselor and the ethics that apply to them. Application of codes of ethics of the professional associations and the examiners of Professional Counselors of Puerto Rico in scenarios in which the professional counselor works.

3 credits

FACO 6025 HUMAN SEXUALITY

Scientific analysis of human sexuality as a fundamental element in the development of the human being. Includes the historical review of sexuality with its bio-psychosocial and spiritual approach. Review of the attitudes, the beliefs and the feelings related to human sexuality. Development of effective strategies of counseling for managing conflicts, dysfunctions and concerns related to sexuality in the Puerto Rican cultural context.

3 credits

FACO 6030 CONFLICT MANAGEMENT, CRISES AND LOSSES IN THE FAMILY

Review of the concept "conflicts" from the point of view of the family system and the healthful management of these as part of the therapeutic process. Analysis of family counseling in cases of crisis and losses from the bio-psychosocial and spiritual perspective. Includes the thanatological perspective in the integration of multidisciplinary efforts to cope with the critical experience of loss and death as a process of change. Application of theoretical frameworks, techniques, and ethical-legal issues that tend to strengthen humanistic and spiritual awareness of respect for human dignity.

3 credits

FACO 6040 FAMILY COUNSELING IN ADDICTION AND ABUSE CASES

Review of the strategies used for the prevention and treatment of addictions and abuse with a panoramic view of the interactions of family dynamics. Analysis of the basic concepts of the theory of family systems for their application and the use of motivational interviews as an effective tool in the therapeutic process, and the risk factors and protective factors in cases of addictions and abuse. Includes demonstration sessions of family counseling and visits to observe organizations/centers in which family counseling/therapy is applied.

3 credits

FACO 6050 CASE MANAGEMENT IN FAMILY COUNSELING

Analysis and application of therapeutic interventions to family or couple situations. Emphasis on the compilation of information, analysis and use of the screening process, assessment, treatment plans, documentation, referrals and evaluation. Includes the ethical-legal issues that are relevant to interventions.

3 credits

Courses in Finance (FINA)**FINA 6310 INTERNATIONAL FINANCIAL ADMINISTRATION**

Analysis of advanced concepts in managerial finance in international commerce from a managerial and corporate perspective. Examples of ethical and moral principles when administering financial resources. Comprehensive analysis of the international financial environment, exchange rates, risk management in international investments, financial institutions, policies and problems. Review of the different capital structures in an international environment.

3 credits

FINA 6420 INTERNATIONAL FINANCIAL MARKETS

Discussion of the operation of capital markets and money, cash flow accounts, risk, nature and structure of interest rates in global markets. Analysis of financial intermediaries from an international perspective, the role of multinational companies and the international bank. Formulation of the economic reasons for the growth of International Financial Markets and the regulatory problems in the International Bank.

3 credits

FINA 6430 INTERNATIONAL ANALYSIS OF INVESTMENTS PORTFOLIO

Analysis of the main indices of international capital, the emergent markets, risk management in the exchange rates and the detailed study of the concept of diversification in international investments. Comparison of multinational corporate shares and the evaluation of local and foreign profits, the anticipated yields and the risk in the investment portfolio in international markets.

3 credits

FINA 7101 CORPORATE FINANCE I

Evaluation of the theories and models of corporate finance and their application to financial policies that include the structure of capital, dividends, options and derivatives and corporate reconstructions.

3 credits

FINA 7102 CORPORATE FINANCE II

Evaluation of the theoretical and empirical aspects of corporate finance. Includes the theory of agency, signals, incomplete contracts, effects of incomplete information, the control and the corporate administration and the compensations of executives. Prerequisite: FINA 7101.

3 credits

FINA 7201 FINANCIAL MATHEMATICS

Analysis of the statistical inferences and mathematical models in research and in financial practice. Includes sampling, hypothesis and construction of financial models applied to credits, bonds, derivatives and options.

3 credits

FINA 8000 SEMINAR IN CORPORATIVE FINANCE

Evaluation of the theories and practices related to a specific topic of corporate finance in agreement with the interests of the students. Prerequisites: FINA 7102, 7201.

3 credits

FINA 8100 SEMINAR IN INVESTMENTS

Evaluation of different types from investments and administration of investment portfolios. Analysis of the processes included in the determination of the optimal investment portfolio and how to measure its performance. Prerequisites: FINA 7102, 7201.

3 credits

FINA 8500 SEMINAR IN FINANCIAL STRATEGIES

Evaluation of the theories and practices related to a specific topic of financial strategies in agreement with the students' research interest. Prerequisites: FINA 7102, 7201.

3 credits

FINA 8550 EPISTEMOLOGY APPLIED TO FINANCES

Evaluation of epistemological aspects in the context of research in finances. Includes the standards based on formal logic and routine, the models of explanatory and predictable logical positivism, problems of empirical studies, and the presumptions of the realistic research in the philosophy of science. Prerequisites: FINA 7102, 7201.

3 credits

FINA 8991 DOCTORAL DISSERTATION I

Definition of the topic of the student's doctoral dissertation. Evaluation of the research methodology, and the review of literature, under the supervision of the Doctoral Committee.

3 credits

FINA 8992 DOCTORAL DISSERTATION II

Collection and analysis of data corresponding to the student's research area, under the supervision of the Doctoral Committee.

3 credits

FINA 8993 CONTINUATION OF DOCTORAL DISSERTATION

Continuation of data analysis and final writing of the dissertation in the student's research area, under the supervision of the Doctoral Committee.

3 credits

Courses in Fine Arts (ARTS)

ARTS 5135 ART AND PUBLIC POLICY

Research and analysis of philosophical and political affairs that influence the relationship between the arts and government.

3 credits

ARTS 5140 PHILOSOPHY OF ART

Study and analysis of the principal trends in the philosophy of art and their influence upon this medium. Review of these trends within the context of Puerto Rican art: past, present and future.

3 credits

ARTS 5980 HISTORY OF PUERTO RICAN ART

Analysis of artistic evolution in Puerto Rican from pre-Columbian times to the present. Study of themes, styles and iconography and the influence of the different schools of universal art on Puerto Rican art.

3 credits

ARTS 6010 HISTORY OF ANCIENT ART

The history of art from the second century BC to the second century AD. Emphasis on the study of Egypt, and the Near East and the Aegean, Greek Etruscan and Roman arts.

3 credits

ARTS 6020 HISTORY OF MEDIEVAL ART

The history of art from the beginning of the Christian era. Includes the Byzantine, early Medieval, Romanesque and Gothic periods.

3 credits

ARTS 6030 HISTORY OF RENAISSANCE AND BAROQUE ART

The history of art of the Renaissance and Baroque periods. Emphasis on the Renaissance, high Renaissance, mannerism, Baroque periods and the eighteenth century, their manifestations in the Fine Arts and in European and American architecture.

3 credits

ARTS 6040 HISTORY OF MODERN ART

The history of modern art and the principal movements of the nineteenth and twentieth centuries. Analysis of these periods and their influence on western art.

3 credits

ARTS 6050 HISTORY OF ORIENTAL ART

The principal movements of oriental art: its particularities and influence on universal art.

3 credits

ARTS 6060 HISTORY OF PRE-COLUMBIAN ART

Overview of art in Latin America from the prehistoric period to the discovery of America. Analysis of the different indigenous cultures, their iconography and styles.

3 credits

ARTS 6070 HISTORY OF LATIN AMERICAN ART

The principal art movements in Latin America, the artists, and their social, political and historical context. Analysis of the development of contemporary Latin American art in its regional and universal context.

3 credits

ARTS 6080 HISTORY OF CONTEMPORARY PUERTO RICAN ART

The styles and trends in Puerto Rican art with special attention to the period of the 1950's to the present. The development of printmaking, the influence of the socioeconomic and political changes on Puerto Rican esthetics and the development of the arts.

3 credits

ARTS 6(111-115) ADVANCED CERAMICS I

Application of basic technical principles of ceramics in creative work. Analysis of construction by hand and by lathe and their possibilities as plastic processes. Introduction to the use of computerized programs for the calculation and formulation of clay and varnish formulas.

2-6 credits

ARTS 6(121-125) ADVANCED CERAMICS II

Exploration and research of specific problems of this medium. Statement and analysis of complex technical construction problems.

2-6 credits

ARTS 6(131-135) ADVANCED CERAMICS III

Experimentation in non-traditional techniques in this medium. Exploration with the use of mixed materials and techniques in the realization of artistic work.

2-6 credits

ARTS 6(141-145) ADVANCED CERAMICS IV

Study, technical and stylistic analyses of contemporary artistic works and their plastic possibilities.

2-6 credits

ARTS 6(211-215) ADVANCED PRINTMAKING I

Application of printmaking principles and techniques in creative work. Analysis of printmaking techniques, stencils, lithography and relief and their possibilities in the plastic process. Introduction to the use of the computer for the solution of graphic design problems.

2-6 credits

ARTS 6(221-225) ADVANCED PRINTMAKING II

Exploration and investigation of specific problems of this medium. Statement and analysis of technical problems of complex printings. Management and manipulation of images in the computer for the production of positives and final works.

2-6 credits

ARTS 6(231-235) ADVANCED PRINTMAKING III

Experimentation in non-traditional techniques in this medium. Exploration in the use of mixed materials and techniques. Management and the appropriate and safe use of materials and equipment in the accomplishment of printed works.

2-6 credits

ARTS 6(241-245) ADVANCED PRINTMAKING IV

Study, technical and stylistic analyses of contemporary artistic works and their application in printmaking.

2-6 credits

ARTS 6(311-315) ADVANCED PAINTING I

Application of principles and techniques of painting in creative works. Discussion and analysis of techniques of painting, oil, acrylics and others, and their possibilities in the production of pictorial works.

2-6 credits

ARTS 6(321-325) ADVANCED PAINTING II

Exploration and investigation of specific problems of this medium. Formal statement and analysis of technical problems in achieving pictorial pieces.

2-6 credits

ARTS 6(331-335) ADVANCED PAINTING III

Experimentation in non-traditional techniques in this medium. Exploration in the use of mixed materials and techniques. Management and appropriate use of materials in the creation of pieces.

2-6 credits

ARTS 6(341-345) ADVANCED PAINTING IV

Study, technical and stylistic analyses of contemporary artistic works and their application to pictorial pieces.

2-6 credits

ARTS 6(411-415) ADVANCED DRAWING I

Application of principles and techniques of drawing in creative works. Analysis of plastic qualities of drawing techniques: abrasive and humid mediums.

2-6 credits

ARTS 6(421-425) ADVANCED DRAWING II

Exploration and investigation of specific problems of this medium. Formal statement and analysis of technical problems in performing artistic drawings.

2-6 credits

ARTS 6(431-435) ADVANCED DRAWING III

Experimentation in nontraditional techniques in this medium. Exploration in the use of materials and mixed techniques.

2-6 credits

ARTS 6(441-445) ADVANCED DRAWING IV

Study, technical and stylistic analyses of contemporary artistic works and their application to drawing of artistic pieces.

2-6 credits

ARTS 6(511-515) ADVANCED SCULPTURE I

Application of principles and techniques of sculpturing in creative works. Analysis of sculpturing techniques: techniques of subtraction and addition of materials and their possibilities as a plastic process.

2-6 credits

ARTS 6(521-525) ADVANCED SCULPTURE II

Exploration and investigation of specific problems of this medium. Formal statement and analysis of technical problems of complex structures. Management and appropriate and safe use of materials and equipment in the construction of sculptured pieces.

2-6 credits

ARTS 6(531-535) ADVANCED SCULPTURE III

Experimentation in nontraditional techniques in this medium. Exploration in the use of materials and mixed techniques in the creation of interior and exterior sculptures.

2-6 credits

ARTS 6(541-545) ADVANCED SCULPTURE IV

Study, technical and stylistic analyses of contemporary artistic works and their application to sculptural pieces.

2-6 credits

ARTS 6(611-615) ADVANCED PHOTOGRAPHY I

Application of principles, techniques and chemical processes of black and white photography in creative work.

2-6 credits

ARTS 6(621-625) ADVANCED PHOTOGRAPHY II

Exploration and investigation in specific problems of color photography and its possibilities as a creative process. Management and use of specialized chemicals and equipment to obtain photographic work in color.

2-6 credits

ARTS 6(631-635) ADVANCED PHOTOGRAPHY III

Experimentation in nontraditional techniques in this medium. Exploration in the use of materials, mixed techniques and technology to obtain photographic images. Adequate use of materials utilized in conservation of photographs. Production of photographic works of greater size for publication and photographic documentation.

2-6 credits

ARTS 6(641-645) ADVANCED PHOTOGRAPHY IV

Study, technical and stylistic analyses of contemporary artistic works and their application to photography.

2-6 credits

ARTS 6940 SEMINAR IN ART ADMINISTRATION

Topics related to the administration and supervision of organizations and/or facilities related to the arts. Emphasis on areas such as preparation and administration of budgets, collections, inventories and those areas particular to the infrastructure of physical facilities.

3 credits

ARTS 6944 SEMINAR IN MUSEOLOGY

Theoretical and practical study of the work, organization and operation of museums. Experience supervised by a university professor in a museum or similar institution.

3 credits

ARTS 6954 SEMINAR IN GALLERY ADMINISTRATION

Theoretical and practical study of the work, organization and operation of an art gallery. Experience supervised by a university professor in an art gallery or institution with similar functions.

3 credits

ARTS 6964 SEMINAR: PRACTICE, THEORY, AND CRITIQUE OF ART

Study and analysis of the theories, trends and critiques of art with emphasis on contemporary works in Puerto Rico and abroad. Identification and analysis of controversial aspects of production and the role of an artistic critic.

3 credits

ARTS 6971 CONCEPT AND THEME IN THE PLASTIC ARTS PROPOSAL

Evaluation of the conceptual aspects of plastic work with emphasis on one's own artistic work. Includes visual planning, the image and forms.

1 credit

ARTS 6972 DOCUMENTATION AND RESEARCH IN THE PLASTIC ARTS PROPOSAL

Assessment of techniques and procedures of thematic research for the strengthening of the conceptual aspects in one's own work. Prerequisite: ARTS 6971.

1 credit

ARTS 6973 SPECIAL PROBLEMS III

Analysis of the historical, ethical and philosophical background influencing new artistic trends. Readings, discussions and examination of contemporary art issues.

3 credits

ARTS 6974 CONCEPT AND COMPOSITION IN THE ARTISTIC PROPOSAL

Consideration of the artistic concept in its dimension of the verbal and written language. Includes the accomplishment and presentation of works directed to integrate the skills developed in the seminars of the concept and research. Prerequisite: ARTS 6972.

1 credit

ARTS 6995 CREATIVE PROJECT

Work, discussion and realization of a creative project as a substitution for the written thesis. This course will conclude with the presentation of an exhibition of the art pieces in the gallery of the University or in another suitable public area. Prerequisites: Permission of the advisor and the completion of the specialty requirements. Grade: P/NP.

6 credits

ARTS 6996 CREATIVE PROJECT I

Development of a proposal of a Creative Project of your artistic work. Requires authorization of the adviser and having completed the foundations and specialty requirements. Grade: P/NP.

3 credits

ARTS 6997 CREATIVE PROJECT II_

Presentation of an exhibition of the work in a selected scenario. Requires authorization of the adviser and having completed the foundations requirements in plastic arts and the specialty. This course does not allow the grade of incomplete. Prerequisite: ARTS 6996_. Grade: P/NP.

3 credits

Courses in Global Logistics (GLLO)

GLLO 6100 INTRODUCTION TO GLOBAL LOGISTICS

Analysis of the fundamental principles of logistics, transportation and distribution in the global economy environment. Comparison between the local and regional business value chains, and the value chains of international and globalized companies. Description of the functions of the different components of a value chain in an environment within globalized logistics. Assessment of global logistics as a strategy of sustained competitiveness.

3 credits

GLLO 6200 TECHNOLOGY FOR GLOBAL LOGISTICS

Application of the fundamental technological principles as support for the processes of logistics, transportation and distribution in the environment of the global economy. Comparison of the technological tools of the local and regional business value chains with those of the value chains of international and globalized companies. Evaluation of the functions of the different components of a value chain and how their administration may be optimized with the implementation of technological tools.

3 credits

GLLO 6300 SECURITY IN THE GLOBAL VALUE CHAIN

Study of the foundations of global logistic security. Analysis of the fundamental principles of security in the value chain related to: regulations, implementation models, technology and evaluation criteria. Comparison of the aspects of security of the local business value chains with those of the international and globalized companies.

3 credits

GLLO 6400 ADVANCED GLOBAL LOGISTICS

Study of advanced topics of global logistics. Emphasis on the application of metrics to logistic systems of transportation and distribution in the environment of the global economy. Analysis of the functions of the different components of a value chain in an environment globalized within globalized logistics.

3 credits

Courses in Geography (GEOG)

GEOG 5000 TERRESTRIAL AND ENVIRONMENTAL SCIENCES

Analysis of the physical-biological environment in which human beings live. Includes the atmosphere, hydrosphere and lithosphere. Emphasis on the processes that structure and mold the surface of the Earth and the biosphere. Analysis of the repercussions of human activities in the physical-biological environment. Description of the physical-geographic environment as a resource to satisfy the basic activities of human beings, such as: agriculture, mining, housing, transportation. Analysis of the effect of the human population on the regional and world-wide environment.

3 credits

Courses in Health and Physical Education (HPER)

HPER 5000 SELECTED BIBLIOGRAPHY IN PHYSICAL EDUCATION

Analysis of fundamental topics in the physical education field using current techniques and research methods. Learning experiences in the traditional classroom and the virtual learning modalities are integrated. Requires the development of a research project or topic related to the sub specialization area.

3 credits

HPER 5010 PHILOSOPHY OF PHYSICAL EDUCATION

Philosophies of physical education through various ages. Modern philosophies of physical education in implementing Puerto Rico's philosophy of education. Prerequisite for all other graduate courses in health and physical education.

3 credits

HPER 5020 PROBLEMS AND ISSUES IN PHYSICAL EDUCATION

Study of the problems and issues that physical education faces today: facilities, equipment, professional preparation, philosophy, objectives, budget and supervision. Identification and discussion of controversial issues. Prerequisite: HPER 5010.

3 credits

HPER 5030 CONSTRUCTION AND MAINTENANCE OF PHYSICAL EDUCATION FACILITIES

Principles, design, planning; and construction of physical education and recreational facilities with emphasis on tropical areas, both indoor and out. Maintenance problems identified and discussed. Prerequisite: HPER 5010.

3 credits

HPER 5040 CURRICULUM DEVELOPMENT IN PHYSICAL EDUCATION

Integration of the principles and practices in the development of curriculum in physical education at all levels. Analysis of applicable approaches, models and designs of curricular development in physical education.

3 credits

HPER 5050 EVALUATION, ASSESSMENT AND MEASUREMENT IN PHYSICAL EDUCATION

Application of the concepts and techniques of evaluation, assessment and measurement in physical education. Analysis of the processes of planning, preparation, administration, correction and interpretation of evaluation instruments in relation to the goals and objectives of the physical education program. Use of statistical measurements in the interpretation of results. Includes practical experience and time in computer laboratories.

3 credits

HPER 5070 MODELS AND STYLES OF TEACHING PHYSICAL EDUCATION

Discussion of approaches in the creation of learning environments appropriate for students and the educational objectives. Analysis of the fundamental principles of teaching styles applied to the physical education discipline. Includes experimentation with the styles.

3 credits

HPER 5300 SPORTS PSYCHOLOGY

Analysis of emotional and psychological problems related to physical activity and sports. Discussion of research related to motivation, attitudes and emotional problems that form part of sports performance. Application of intervention strategies and technological modalities to modify behavior.

3 credits

HPER 6010 SUPERVISION IN PHYSICAL EDUCATION

Analysis of models, systems, modalities, approaches and instrumentation for the development of supervision in the educational environment. Implementation of supervision styles in a cycle of support visits to teachers. Integration of technology in the supervision processes.

3 credits

HPER 6020 RECREATION IN PUERTO RICO

History, principles, objectives, programs, leadership facilities and equipment, finances and evaluation of public and private recreation in Puerto Rico. The future of recreation. Prerequisite: HPER 5010.

3 credits

HPER 6030 PREVENTION AND REHABILITATION OF ATHLETIC INJURIES

Analysis of the fundamental principles for the prevention, treatment and rehabilitation of muscular skeletal injuries associated with the practice of physical activity, exercise and sports. Emphasis on the epidemiology of the injuries and pathophysiology, types of injuries of the trunk and the upper and lower extremities. Discussion of the basic

concepts in the rehabilitation of injuries, including the role of physical therapy and athletic training in this process. Requires passing training in Cardiovascular Resuscitation.

3 credits

HPER 6040 SOCIOLOGY OF PHYSICAL ACTIVITY AND SPORTS

Sports and physical activity as a social institution and how this affects the dynamics of other social institutions. Prerequisite: HPER 5010.

3 credits

HPER 6070 ADAPTED PHYSICAL EDUCATION

Adaptations of physical education with emphasis on individualized perceptual motor skills. Organization and management of physical education and recreational programs for mentally and/or physically handicapped individuals. Prerequisite: HPER 5010.

3 credits

HPER 6100 TRAINING THEORY AND METHODOLOGY

Application of advanced principles of training to improve the athlete's performance. Discussion of biomedical, psychological, social, nutritional and physical aspects of the trained person. Includes development of force, flexibility, speed and other physical aspects. Analysis of factors for technical preparation and other aspects of individual and team training that benefit the future trainer.

3 credits

HPER 6110 PHYSIOLOGY OF EXERCISE

Consideration of the effect of physical activity, sports and vigorous exercise on the functions of the human body. Critical analysis of the results of scientific research in the responses and adaptations of bioenergetics, neuromuscular, pulmonary, circulatory and endocrine functions as a result of physical activity, exercise and sports training. Discussion of the different variables that affect physical and sports performance. Includes practical experience.

3 credits

HPER 6220 ANATOMY AND KINESIOLOGY

Study of muscles, tendons, ligaments and bones and their function in human movement. Includes the biomechanical aspects of movement. Includes practical experience. Prerequisite: HPER 5010.

3 credits

HPER 6330 PREVENTION AND REHABILITATION OF CARDIOVASCULAR PROBLEMS

Instruments and methods necessary for detecting cardiac abnormalities through the use of the electrocardiogram (EKG) and other laboratory equipment. Prescription of the appropriate amount of exercise in rehabilitation programs. Includes practical experience. Prerequisite: HPER 5010.

3 credits

HPER 6440 MOTOR LEARNING AND CONTROL

Analysis of the phenomenon of human movement in the scenario of physical activity and the areas that include motor conduct. Discussion of the different theoretical perspectives explaining learning and motor performance. Application of instruments, techniques and strategies to maximize motor learning.

3 credits

HPER 6550 HEALTH, NUTRITION AND PHYSICAL WELL-BEING

Preventive techniques for the most common health problems. Includes procedures, nutritional evaluation, special diets and prescription of exercise. Practical experience in the design and application of sports medicine programs. Prerequisite: HPER 5010.

3 credits

HPER 6660 BIOMECHANICS

Skills in handling laboratory instruments used in the mechanical analysis of human movement, especially in the area of physical education and sports. Application of physical laws and mathematical principles to interpret displacement,

speed and direction. Computer use for cinematographic analysis. Includes laboratory experience. Prerequisites: HPER 5010, 6220.

3 credits

HPER 6910 PRACTICUM

Practical experience under the supervision of a faculty member. In this practice, students will develop competencies related to their specialization. Students may be assigned to education or commercial institutions, clinics, laboratories or agencies that offer services related to physical education and related fields.

3 credits

HPER 6970, 6973 SEMINAR

Students are to assist coordinators of physical education or recreation leaders in various municipalities. This assistantship serves as laboratory experience in observing and evaluating the various phases of the Program. Observations and evaluations to be discussed during the Seminar.

1. Students are assigned to visit recreational resources in various parts of the Island and required to explore areas that could be developed for recreational purposes and to study present recreational facilities that could be improved and expanded.
2. Students may select a research project in an area of individual need and interest. The project may be related to a problem or a situation observed during their visits to schools or recreation areas.
3. Students who have not had any experience in teaching or recreation leadership are required to spend from one-third to one-half of their time in each course in teaching or working as recreation leaders and the rest of the time in assisting in various programs such as intramural, interscholastic competition, field trip and summer camps. Prerequisite: HPER 5010.

3 credits per course

Courses in History (HIST)

HIST 5000 HISTORY OF THE ABORIGINAL CULTURES OF THE AMERICAS

Historical study of the human presence in the Americas. This course will cover the different ethnic groups, their adaptation to the environment, social organization, material culture, geographic distribution and outside influences from the humanistic viewpoint using available documentation for reference.

3 credits

HIST 5005 HISTORY OF PUERTO RICO 1800 - 1898

Study of the changes that occurred in the politics, economy, and society of 19th century Puerto Rico. This course will study the main events that brought changes in the political, social and economic life of the island. Special attention will be given to the Passbook Law, the Royal Economic Society of Friends of the Nation, the Lares Rebellion, the abolition of slavery, and the rise of political parties.

3 credits

HIST 5010 INTERNATIONAL RELATIONS BETWEEN THE UNITED STATES AND PUERTO RICO, 19TH. - 21ST. CENTURIES

An analysis of the economic and political relations between the United States and Puerto Rico from the 19th century to the present. Special attention will be given to national and global commercial agreements.

3 credits

HIST 5015 COLONIAL INSTITUTIONS IN AMERICA

Review of the colonial history of Hispanic America through its institutions. Analysis of the different governmental structures with emphasis on their antecedents, organization, functions, relations with other institutions and their posture within the general political scheme that prevailed in America.

3 credits

HIST 5020 SLAVERY IN THE AMERICAS

A study of the causes and consequences of slavery in the Americas and the different living conditions slaves experienced. This course provides the opportunity to study and analyze the reasons and causes for slavery in America. It will analyze the slave trade and the economic and spiritual aspects of the institution of slavery.

3 credits

HIST 6000 COLONIZATION, SOCIETY AND CULTURE OF THE SPANISH ANTILLES 16TH – 18TH CENTURIES

Analysis of colonial life comparing Cuba, Hispaniola and Puerto Rico from the beginning of Spanish colonization. The study will be placed in the context of the political, administrative, and institutional organization of the Spanish Empire. This course examines, from a critical point of view, the settlement and distribution of the Spanish territories in the 16th - 18th centuries. The study will focus on Puerto Rico but will make comparisons with the other Antilles.

3 credits

HIST 6005 PUERTO RICAN HISTORIOGRAPHY

Analysis of the development of Puerto Rican historical writing from 1508 to the present. The course will be divided into two parts: 1) writers of chronicles and 2) historians.

3 credits

HIST 6010 METHODOLOGIES FOR HISTORICAL RESEARCH

Study of methods in developing a research project in history. Discussion of specifics in how to carry out research.

3 credits

HIST 6020 HISTORIOGRAPHY OF THE AMERICAS

Critical analysis of historical writings of the Americas from the 15th century to the present. Both chroniclers and historians will be studied.

3 credits

HIST 6904 ANALYSIS AND DEVELOPMENT OF HISTORICAL THOUGHT I

Study of the most outstanding problems of history from antiquity to the Middle Ages. Emphasis on the development of methods, techniques and approaches used by historians, as well as the relation of these processes to the formation of historical thought. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of History.

3 credits

HIST 6905 ANALYSIS AND DEVELOPMENT OF HISTORICAL THOUGHT II

Study of the most outstanding problems of history from the Middle Ages to the present. Emphasis on the development of methods, techniques and approaches used by historians, as well as the relation of these processes to the formation of historical thought. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of History.

3 credits

HIST 6906 HISTORICAL CONTEXT OF THE WESTERN WORLD

Analysis and interpretation of historical development of the Western World through the study of different historiographical sources. Emphasis on the most significant institutions, movements and trends of a social, political, economic and cultural nature that have contributed to the evolution of the present day world. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of History.

3 credits

HIST 6907 HISTORICAL CONTEXT OF CONTEMPORARY PUERTO RICO

Analysis and interpretation of the historical development of contemporary Puerto Rico. Emphasis on the most significant economic and social problems within the framework of the political context of the twentieth century. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of History.

3 credits

HIST 6908 HISTORICAL CONTEXT OF THE UNITED STATES

Analysis and interpretations of economic, social, political and cultural development of the United States through the study of historical document and historiographic sources. Emphasis on the impact of the United States as a great power in its relation with the rest of the world. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of History.

3 credits

HIST 6909 HISTORICAL CONTEXT OF LATIN AMERICA

Comparative analysis of the historical processes in the different Latin America countries, including Brazil. Study of the construction and development of the Latin American nations since the wars of independence to the present. Emphasis on the unity, diversity and development of Latin American societies. Course designed for students in the Master of Education in Curriculum and Teaching of History.

3 credits

HIST 6980 THESIS PROPOSAL

Discussion of the theory, historiography and method related to the topic and problem of the research study. Elaboration and writing of the thesis proposal. Prerequisites: Have approved 21 credits of the Program, including courses HIST 6005 and HIST 6020. Grade: P/NP.

3 credits

HIST 6990 THESIS

Design, planning and development of a research project related to the history of the Americas. A variety of methodologies in historical research will be used. The student may register as many times as necessary in this course to complete the thesis. Prerequisite: permission of the department chairman or the academic advisor. Grade: P/NP.

3 credits

HIST 7000 POPULAR CULTURE AND NATIONALISM IN LATIN AMERICA

This course examines race, class and ethnicity in Latin America and how they have significantly influenced national identity, with emphasis on Brazil, Cuba and Peru. Analysis on the cultural contributions of these countries to the rest of the Americas in music, the arts and literature.

3 credits

HIST 7005 ISLAMIC SOCIETIES IN THE AMERICAS DURING THE 20TH CENTURY

Analysis of the religious aspects, ethnic relations, the development of social institutions and the relations between government and religion. Review of the contributions of societies, ethnic groups, social classes, political systems, the government and religious beliefs have influenced the history of the Americas.

3 credits

HIST 7010 RUSSIA AND THE AMERICAS

Analysis of the influence of Russia and the Soviet Union in the Americas from the beginning of the contemporary epoch to the present. Historical review of political, ideological, economic and military manifestations that typify the projection of the international power of the Russian-Soviet state.

3 credits

HIST 7015 THE UNITED STATES IN LATIN AMERICA: 20TH CENTURY

Critical analysis of the foreign policy of the United States and its relation with the Latin American region.

3 credits

HIST 7020 TOPICS IN HISTORY OF AMERICA I

Historical review from the native cultures to the conclusion of the different processes of independence. Analysis from the most recent historiography on historical topics of the Americas of that period.

3 credits

HIST 7030 TOPICS IN HISTORY OF AMERICA II

Historical review from the conclusion of the different processes of independence to the present. Analysis from the most recent historiography on the historical topics of the Americas of that period.

3 credits

HIST 7040 TOPICS IN HISTORY OF PUERTO RICO: 20TH CENTURY

Historical review from 1898 to the present. Analysis of the different approaches of the great historical topics of Puerto Rico during this period from the most recent historiography and through a compared methodology.

3 credits

HIST 8970 HISTORICAL RESEARCH METHODOLOGY

Application of research and writing skills needed to prepare a historical research project. The student will apply and integrate knowledge acquired from primary and secondary historical sources. Requires having completed 24 specialization credits.

3 credits

HIST 8980 THE DOCTORAL DISSERTATION PROPOSAL

Planning, design, preparation, development and defense of the dissertation research proposal in History and the historiography articles. Development of the study problem related to the dissertation proposal, identification of the topics and the secondary bibliography that will be analyzed to write up two historiography papers. The student will register as many times as necessary to complete both requirements. Prerequisite: HIST 8970. Grade: P/NP.

3 credits

HIST 8990 DISSERTATION

Preparation, presentation and defense of the doctoral dissertation. This course completes the work for the degree in Doctors in Philosophy in History. The student may register as many times as necessary for the completion of the dissertation. Prerequisite: HIST 8980. Grade: P/DP.

3 credits

Courses in Human Resources (HURS)**HURS 7000 HUMAN RESOURCES MANAGEMENT**

Critical analysis of the principles and practices in recruitment, selection, development, compensation and effective use in human resources in modern business. Human resources planning in business. Study of management requirements, change in private and non-profit organizations.

3 credits

HURS 8010 COMPARATIVE ADMINISTRATION

Analysis of cultural norms and values in different periods, particularly in Latin America and the Caribbean. Evaluation of the implications of cultural differences in managerial decision making. Analysis of critical factors in the formulation of corporative strategy in different countries.

3 credits

HURS 8020 LABOR LEGISLATION

Critical examination of current and proposed legislation, including the federal and Puerto Rican labor laws.

3 credits

HURS 8040 INITIATION OF COOPERATION BETWEEN MANAGEMENT AND WORKERS

Review of theories, principles and concepts on which initiatives are established such as Quality Work Life (QWL), Quality Circles (QC), and the Employees Shared Ownership Policy (ESOP), among others, in union and non-union environments.

3 credits

HURS 8050 LABOR NEGOTIATIONS

Analysis of the function of the negotiator in labor disputes with labor relations system. Evaluation of bargaining agencies and negotiation in the public and private sector.

3 credits

HURS 8060 HIGH-TECHNOLOGY MANAGEMENT

Critical analysis of the existing tools to implement and use high technology to ensure high profit in long term investment, thus achieving a competitive advantage.

3 credits

HURS 8070 HUMAN RESOURCES PLANNING, RECRUITMENT AND SELECTION

Analysis of the concepts and techniques of human resources planning, recruitment and selection. Review of the scientific, legal and administrative aspects related to planning, recruitment and selection of human resources according to the organization's needs.

3 credits

HURS 8075 COMPENSATION ADMINISTRATION

Critical analysis of the managerial aspects of motivation and compensation principles. Comparison of the practices to administer, operate, research and design an effective compensation program. Includes research of selected topics in compensation administration.

3 credits

HURS 8085 HUMAN RESOURCES DEVELOPMENT

Critical analysis of the human resource development processes identified in theory, research, and the learning experiences of employees, as developed by the organization.

3 credits

HURS 8090 MANAGEMENT OF CHANGE

Analysis of the requirements for generating and administering change in organizations. Development of research on subjects related to change management. Critical analysis of the theory of decisions and strategies in a global environment that is in continuous change.

3 credits

HURS 8100 DISCRIMINATION IN EMPLOYMENT

Analysis of Title VII of the Federal Civil Rights Law as well as other similar local and federal statutes related to employment discrimination. Study of the theories of discrimination and the available procedures and remedies under said laws. Examination of the principles of legal interpretation and research methods in the area. Includes research of topics related to discrimination in employment.

3 credits

HURS 8946 SEMINAR OF SPECIAL TOPICS IN HUMAN RESOURCES

Review of the current problems related to the field of human resources and the management of problems confronted on a daily basis by company management.

3 credits

Courses in Information Security (INSE)

INSE 5101 FUNDAMENTALS OF SECURITY IN NETWORKS I

Review of practices for the detection and prevention of intrusions from the outside-inside of an information system. Description of the last generation techniques and tools used to diminish the vulnerability of information systems. Requires additional time in a virtual laboratory.

3 credits

INSE 5102 FUNDAMENTALS OF SECURITY IN NETWORKS II

Analysis of the vulnerability of digital electronic systems and the security measures and standards. Development of efficient and proactive defense structures. Requires additional time in a virtual laboratory. Prerequisite: INSE 5101.

3 credits

INSE 5140 SECURITY IN E-COMMERCE

Analysis of the authentication, authorization and verification of violations (impossibility of negation) of users in e-commerce. Review of the attacks of hackers in systems with different safety measures. Classification of commercial transactions and their security aspects, such as the legal and social aspects that apply to e-commerce.

3 credits

INSE 5201 FORENSIC INFORMATICS I

General review and application of the tools and the necessary bases in the world of Forensic Science Informatics. Discussion and research of cybernetic crimes. Identification of the possible failures of security, their origin and the evidence of vulnerability at the security levels. Requires additional time in a virtual laboratory.

3 credits

INSE 5202 FORENSIC INFORMATICS II

Review of evidences of attacks to the Web. Analysis of emails, of movable devices and the strategies for the handling and presentation of evidence. Evaluation of the legal aspects and the future trends of Forensic Science Informatics. Requires additional time in a virtual laboratory. Prerequisite: INSE 5201.

3 credits

INSE 5400 SECURITY IN NETWORKS OF VOICE ON INTERNET (VOIP)

Analysis of the foundations related to the use of the Internet Protocol (IP) for making voice calls, emails, instantaneous messages and Web pages through computers or cellular telephones. Review of the technologies that make up VoIP, which transmits voice and other multimedia data through the Web. Evaluations of the threats, the risks and the security of the VoIP technologies. Requires additional time in a virtual laboratory.

3 credits

INSE 5600 SECURITY IN DATABASES

Analysis of measures and levels of security applied to the relational databases in client/server environments, as well as privacy rights. Evaluation of the different types of vulnerability, the risks and the safety measures in data bases. Prerequisite: INSE 5101.

3 credits

INSE 6100 PRACTICES FOR THE DETECTION AND PREVENTION OF INTRUSIONS

Detection and analysis of intrusions to an information system, from the point of view of a hacker. Design and implementation of a prevention plan to avoid future intrusions. Configuration of a System of Detection Intrusion (SDI). Recovery and documentation of a system affected by intrusions. Requires additional time in a virtual laboratory. Prerequisites: INSE 5101, 5201.

3 credits

INSE 6120 RISK ANALYSIS

Analysis of risk and the planning of policies related to security in networks. Review of different levels of risk of the quality of the systems, and the quantitative and qualitative analysis that measure their risk. Evaluation of plans of contingency in the attacks or situations that breach or alter the security of the networks or the systems. Includes cybernetic crimes, their forensic research and their relation with hackers. Prerequisite: INSE 5101.

3 credits

INSE 6130 RESEARCH METHODOLOGY

Analysis of different methodologies of quantitative and qualitative research. Includes the review of the fundamental concepts of research applied to the systems security market.

3 credits

INSE 6200 AUDITING OF INFORMATION SYSTEMS

Evaluation of auditing systems processes that include situations of disaster and their recovery. Identification and correction of the diverse vulnerabilities that could appear in an exhaustive investigation of communications network, workstations or servers. Prerequisites: INSE 5102, 5202.

3 credits

INSE 6400 SPECIAL TOPICS IN SECURITY

Discussion of topics related to the field of information security in diverse scenarios. Prerequisites: INSE 5202, 6100.
3 credits

INSE 6980 DEVELOPMENT OF A SECURITY PROJECT

Development of a strategic security plan for the analysis of vulnerable situations in a company's network. Elaboration of a practical or theoretical project. Previous authorization of the professor and the Coordinator of the Program is required. Prerequisites: INSE 5102, 5202, 6100, 6120 and INSE 6130. Grade: P/NP.

3 credits

Courses in International Business (INBS)**INBS 5000 INTERCULTURAL NEGOTIATION AND COMMUNICATION IN INTERNATIONAL BUSINESS**

Analysis of the importance of communication in the different cultures and its influence in business relations; the development and application of communication strategies in international and multicultural business relations; the study of the implications of these international business relations.

3 credits

INBS 5005 PROFESSIONAL WORKSHOP

Development of research competencies for the study of the international businesses. Analysis of the international sociocultural implications that affect this discipline. Grade P/NP.

2 credits

INBS 5020 INTERNATIONAL MACROECONOMICS

Review of the essential elements of the macroeconomic theoretical frame that explain the determinants of the international movements of capital, imbalances in commercial exchange and the nominal and real exchange rates. Discussion of the stable economic policy from a global perspective and its controversies.

3 credits

INBS 6000 INTERNATIONAL BUSINESS MANAGEMENT

Ample study and exploration of problems and essential elements in the development and management of international business. Overview of the activities that take place in a globalized, dynamic, complex, and highly competitive environment.

3 credits

INBS 6010 INTERNATIONAL BUSINESS LAW

Basic legal aspects of international business and finance. The laws and regulations that rule the functions and operation of business at an international level.

3 credits

INBS 6020 INTERNATIONAL ECONOMIC POLICY

Evaluation of the economic policies originating in international institutions, which affect national economies. Analysis of aspects, such as international commerce and exchange and their impact on economic growth and strategies for competitiveness. Includes the analysis of decisions and strategies related to a globalized environment and one of constant change.

3 credits

INBS 6070 GLOBALIZATION: FOUNDATIONS OF CONTEMPORARY INTERNATIONAL BUSINESS RELATIONS

Evaluation of the development of globalization in an interdisciplinary context. Critical analysis of the consequences of contemporary globalization.

3 credits

INBS 6080 INTERNATIONAL RELATIONS AND CONTEMPORARY AFFAIRS OF ECONOMY AND INTERNATIONAL BUSINESS

Analysis of the classic and contemporary arguments of the Theory of International Relations. Discussion of international policies and their effects on international commerce.

3 credits

INBS 6090 INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL CIVIL SOCIETY: THEIR INFLUENCE IN INTERNATIONAL RELATIONS AND BUSINESS

Analysis of the historical development, the importance and influence of the different types of non-state actors in the interaction of international relations. Review of the influence of civil society in international relations, its effects and interaction in international business.

3 credits

INBS 6210 RESEARCH METHODOLOGY IN INTERNATIONAL BUSINESS

Development of research projects with emphasis on the applicable methodologies in the context of the international business. Prerequisite: Have completed 36 credits of the specialization with a minimum average of 3.00.

3 credits

INBS 6310 INTERNATIONAL HUMANITARIAN ACTIONS: PHILANTHROPY AND BUSINESS OPPORTUNITIES

Review of the role of humanitarian affairs in international policy from the perspective outlined by the United Nations Organization (UN) for the post-9/11 world. Evaluation of ethical matters: contemporary philanthropy and the benefits for “business opportunities”. Critical analysis of the intrinsic problems of the diverse actors implied in humanitarian aid.

3 credits

INBS 6905 INTERNATIONAL INTERNSHIP

Educational experience abroad in areas related to international business. To enroll in this course, students must have the approval of the Director of the Campus Department. Grade P/NP.

3 credits

INBS 6910 PROFESSIONAL PRACTICE

Integrated professional experience in work scenarios in companies with an international emphasis. This will be carried out under the supervision of a faculty member and will consist of a minimum of eight (8) hours weekly for a minimum of 135 hours per academic term. Prerequisite: Have completed a minimum of 36 credits, of which 24 must be in the specialization with a minimum academic grade point index of 3.0. Grade: P/NP.

3 credits

INBS 6970 SEMINAR: BUSINESS ENVIRONMENT AND ADMINISTRATIVE PRACTICES OF THE CARIBBEAN AND LATIN AMERICA

Analysis of the most significant geographical, political, and economical aspects of the Caribbean and Latin American regions and their application to pertinent administrative functions. Study of the current international treaties.

3 credits

INBS 6990 CONSULTING/RESEARCH PROJECT

Development of a research or consulting project on international business and other topics related to the study program. Prerequisite: INBS 6210. Grade P/NP.

3 credits

Courses in International Business Administration (IBAD)

IBAD 5100 RESEARCH IN THE INTERNATIONAL ENVIRONMENT

Presentation of the importance of the research method and its significance in developing international businesses successfully. Review of concepts of sampling, measurement, reliability, validity, data collection, descriptive statistics and inferential statistics. Identification of the methods of experimental and non-experimental research, research design, writing of a research proposal, qualitative, quantitative and historical research. Design of the search for information at the international level.

3 credits

IBAD 5110 STRATEGIC INTERNATIONAL ADMINISTRATION

Discussion of the challenges and opportunities faced by the manager in an international business environment. Study of multinational companies, markets in North America, Europe and Asia, international policies, economic integration, culture, business ethics, international exchange and finances. Review of strategic global planning, organizational, production and marketing strategies. Demonstration of concepts of political risk strategies, and negotiations, corporate and national competitiveness.

3 credits

IBAD 5210 INFORMATION SYSTEMS AND ELECTRONIC BUSINESS

Presentation of Information Systems in companies with global presence. Discussion of planning elements, analysis, design, development, implementation, decision making and maintenance of information systems and local and corporate networks. Analysis of E-Commerce, E-Business, E-Money and M-Commerce systems. Contrast of ethical and, legal principles and security.

3 credits

IBAD 5320 GLOBAL ENVIRONMENT OF BUSINESS

Comparison of local and foreign perspectives that form the context for business in a diverse and interdependent world. Application of the concepts of diversity in socio-cultural, ethical, political, legal, regulatory and national environment aspects, and the impact of demographic diversity in organizations. Review of markets, economies and consumer behavior in different countries.

3 credits

IBAD 5410 INTERNATIONAL DISTRIBUTION

Study of the concepts of foreign freight transportation, international transportation and freight storage. Analysis of the documentation related to international distribution and the different distribution and export channels.

3 credits

IBAD 6971 SPECIAL PROJECT IN INTERNATIONAL BUSINESS ADMINISTRATION

Discussion of planning, strategies and development of a special project in the field of the specialization selected in International Business Administration. Analysis of ideas, concepts, situations and the main problems related to international business. Evaluation of experiences in the specialization area where students will integrate and implement theoretical foundations acquired throughout their academic training. Development of a functional project or a research project. Oral and written presentation of the research work. This project must be focused on the international level. Prerequisite: have passed all the other core and specialization courses.

3 credits

Courses in Interregional and International Business (INBU)

INBU 7100 INTERNATIONAL AND GLOBAL BUSINESSES POLICY AND STRATEGY

Formulation of the company's policy and strategy in an international context. Simulations of intercultural negotiations. Includes the development of an international strategy for a local company.

3 credits

INBU 7120 GLOBAL MARKETING

Analysis of marketing and the global and international implications with emphasis on Latin American and Caribbean companies. Review of marketing theory and practice across national and global borders, marketing and marketing research within different foreign environments. Analysis of the external and internal variables in the international environment and the development of marketing strategies by international companies.

3 credits

INBU 7130 MULTINATIONAL AND GLOBAL MANAGEMENT AND STRATEGY

Formulation of multinational companies' strategies and policy. Critical analysis of strategic managerial alternatives within the global context of business operations in a political, economic and cultural environment. Simulation of intercultural negotiations. Includes the development of international strategy for local companies.

3 credits

INBU 7140 COMMUNICATION AND INTERCULTURAL NEGOTIATION IN INTERNATIONAL BUSINESS

Analysis of the impact of communication on different cultures for commercial purposes. Application of communication skills in multicultural commercial scenarios. Comparison of the implications of intercultural negotiations in domestic and international multicultural companies.

3 credits

INBU 8170 INTERNATIONAL FINANCE

Analysis of the international financial environment. Review of financial risk inherent to international businesses. Description of problems when implementing corporate financial principles in other countries and of the financial aspects of the relationship between main and subsidiary company.

3 credits

INBU 8210 THEORY OF INTERNATIONAL BUSINESS

Critical analysis of the classical and modern theories of international business and the implications of business policies derived from the different theories. Consideration of the importance of international business for developing countries and the development of competitiveness strategies. Review of monetary aspects of international commerce, such as the problems and policies of adjustments in the balance of payments.

3 credits

INBU 8946 SEMINAR OF SPECIAL TOPICS IN INTERREGIONAL OR INTERNATIONAL BUSINESS

Review of current problems related with interregional and international business and with the handling of problems confronted daily by company management.

3 credits

Courses in Labor Relations (LARE)

LARE 5001 RESEARCH METHODS IN LABOR RELATIONS

Analysis and application of research methods and techniques in the field of labor relations. Application of the scientific method in labor problem solving. Review of the quantitative and qualitative methodologies.

3 credits

LARE 5010 COLLECTIVE BARGAINING IN THE PUBLIC AND PRIVATE SECTOR

Theory and techniques of collective bargaining in the public and private sector. Analysis of substantive aspects, collective bargaining procedures, content and administration of contracts and legislation governing labor relations.

3 credits

LARE 5200 LABOR STATISTICS

Application of sampling techniques and the fundamental concepts of descriptive and inferential statistics in the analysis of the factors affecting the development and trends of the labor markets in a global economy.

3 credits

LARE 5300 LABOR ECONOMY

Analysis of the economic problems of the labor market, the population and the labor force in a global economy. Review of the economic aspects of the development of human resources, compensation, income distribution, and related public policies. In addition, the economic effects of labor relations, collective bargaining and labor unions, on wages, employment, the cycle, and economic growth are evaluated.

3 credits

LARE 5400 LABOR LEGISLATION

Review of the local and federal labor laws regulating the labor relations in unionized companies. Emphasis on the constitutional rights of workers to organize themselves in unions of their selection. Evaluation of the mechanisms of the different labor forums that administer the labor laws of Puerto Rico.

3 credits

LARE 5410 HISTORY AND PHILOSOPHY OF LABOR MOVEMENTS

Current theories in labor relations and their principal institutions; history of labor movements in the United States, Puerto Rico and other countries; the development of labor organizations and their strategies over the years.

3 credits

LARE 5420 LABOR RELATIONS IN THE PUBLIC SECTOR

Review of the historical development of labor relations in the public sector. Analysis of the legislation of labor relations and its effect on groups protected by the constitution and its limitations. Evaluation of the situation of the municipalities, public corporations, the central government, and special agencies, within the general framework of labor relations in the United States and other countries.

3 credits

LARE 6300 PROTECTIVE WORK LEGISLATION

Review of the protective laws and social work security applicable in Puerto Rico. Analysis of the rights of exempt and nonexempt workers, the protective laws, and the constitutional rights that protect them. Evaluation of the laws that protect the rights related to employment conditions, such as: leaves, work hours, rest periods, dismissals and other fringe benefits.

3 credits

LARE 6410 COMPARATIVE LABOR RELATIONS

Review of the socioeconomic and legal frameworks regulating labor relations at the international level between several countries or geographic regions. Comparison of labor relations at the international level.

3 credits

LARE 6430 NEW ORGANIZATIONAL WORK PATTERNS

Review of the traditional and nontraditional alternatives for organizing work in private companies as well as in public ones, and their relation with the new personal values of the employees.

3 credits

LARE 6440 MEDIATION, CONCILIATION AND LABOR ARBITRATION

Analysis of the different resources and methods for solving conflicts, such as: mediation, conciliation and arbitration. Review of the historical trajectories, the similarities and differences of those resources and their application for conflict resolution. Evaluation of the jurisdiction of the administrative forums of the states as well as the federal ones, and their results in the solution of labor disputes.

3 credits

LARE 6450 JOB DISCRIMINATION

Analysis of legislation, the constitutional aspects and jurisprudence related to the prohibition of discrimination in work centers. Discussion of the aspects regarding the nature, importance and characteristics of protections against job

discrimination in the public and deprived sectors. Review of the duties, obligations, practices, measures and rights of employers and employees in the prevention and attention given to situations related to job discrimination.

3 credits

LARE 6975 INTEGRATING SEMINAR IN LABOR RELATIONS

Evaluation of complex cases, situations and investigations for the integration of the knowledge that may permit the explanation and display of leadership skills in the labor scenario. Prerequisite: to have approved all the core courses and of the specialization. Grade: P/NP

3 credits

Courses in Leadership and Instruction in Online Education (LIDE)

LIDE 7010 DEVELOPMENT AND PLANNING OF THE ONLINE EDUCATION PROGRAM

Analysis of the organization, realization and administration of the online education program. Emphasis on the strategic and operational planning of programs. Proposal of strategies for the administration, evaluation and supervision for the management of online education. Requires the participation in virtual meetings by means of telecommunication in an educational platform.

3 credits

LIDE 7020 PEDAGOGICAL INTERACTION

Evaluation of the actions that produce motivation and the active/shared learning of the student. Analysis of the concept of pedagogical interaction based on a model that considers the synchronous communication as well as the asynchronous communication. Formulation of interaction techniques among all the parts: professor-student, student-student and student-content. Requires the participation in virtual meetings by means of telecommunication in an educational platform.

3 credits

LIDE 7030 INSTRUCTIONAL TECHNOLOGY IN ONLINE EDUCATION

Appreciation of the organization, actions and administration of the online educational program. Emphasis on the strategic and operational planning of the program. Propose strategies of administration, evaluation and supervision for the management of online education. Requires the participation in virtual encounters by means of telecommunication in an educational platform.

3 credits

LIDE 7040 VIRTUAL PLATFORMS AND LEARNING OBJECTS FOR ONLINE EDUCATION

Comparison of the learning objects as work model for the design and production of content. Application of the standards and requirements of the production process, for the design of learning objects. Use of the diverse platforms that make virtual education possible, considering their surroundings and context. Requires the participation in virtual encounters by means of telecommunication in an educational platform.

3 credits

LIDE 7050 RESEARCH METHODS

Application of concepts related to qualitative and quantitative research. Critical analysis of the designs and methods of research, construction of instruments and interpretation of the results. Creation of a research proposal related to leadership or online instruction. Requires the participation in virtual encounters by means of telecommunication in an educational platform.

5 credits

Courses in Library and Information Sciences (LISC)

LISC 5000 LIBRARY FUNDAMENTALS AND INFORMATION SCIENCES

Theoretical and philosophical backgrounds of Library Information Sciences. Purpose, function and services offered by each type of library and documentation and information centers in modern society, especially in the Puerto Rican society. The profession, its terminology, literature, associations and professional education.

3 credits

LISC 5180 COMPUTER APPLICATIONS IN THE LIBRARY

General view of the varied uses of the computer in different library functions. Study of the planning, evaluation and implementation of computerized library systems.

3 credits

LISC 5200 INFORMATION SERVICES AND DOCUMENTATION

Assessment, selection and use of bibliographic reference sources. Includes techniques and information search analyses and studies of reference policies and services. Also included are mechanized systems of documentation and information. Emphasis on the role of the library as an information center.

3 credits

LISC 5250 DOCUMENTATION AND DATABASE FOR THE HUMANITIES

Analysis and evaluation of manual and computerized documentation resources in the humanities. Study of the interaction process in computerized databases in the humanities. Includes supervised practice at the DIALOG service terminals for which an additional fee is charged. Prerequisite: LISC 5180.

1 credit

LISC 5260 DOCUMENTATION AND DATABASE FOR THE BEHAVIORAL SCIENCES

Analysis and evaluation of manual and computerized documentation resources in the Behavioral Sciences. Study of the interaction process in computerized databases in the field of the Behavioral Sciences. Includes supervised practice at DIALOG service terminals for which an additional fee is charged. Prerequisite: LISC 5180.

1 credit

LISC 5270 DOCUMENTATION AND DATA BASE FOR THE NATURAL SCIENCES

Analysis and evaluation of manual and computerized documentation resources in the natural sciences. Study of the interaction process in computerized databases in the natural sciences. Includes supervised practice at DIALOG service terminals for which an additional fee is charged. Prerequisite: LISC 5180.

1 credit

LISC 5300 CATALOGING AND BIBLIOGRAPHIC DESCRIPTIONS

Theory and practice in the techniques of bibliographic description of printed and non-printed materials. Emphasis on the uses of AACR2 (Anglo-American Cataloging Rules 2) and MARC (Machine Readable Cataloging). Analysis of the different types of catalog forms.

3 credits

LISC 5350 SUBJECT CLASSIFICATION AND INDEXING

Different methods used in classification by subject. Theory and methods of establishing subject headings. Principles and practices in indexing.

3 credits

LISC 5370 SPECIAL PROBLEMS IN DESCRIPTIVE CATALOGING

Analysis and development of cataloging technique and norms, and of the description of printed and non-printed materials. Emphasis on the cataloging of special collections such as musical scores, audiovisual materials, microforms, etc. Includes computerized cataloging procedures. Prerequisite: LISC 5350.

3 credits

LISC 5390 THE CONTROL AND HANDLING OF SERIAL PUBLICATIONS

General view of serial publications, their creation, format, handling and use; selection, content and bibliographic control; policies, administration and cooperative programs. Includes magazines, newspapers, yearbooks, society bulletins and serial publications of government agencies.

3 credits

LISC 5450 COLLECTION, ACQUISITION, DEVELOPMENT AND EVALUATION

Study and analysis of the different professional techniques and skills required for the evaluation, selection, acquisition and preservation of printed and non-printed educational resources.

3 credits

LISC 6150 ADMINISTRATION OF SCHOOL LIBRARIES

Detailed study of the school library and of the librarian's role in this environment. Includes and analyzes the educational trends, the role of the librarian in the teaching learning process and in promoting the use of the library.

3 credits

LISC 6160 PUBLIC LIBRARIES

Historical, legal, economic and administrative factors that affect the planning organization and development of public libraries and public library systems. Theoretical and practical concepts related to public libraries as informative, educational, recreational, cultural and social service institutions. Prerequisite: LISC 5000.

3 credits

LISC 6161 LIBRARIES AND SPECIALIZED INFORMATION CENTERS

Various types of libraries, systems of information and related specialized organizations; their historical development, their management, resources, functions and services, problems related to the operation of libraries and information centers that serve particular clients. Prerequisite: LISC 5000.

3 credits

LISC 6250 RESEARCH METHODS APPLIED TO LIBRARY AND INFORMATION SERVICES

Current situation of the library as an institution and of the Library Information Sciences as a discipline. Development of scientific research skills applied to the Library and Information Sciences.

3 credits

LISC 6350 EDUCATIONAL TECHNOLOGY: USE, PRODUCTION AND EVALUATION

General view of the field of educational technology. Emphasis on the evaluation, selection, acquisition and use of commercially produced materials and equipment. Introduction to the techniques of local production. Includes organization and management of non-printed material collections and examines their various forms.

3 credits

LISC 6460 DEVELOPMENT OF COLLECTIONS AND SERVICES FOR CHILDREN, YOUNG PEOPLE AND ADULTS

Historical background of universal children and young people's literature and the study of the sources and guidelines for its evaluation and selection. Analysis of the diversification of both printed and non-printed materials. Includes the principles of child, youth and adult psychology and their application to library services. Prerequisite: LISC 5450.

3 credits

LISC 6710 SERVICES IN ACADEMIC LIBRARIES AND DOCUMENTATION CENTERS

Trends, innovations, goals, policies and services of the academic library. Administrative theories and processes applied to the library and information and documentation service agencies. Includes administrative relations, coordination, personnel, finances, evaluation, planning, organization, decision-making and other problems.

3 credits

LISC 6750 BIBLIOGRAPHIC INSTRUCTION

Planning and development of programs for the use of library resources. Analysis of specific methodologies and the procedures for their appraisal. Includes the financing, promotion, maintenance and development of programs.

3 credits

LISC 6910 INTERNSHIP IN LIBRARIES

Supervised practice in a library. Students will develop competence and leadership through direct participation in public and technical services, orientation activities and seminars; and preparation of case reports, work plans and research. Admission to internship is requested in writing from the Program Director.

3 credits

Courses in Linguistics (LING)

LING 5200 NEW TRENDS IN LINGUISTICS

Analysis of the theoretical postulates and the work methodology of the main linguistic schools of Europe and the United States beginning with Ferdinand de Saussure.

3 credits

LING 5210 HISTORY OF THE SPANISH LANGUAGE

Historical and analytical study of the Spanish language from Latin to the present with emphasis on the most decisive stages of its development. Phonetic, morphological and lexical comparisons of Spanish with other Romance languages.

3 credits

LING 5240 ADVANCED GRAMMAR

Systematic study of the grammatical structures of the Spanish language in light of new linguistic trends and their application to the teaching of Spanish as the vernacular.

3 credits

LING 5250 LINGUISTICS APPLIED TO THE TEACHING OF SPANISH

Analysis of the theoretical frameworks of current linguistics and their application to the teaching of Spanish as the mother tongue. Discussion of the findings of recent research with special emphasis on studies on Puerto Rican Spanish.

3 credits

Courses in Marketing (MKTG)

MKTG 6410 INTEGRATED COMMUNICATION IN INTERNATIONAL MARKETING

Review of the different tools of the integrated advertisement and marketing blend, consumer satisfaction at the global level and improvement of the company's profits. Distinction between paid advertisements, non-paid publicity, personal sales, promotional sales, sponsorship, direct marketing, public relations and communication using Internet. Analysis of the development of advertisement activities with focus on international marketing using diverse tools.

3 credits

MKTG 6420 STRATEGIC PLANNING OF INTERNATIONAL MARKETING

Identification of the concepts and techniques for planning and selection of marketing strategies for multinational organizations. Application of the fundamentals of managerial marketing in the global environment. Discussion of the use and implementation of strategic planning to develop long-lasting competitive advantages at the local and international levels.

3 credits

MKTG 6430 CONSUMING BEHAVIOR AT THE INTERNATIONAL LEVEL

Review of the different theories explaining consuming behavior. Study of the cognitive bases and consumers' purchasing behavior, their preferences and decision-making processes. Review of the behavioral concepts as seen through the analysis of how the consumer at the international level acquires and uses information for decision making.

3 credits

MKTG 6440 ELECTRONIC MARKETING

Analysis of the development of new business models that promote the maximization of consumer value and the profits of the multinational company. Application of marketing strategies using electronic tools. Discussion of marketing

through Internet, wireless communication, advertising by location, design of Web pages and other innovating technologies.

3 credits

Courses in Mathematics (MATH)

MATH 5001 ARITHMETIC FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the concepts of numeration and measurement, meaning of the operations of addition, subtraction multiplication and division in integral numbers. Study and meaning of fractions, addition, subtraction, multiplication and division of fractions. Ratio, proportions and percents. Solution of problems with integral numbers and fractions. Measurement system and unit conversion.

3 credits

MATH 5005 BASIC GEOMETRY FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the Geometry of Euclides. The postulates and basic theorems of geometry are discussed and emphasized. The properties of straight lines, the plane, angles and figuration are discussed. Parallel lines, perpendicular lines and cross-sectional lines are emphasized. In addition, applications of triangles and quadrilaterals with his respective properties and similarities are included. Prerequisite: MATH 5001.

3 credits

MATH 5007 ALGEBRA FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the main topics of algebra used in the elementary school. Operations with real numbers, operations with polynomials, powers, linear and quadratic equations. Algebra will be applied to problem solving, including graphical and symbolic representations.

3 credits

MATH 5010 PROBABILITY AND STATISTICS FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the relation between the empirical reality and the mathematical test. Includes techniques to organize data: frequency distribution, polygons, bar, pie or circular charts. Application of the measures of central trends, measures of dispersion and elements of probability. Discussion of the basic concepts of the sample theory and the test of hypothesis, correlation and regression. Use of the scientific or graphic calculator and computerized programs.

3 credits

MATH 5100 INTERMEDIATE CALCULUS

Differential equations, vector fields, growth and degradation, mathematical modeling, L'Hopital's rule, improper integrals, Taylor's power series, convergent radius, multivaried functions, limits and continuance, derivatives and integrals. Integration of vector fields, Green's and Stokes' theorems.

3 credits

MATH 5200 COMPUTATIONAL MATHEMATICS

Solution of problems in the areas of calculus, algebra and geometry, linear algebra and mathematical models, by means of mathematical computer languages. Introduction and computational implementation of several applications such as optimization, areas and volumes, handling of lists, dynamic systems, finance mathematics, and diverse types of graphs and visualization. Introduction to numerical analysis methods and their implementation in computational algebraic languages.

3 credits

MATH 5400 PROBABILITY

Review of permutations, combinations and partitions. The Binomial theorem. Discrete probability. General, conditional and independent probability. Discrete and continuous random variables. Expected value and moment generating functions. United and conditional distributions and conditional expected value. Random variable functions including the method of accumulative distribution function and the transformation method. Order statistics.

3 credits

MATH 5500 ADVANCED DISCRETE MATHEMATICS

Synthesis of the calculation of propositions and the theory of sets, including relations, functions, equivalences and partial orders. Fundamentals and applications of the theory of graphs, digraphs and trees. Introduction to combinatorial analysis. Study of recurrent relations and their applications in computation. Fundamentals of the theory of languages, machines of finite states and automata theory.

3 credits

MATH 5700 FUNDAMENTALS OF ABSTRACT MATHEMATICS

Logic, demonstration methods, theory of sets, permutations and combinations, relations, including equivalence and partial order relations, ordered bodies and their axioms, functions binary operations divisibility, cardinality, the Cantor Theorem. R topology, open and closed sets and accumulation points.

3 credits

MATH 5800 TOPICS IN ABSTRACT ALGEBRA

Review of cyclic and normal subgroups; the three homomorphism theorems for groups. Prime and maximal ideals. Modules, vector spaces, bases, dimension and linear transformations. Reticules, Boolean algebra and applications.

3 credits

MATH 5900 MATHEMATICAL LOGIC AND APPLICATIONS

Study of syntax and semantics in first order languages. Analysis of the theorems of Completeness, of Löwenheim-Skolem, of Compactness and the limitations of the formal method. Introduction to the theory of computability by means of Turing machines. Analysis of the theory of numbers and recursive functions, including the theorem of Rice and that of Recursion. Introduction to the complexity theory.

3 credits

MATH 6100 INTRODUCTION TO REAL ANALYSIS

Successions and convergence, Cauchy successions, monotonous successions. Limit of a function, limit of a succession, limit of monotonous successions. Uniform continuity, open, closed and compact sets, derivatives, Rolle, Medium Value and L'Hopital Theorems. Riemann integrals, integral functions. Fundamental Theorem of Calculus, Medium Value Theorem and the Change of Variable Theorem. Infinite series convergence and absolute and conditional convergence.

3 credits

MATH 6150 MATHEMATICAL MODELS FOR THE SCIENCES

Analysis of mathematical models of physics, biology, economics and other sciences. Classification of models according to their mathematical base. Approximation, transformation and symmetries of a model. Modeling in computers. Prerequisite: MATH 5100.

3 credits

MATH 6200 GRAPHS AND APPLICATIONS

Analysis of the theory of graphs, their algebraic representation and special types including directed graphs. Analysis of the problems of graphs route, planarity, parity and coloration. Study of trees, special types and applications. Introduction to the theory of matrixes. Prerequisite: MATH 5500.

3 credits

MATH 6300 ACTUARIAL MATHEMATICS AND RISK THEORY

Study of insurance economy, models of individual risk, and survival distributions. Evaluation of insurances and life annuities, the net premiums, the several lives functions and multiple decreasing models. Fundamentals of the evaluation theory of pension plans. Prerequisite: MATH 5400.

3 credits

MATH 6350 MATHEMATICAL METHODS IN RESEARCH

Study of mathematical methods to determine optimal solutions under restrictions of optimization problems of industry and the economy. Topics of linear programming, the simplex method, flows in networks, non-linear programming, dynamic programming, project management and analysis of decisions are dealt with. Prerequisite: MATH 5200.

3 credits

MATH 6400 ADVANCED MATHEMATICAL STATISTICS

Study of classic statistics of a variable and the estimation of parameters. Analysis of linear statistical models and safe predictions. Study of the robust statistics concept. Fundamentals of non-linear statistical models; analysis of multiple variables and time series. Use of computer programs for statistics and statistical programming languages. Prerequisite: MATH 5400.

3 credits

MATH 6600 ECONOMETRICS AND FINANCE MODELS

Analysis of yields and valuation methods for capital assets. Analysis of multifactor models for inter-temporary balance, options and derivatives, fixed income assets and term assets. Prerequisite: MATH 5100.

3 credits

MATH 6800 CRYPTOGRAPHY

Study of basic cryptographic methods based on properties of numbers and group theory. Introduction to the keys of public encryption and advanced cryptographic techniques based on algebraic geometry. Prerequisites: MATH 5500, 5800.

3 credits

MATH 6810 INFORMATION THEORY AND CODIFICATION

Theory of codification, efficient codification, codification without noise and codification theorems. Introduction and applications of linear codes; codes in finite fields and cyclical codes. Prerequisites: MATH 5500, 5800.

3 credits

MATH 6900 CREATIVE PROJECT

Development of a special project on a problem or application area of the specialization in which students took their elective courses, under the direction of a Program professor. The course requires oral and written presentations. Student will register in this course as often as necessary until finishing their research. Prerequisite: 24 approved credits. Grade: P/NP.

3 credits

MATH 6904 ADVANCED ALGEBRA

Study of the following topics of theory of numbers: whole numbers prime numbers and the fundamental theorem of Arithmetic. Maximum common divisor and minimum common multiple. The algorithm of Euclides. Numerical congruencies. Groups, rings and fields. Real and complex numbers. Polynomials. Vectorial spaces: vector and matrices. Boolean algebra. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Mathematics.

3 credits

MATH 6905 MODERN GEOMETRY

Modern approaches of geometry. Foundations and development of several geometries. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Mathematics.

3 credits

MATH 6906 REAL NUMBER ANALYSIS

Study of the real numbers system; functions and limits; elements of the set theory; numerical successions and series; continuity; derivatives and the integral of Riemann; integral functions, fundamental theorem of calculus, theorems of average value and the change of variables. Infinite convergences series, absolute and conditional convergence.

Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching in Mathematics.

3 credits

MATH 6907 PROBABILITY AND STATISTICS

Modern approach to probability and statistics. Study of the following topics: sets and probability; random variables and probability distributions. Sampling theory is included; estimation theory, tests of hypothesis and meaning; regression and correlation and analysis of variance. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching in Mathematics.

3 credits

MATH 6908 DISCRETE MATHEMATICS

Study of the following topics: set theory and Venn diagrams. Counting methods: inclusion-exclusion principle, addition and multiplication rules, exchanges and combinations. Relations and functions. Graph theory. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Mathematics.

3 credits

MATH 6909 PROBLEM SOLVING

Evaluation of a variety of strategies and techniques for solving mathematical problems. The problems will emphasize the numbering and operational areas, algebra, geometry, measurement and statistics and probability. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching in Mathematics.

3 credits

MATH 6910 HISTORY OF MATHEMATICS

Historical development of the main ideas in mathematics. Contribution of renowned mathematicians. Analysis of classic mathematicians. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching in Mathematics.

3 credits

MATH 6911 ANALYTICAL GEOMETRY

Study of rectangular coordinates, graphic equations in two and three variables, flat curves of superior order, transformations of coordinates, polar, tangent and normal coordinates, the plane, the straight line and surfaces in space.

3 credits

Courses in Mechanical Engineering (MECN)

MECN 5970 ADVANCED TOPICS IN MECHANICAL ENGINEERING

Selection of topics in accord with the student's interest and the availability of the resource.

3 credits

MECN 6010 ADVANCED MATHEMATICS FOR ENGINEERS

Study of advanced mathematical techniques to solve complex problems applied to engineering and physics. Formulation of the differential equations that describe an engineering problem and application of mathematical methods to find its analytical solution.

3 credits

MECN 6020 ADVANCED THERMODYNAMICS

Study of Thermodynamics applied to power and refrigeration cycles. Application of the First and Second law of thermodynamics. Entropy analysis to understand the irreversibilities associated with power generation and refrigeration cycles and the concepts of energy.

3 credits

MECN 6030 ADVANCED SOLID MECHANICS

Advanced studies in the mechanics of materials include analysis and design of components under external loads, elasticity, and concentration. Study of failures related to plasticity, fracture, fatigue, yield, creep, and corrosion.

3 credits

MECN 6040 COMPUTATIONAL MODELING FOR ENGINEERING

Development of numerical methods for the solution of partial differential equations applied to engineering problems. Discussion of finite difference methods for parabolic and hyperbolic problems. Discussion of the finite elements method. Requires the development of a project using computational tools.

3 credits

MECN 6110 RENEWABLE ENERGY

Study and analysis of the principal characteristics of renewable energy sources. Analysis of the technical, economic and environmental viability of different renewable energy sources.

3 credits

MECN 6120 ENERGY MANAGEMENT

Study of energy management related to energy purchasing, energy accounting and the electricity rates structures. Analysis of electrical and mechanical energy systems. Application of economic and life cycle cost analysis. Discussion and application of energy efficiency codes and standards in residential, commercial and industrial buildings and facilities.

3 credits

MECN 6130 SUSTAINABLE BUILDINGS

Study and analysis of energy currents that interact in buildings. Application of passive and active techniques to reduce power consumption of buildings and the efficient installation of air conditioning systems. Calculation of thermal loads for the design of the system. Computer simulation of buildings to optimize the system.

3 credits

MECN 6140 FUEL CELLS

Study of the functioning principles of fuel cells from the electrochemical, thermodynamic and transport processes perspective. Emphasis on ion exchange membrane fuel cells and their variants. Analysis of their technical, economic and environmental viability. Requires the development of an energy system project using fuel cells.

3 credits

MECN 6150 ADVANCED POWER GENERATION

Thermodynamic analysis of modern power generation technologies. Study of the “Rankine” cycles of fossil and nuclear fuel, gas turbine power plants, combined power plants, and generation of distributed power.

3 credits

MECN 6210 INTEGRATION OF ENGINEERING SYSTEMS

Study of methods and tools used by systems engineers in the aerospace industry. Conversion of function and needs to a system or product. Study of the methodology of decision making, alternate design, integration of human factors, reliability, maintenance, viability, and safety in product design.

3 credits

MECN 6220 ADVANCED AEROSPACE STRUCTURES

Study and discussion of exact and approximate methods for analysis and design of aerospace structures. Determination of stresses, strain, constitutive equations, and problem solving with boundary conditions and 2-D elasticity.

3 credits

MECN 6230 AEROSPACE DYNAMICS

Formulation of motion equations in problems of systems with multiple rigid bodies. Applications of dynamics to aerospace vehicles. Modeling of the general motion of rigid bodies systems. Linearization of motion equations for stability and modal analysis.

3 credits

MECN 6240 AEROSPACE MATERIALS

Study of conventional and nonconventional materials used in the aerospace industry. Analysis of the production, structure, properties, function, and use of advanced materials for aerospace applications.

3 credits

MECN 6250 COMPUTATIONAL FLUID DYNAMICS

Solution of fluid flow problems with CFD techniques. Discussion of compressible and incompressible flows governed by Navier-Stokes equations. Model Equations and Classification of PDEs; Finite Difference Methods; Semi-Discrete Approach. Reduction of PDEs to ODEs. Theory and Numerical fluid flow modeling with commercially available software. Requires the development of a project using computational tools.

3 credits

MECN 6260 ADVANCED MECHANICAL VIBRATION

Study and analysis of free and forced vibrations of systems with one or multiple degrees of freedom and continuous systems that include elements such as strings, rods and beams. Analysis of natural frequencies and vibration modes. Solution of motion equations by modal analysis and numerical methods.

3 credits

MECN 6300 ADVANCED CONTROL SYSTEMS

Analysis of methods for the design of linear control systems using compensation techniques for one and two degrees of freedom. Design of modern control systems using state space techniques, pole placement, "Ackermann" Equation, estimation, robust control and H^∞ . Emphasis on the design of digital control systems. Analysis of optimal control design of nonlinear control.

3 credits

MECN 6510 LIGHTING SYSTEMS DESIGN

Study of the concepts of illumination, vision, color and electric lighting sources from the perspective of applied engineering. Discussion and application of methods to calculate illumination values. Lighting systems design of interior and exterior applications using computational tools. Use of codes and standards for a sustainable design.

3 credits

MECN 6981 PROJECT I

Development and presentation of a project proposal. This proposal must have the approval of the project adviser. Prerequisite: Authorization of the director of the department or the project adviser. Grade: P/NP.

1 credit

MECN 6982 PROJECT II

Development and presentation of the project proposed in MECN 6981. Prerequisite: MECN 6981. Grade: P/NP/TP.

2 credits

MECN 6991 THESIS I

Development and presentation of a scientific research proposal. Requires the approval of the thesis adviser. Prerequisite: Authorization of the director of the department or the thesis adviser. Grade: P/NP.

1 credit

MECN 6992 THESIS II

Development of the scientific research work proposed in MECN 6991. Prerequisite: MECN 6991. Grade: P/NP.

2 credits

MECN 6993 THESIS III

Completion and presentation of the scientific research work developed in MECN 6992. Prerequisite: MECN 6992. Grade: P/NP/TP.

3 credits

Courses in Music (MUSI)

MUSI 5000 COMPENDIUM OF THEORY AND SIGHT READING

Analysis of theory and harmony concepts for the music teacher and the professional musician. Includes the study of sight reading methods and auditory training and the discussion of techniques pertinent to the teaching -learning of the theory.

2 credits

MUSI 5001, 5002, 5003, 5004 ENSEMBLE

Study and preparation of a written repertoire for a diverse combination of instruments and/or voices. Requires 30 hours of practice during the academic term.

1 credit per course

MUSI 5010 COMPENDIUM OF HISTORY AND MUSICAL LITERATURE

Study of the periods of the history of music from the Middle Ages to the twentieth century with emphasis on the musical style of each period. Study of the styles and forms developed in each period emphasizing the most important composers of each period.

2 credits

MUSI 5017 COMPLEMENTARY INSTRUMENT III

Experience with the performance of a secondary instrument under individualized supervision of a professor. Development of performance skills and teaching of the instrument that complement the educational task.

1 credit

MUSI 5018 COMPLEMENTARY INSTRUMENT IV

Experience with the performance of a secondary instrument under individualized supervision of a professor. Continuation of the development of performance skills and teaching of the instrument that complement the educational task.

1 credit

MUSI 5051 INSTRUMENTAL LITERATURE

Analysis and evaluation of instrumental literature from the Renaissance to the present for teaching in different educational levels. The historical and structural aspects of the repertoire and their pedagogical qualities are evaluated. Includes music of Puerto Rico.

2 credits

MUSI 5061 VOCAL AND CHORAL LITERATURE

Analysis and evaluation of vocal and choral literature from the Renaissance to the present for teaching in different educational levels. The historical and structural aspects of the repertoire and their pedagogical qualities are evaluated. Includes music of Puerto Rico.

2 credits

MUSI 5065 POPULAR MUSIC

Study and appreciation of the styles and varieties of popular music from the nineteenth century to the present. Emphasis on the popular music of Puerto Rico, Latin America, the Caribbean and the United States. The factors influencing the development of each style are discussed and the diverse styles and subtypes are identified.

2 credits

MUSI 5080 ORCHESTRATION AND ARRANGING BY COMPUTER

Application of advanced arranging and composition techniques using computer technology as the principal tool.

2 credits

MUSI 5185 INTERPRETATION AND MUSICAL ANALYSIS

Integrated course in which musical structure as an instrument of analysis in musical interpretation is studied. Includes the study of the most recognized literature from the Renaissance to contemporary times, with emphasis on small musical forms.

3 credits

MUSI 5255, 5256, 5257 WORKSHOP IN APPLIED MUSIC I, II, III

Eight hours of individual training in performance or teaching the principal instrument during the academic term. Requires the supervision of a principal instrument professor.

1 credit per course

MUSI 5265 CONDUCTING AND LITERATURE

Training and supervised practice in conducting ensembles. Analysis and practice of practice techniques and study of scores. Study of style, performing practices and examples of choral and instrumental literature for students at different levels of performance.

3 credits

APPLIED MUSIC

Eight hours of individualized instruction during the academic term on the instrument. Emphasis on theoretical explanations and technical exercises. Includes the analysis and performance of advanced compositions of diverse musical styles. Requires a performance test before a jury at the end of the academic term. Prerequisite: an audition.

MUSI 5701, 5702, 6701, 6702	Flute
MUSI 5711, 5712, 6711, 6712	Oboe
MUSI 5721, 5722, 6721, 6722	Clarinet
MUSI 5731, 5732, 6731, 6732	Bassoon
MUSI 5741, 5742, 6741, 6742	Saxophone
MUSI 5751, 5752, 6751, 6752	Trumpet
MUSI 5761, 5762, 6761, 6762	Horn
MUSI 5771, 5772, 6771, 6772	Trombone
MUSI 5781, 5782, 6781, 6782	Euphonium
MUSI 5791, 5792, 6791, 6792	Tuba
MUSI 5801, 5802, 6801, 6802	Percussion
MUSI 5811, 5812, 6811, 6812	Piano
MUSI 5821, 5822, 6821, 6822	Organ
MUSI 5841, 5842, 6841, 6842	Voice
MUSI 5851, 5852, 6851, 6852	Violin
MUSI 5861, 5862, 6861, 6862	Viola
MUSI 5871, 5872, 6871, 6872	Cello
MUSI 5881, 5882, 6881, 6882	Contrabass
MUSI 5891, 5892, 6891, 6892	Guitar

1 credit per course

Courses in Music Education (MUED)

MUED 5050 THE TEACHING OF INSTRUMENTS

Appropriate study of methods, concepts, materials and repertoire for teaching the student's principal instrument. Includes a project in teaching the instrument. Topics related to teaching strategies and particular learning characteristics of students who are at diverse performance levels are discussed.

2 credits

MUED 5060 THE TEACHING OF VOCAL AND CHORAL MUSIC

Appropriate study of methods, concepts, materials and repertoire for teaching vocal and choral music. The different physiological, psychological and acoustic voice problems are identified. Includes a project in teaching voice. Topics related to teaching strategies and particular learning characteristics of students who are at diverse performance levels are discussed.

2 credits

MUED 5100 RESEARCH TECHNIQUES IN MUSIC EDUCATION

Evaluation of sources in the area of music education. Examination of quantitative and qualitative methods. Writing of research projects, preparation and administration of questionnaires and tabulation of results.

3 credits

MUED 5101 PHILOSOPHY OF MUSICAL EDUCATION

Study of the principal philosophical approaches to music education (Reimer, Elliot, Langer, among others) as a basis for the formulation of a philosophy for the Puerto Rican context.

3 credits

MUED 5102 COMPARATIVE HISTORY OF MUSIC EDUCATION

Chronological study of Music Education. Analysis of the didactic approaches and the developmental stages of music education (revision, revolution and operative integration) during the twentieth century.

3 credits

MUED 5103 SEMINAR OF MUSIC EDUCATION AT THE ELEMENTARY LEVEL

Critical analysis of teaching the elements of music (rhythm, melody, harmony, among others) and their application at the elementary level making practical use of established methodologies in the context of Puerto Rico's elementary schools.

3 credits

MUED 5104 SEMINAR OF MUSIC EDUCATION AT THE SECONDARY LEVEL

Critical analysis of teaching the elements of music and their application at the secondary level, making practical use of the established methodologies and their application to the different instrumental-vocal groups, in the context of Puerto Rico's intermediate and high schools.

3 credits

MUED 5105 MEASUREMENT, ASSESSMENT AND EVALUATION OF MUSIC LEARNING

Detailed study of evaluation techniques particular to music to be used in applied music, ensembles and in the classroom. Study of the use of evaluation and assessment modalities as the basis for decision making and their relation to musical behavior.

3 credits

MUED 5106 TECHNOLOGY AND INSTRUCTIONAL DESIGN

Application of recent technology to music curriculum and its evaluation. Use of the computer and other electronic means with emphasis on the use of equipment, programs and equipment MIDI for digital recording. The appropriate use of technology in the classroom is explored and evaluated. Development of skills using several operating systems within the context of music education and their general applications. Requires 30 hours of lecture and 45 hours of lab during the academic term.

3 credits

MUED 5130 PSYCHOLOGY OF LEARNING MUSIC

Historical perspective of the development of learning theories with specific application to music education. Student are provided knowledge to analyze the established learning theories and their recent trends in the field of education and music teaching.

3 credits

MUED 5160 HISTORY AND PHILOSOPHY OF THE TEACHING OF MUSIC

Study and analysis of the historical, philosophical and psychological foundations of music education. The diverse approaches to musical and educational trends from which music education as we know it today and the new teaching modalities emerge are discussed and compared.

3 credits

MUED 5171 DEVELOPMENT AND APPLICATION OF KNOWLEDGE IN MUSIC EDUCATION

Use and administration of bibliographical resources for strengthening the teaching-learning process through research. Emphasis on the application of scientific methods for the research pertinent to the discipline. Includes the preparation of a proposal.

4 credits

MUED 5191 CURRICULUM DESIGN IN MUSIC

Analysis of the principles for curricular design and their application to the development of music programs. Includes recent topics and trends of music education. Discussion of methods, approaches and music education programs at different levels.

3 credits

MUED 6000 SPECIAL PROJECT

Research project or creative project on a topic of music education that enriches the student's knowledge while contributing to existing knowledge or to the development of materials in the area of the music teaching. Requires the supervision of a professor. Prerequisite: MUED 5171.

4 credits

MUED 6690 SEMINAR ON MUSIC EDUCATION PRACTICE PROBLEMS

Development of specific classroom skills as the scenario for teacher performance. Includes dealing with the time allotted for teaching, the use of comparative methodologies for short and long term curriculum design. In addition, the course will guide students to accumulate their daily work experiences with the goal of converting them into research material within a structured theoretical frame. Emphasis on the concept of the music teacher as an artist.

3 credits

MUED 6691 THESIS SEMINAR

Identification of the subject for the Masters in Music Education Thesis. Collection of bibliographical materials and other instruments specific to the specialization. Writing of the thesis proposal.

3 credits

MUED 6692 THESIS IN MUSIC EDUCATION

Research project and writing on a subject that contributes to existing knowledge in the area of Music Education in Puerto Rico and Spanish America. Grade: P/NP.

3 credits

Courses in Music Technology (MUTE)

MUTE 5261 TECHNOLOGY APPLIED TO MUSIC EDUCATION

Application and evaluation of technology in the teaching of music. Includes the use of the computer and other electronic mediums, identification of reliable sources of information, use of equipment MIDI and programs of digital recording.

3 credits

Courses in Nursing (NURS)

NURS 5000 THEORETICAL FOUNDATIONS

Analysis of philosophies, conceptual frameworks, models and theories that provide the foundations for the nursing profession. The relation between theory, research, practice, and philosophical, psychological and sociological foundations.

3 credits

NURS 5010 EPIDEMIOLOGY

Review of epidemiology concepts including methods to identify statistical distributions, determinants of health or illness and analytical techniques. Integrates the application of epidemiology principles in community health and primary care.

2 credits

NURS 5020 BIostatISTICS

Review and application of statistical methods in the research process in health sciences. Application of descriptive and inferential statistics in data interpretation. Use of the computer in the analysis of data.

3 credits

NURS 5040 HEALTH ASSESSMENT

Advanced course in health assessment with emphasis on the comprehensive assessment of the client throughout the life cycle. Includes multidimensional and interactive factors that affect the answers of the client in the sociostructural, sociocultural and biosocial context. Develops in the student knowledge of physical examination and pathophysiology that serve as the basis for advanced nursing practice. Information concerning the evaluation of health throughout the life cycle is analyzed critically.

2 credits

NURS 6050 CURRICULUM IN NURSING

Analysis of the theories and principles in the development of educational programs. Emphasis on the development and application of the nursing curriculum, including different models, designs, contents, methods and strategies of teaching, and curriculum implementation and evaluation.

3 credits

NURS 6060 EVALUATION IN EDUCATION IN NURSING

Application of theories, principles and evaluation models applied to nursing education. Development of evaluation and measurement instruments. Corequisite: NURS 6050.

3 credits

NURS 6070 ADMINISTRATION IN NURSING

Analysis of the theories and principles in the administrative process. Review of the organizational theories and research in tasks of the administrator and supervisor. Profound analysis of interpersonal relations problems, personnel management, finances, physical resources and other related areas.

3 credits

NURS 6080 EVALUATION IN ADMINISTRATION IN NURSING

Application of theories, principles, and evaluation models applied to administration in nursing. Development of an assessment and measurement instrument. Corequisite: NURS 6070.

3 credits

NURS 6090 RESEARCH IN NURSING

Development of a research proposal of a nursing problem identified by the student. The methodology and terminology of qualitative and quantitative research will be utilized. Written and oral presentation of the problem, review of literature, the conceptual framework and the methodology to be used during the investigation. Prerequisite: NURS 5020.

3 credits

NURS 6111 CRITICAL CARE I

Review of theoretical concepts and principles in critical care. Analysis of the nursing process and humanistic care and the roles and functions of the nursing professional in critical care units. Evaluation of ethical-legal concepts related to care of clients at a high risk of death. Analysis of immediate nursing care for the stabilization of cardio

respiratory, renal and neurological functions in critical situations. Review of theories and educational strategies to carry out the teaching-learning process of the client and family in critical care. Prerequisites: NURS 5000, 5010, 5020, 5040, 6910. Corequisite: NURS 6916.

3 credits

NURS 6112 CRITICAL CARE II

Analysis of biopsiopathologic concepts in problems, including: stabilization of the gastrointestinal and endocrine functions, complex multisystemic problems, burns and organ transplants, by integrating the nursing process and humanistic care to the critically ill client. Evaluation of the psycho-social and nutritional alterations, sleep alterations and dealing with pain. Analysis of research findings, administration and managing the care of the client in critical care scenarios. Prerequisites: NURS 6111, 6910, 6916. Corequisite: NURS 6917.

3 credits

NURS 6221 MEDICAL-SURGICAL NURSING I

Analysis of the pathophysiological response of the illness process that affects the functioning of the adult with alterations of the following systems: immunological, intergumentary, digestive and gastrointestinal, endocrine and metabolic, and renal. Review of assessment skills, planning, implementation and evaluation of nursing therapeutic interventions. Analysis of ethical and legal aspects, critical thinking, problem solving and communication skills. Prerequisites: NURS 5000, 5010, 5020, 5040, 6910. Corequisite: NURS 6918.

3 credits

NURS 6222 MEDICAL-SURGICAL NURSING II

Analysis of the pathophysiological response of the illness process that affects the functioning of the adult with alterations of the following systems: neurological, musculoskeletal, cardiovascular, circulatory and hematological, respiratory and reproductive. Review of assessment skills, planning, implementation and evaluation of nursing therapeutic interventions. Analysis of legal and ethical problems, new trends in the nursing profession and research findings. Prerequisites: NURS 6221, 6918, 6910. Corequisite: NURS 6919.

3 credits

NURS 6311 MATERNAL AND CHILD NURSING I

Discussion of the historical, political, social, economic, ethical, technological and legal factors that have impact on reproductive health. Analysis of the physiological, biochemical and psychological answers during pregnancy, normal childbirth and high risk birth. The care of normal child birth and high risk birth is included during the early neonatal stage. Synthesis of research findings related to the care of the mother and newborn child. Application of the ethical and legal aspects, critical thought, problem solving, communication skills, cultural diversity and the practice based on evidence in the nursing process. Prerequisites: NURS 5000, 5010, 5020, 5040 and 6910. Corequisite NURS 6920.

3 credits

NURS 6312 MATERNAL AND CHILD NURSING II

Analysis of the pathophysiological answers to the disease processes that affect the functioning from childhood to adolescence with emphasis on the following systems: respiratory, cardiovascular, neurological, renal, endocrine, gastrointestinal, hematological, immunological and musculokeletal. Synthesis of the knowledge, the theories of growth and development, of the research findings related to etiology, and of the manifestations and treatment in the care of the pediatric client. Application of the ethical and legal aspects, of critical thought, problem solving, communication skills, cultural diversity and the practice based on evidence in the nursing process. Prerequisites: NURS 5000, 5010, 5020, 5040, NURS 6910, NURS 6311 and 6920. Corequisite NURS 6921.

3 credits

NURS 6910 PRACTICE HEALTH ASSESSMENT

Application of the nursing process during the advanced practice in health assessment based on theory, empirical documentation, physical examination skills, therapeutic communication, biosicosocial aspect, critical reasoning, diagnosis differential and the process of decision making. Acquisition of knowledge and the advanced skills required

for a case study. The practice of health assessment skills is carried out in structured and not structured scenarios. Requires sixty (60) hours of clinical practice. Corequisite: NURS 5040.

2 credits

NURS 6914 EDUCATIONAL PRACTICE IN NURSING

Practice in a nursing program in an institution recognized by the Puerto Rico Council on Education, under the supervision of the professor and the practice supervisor. Requires eight hours of practice weekly. Prerequisites: NURS 6050, 6060.

4 credits

NURS 6915 ADMINISTRATIVE PRACTICE IN NURSING

Practice in different health service scenarios, under the supervision of the professor and the practice supervisor. Requires ten hours of practice weekly. Prerequisites: NURS 6070, 6080.

4 credits

NURS 6916 PRACTICE IN CRITICAL CARE I

Advanced practice in nursing care of critically ill clients who present clinical problems (cardio respiratory, renal and neurological) that occur as a result of diseases or treatment. Emphasis on assessment, pharmacological, administration, therapeutic and evaluation strategies. Application of theoretical concepts, ethical-legal principles, roles and functions, and nursing interventions in the context of clinical practice. Analysis and interpretation of laboratory test results and studies. Requires four (4) hours of practice weekly in clinical critical care scenarios. Prerequisites: NURS 5000, 5010, 5020, 5040, 6910. Corequisite: NURS 6111.

2 credits

NURS 6917 PRACTICE IN CRITICAL CARE II

Advanced practice in nursing care of critically ill clients who present gastrointestinal and endocrine alterations, complex multisystemic problems, burns and administration of transplant patients. Application of the nursing process and humanistic care while offering nursing care to the critically ill client. Demonstration of advanced clinical skills in the coordination of collaborative administration of clients with psycho-social and nutritional alterations, sleep alterations and management of pain in critically ill clients. Requires four (4) hours of practice weekly in clinical critical care scenarios. Prerequisites: NURS 6111, 6910, 6916. Corequisite: NURS 6112.

2 credits

NURS 6918 PRACTICE IN MEDICAL-SURGICAL NURSING I

Advanced practice in nursing care of critically ill clients with common diseases of the following systems: immunological, intergumentary, digestive and gastrointestinal, endocrine and metabolic, and renal. Application of assessment skills, planning, implementation and evaluation of nursing therapeutic interventions. Application of ethical and legal aspects, critical thinking, problem solving and communication skills during the intervention. Requires four (4) hours of practice weekly in variable health scenarios. Prerequisites: NURS 5000, 5010, 5020, 5040, 6910. Corequisite: NURS 6221.

2 credits

NURS 6919 PRACTICE IN MEDICAL SURGICAL NURSING II

Advanced practice in nursing care of clients with diseases that affect the functioning of adults in the following systems: neurological, musculoskeletal, cardiovascular, circulatory and hematological, respiratory and reproductive. Application of assessment skills, planning, implementation and evaluation of the nursing therapeutic interventions. Evaluation of ethical, legal problems, new trends in the nursing profession and research findings during the advanced practice of medical-surgical nursing. Requires four (4) hours of practice weekly in variable health scenarios. Prerequisites: NURS 6221, 6918, 6910. Corequisite: NURS 6222.

2 credits

NURS 6920 MATERNAL CHILD NURSING PRACTICE I: MATERNAL - NEONATAL

Advanced practice in maternal-neonatal care. Application of the skills of the nursing process: assessment, diagnosis of nursing, planning, implementation and evaluation of therapeutic interventions. Use of the ethical and legal aspects of critical thought, problem solving, communication skills, the cultural diversity and the practice based on evidence

during the implementation. Requires four (4) hours of practice weekly in variable health scenarios. Prerequisites: NURS 5000, 5010, 5020, 5040 and 6910. Corequisite NURS 6311.

2 credits

NURS 6921 MATERNAL AND CHILD NURSING PRACTICE II: CHILDHOOD - ADOLESCENCE

Advanced practice in the nursing care of clients from childhood to adolescence with emphasis on the following systems: respiratory, cardiovascular, neurological, renal, endocrine, gastrointestinal, hematological, immunological and musculoskeletal. Application of the skills of assessment, diagnosis of nursing, planning, implementation and evaluation of the therapeutic nursing interventions. Use of the theories of growth and development, of the ethical and legal aspects of critical thought, the problem solving, the communication skills, cultural diversity and the practice based on evidence during its implementation. Requires four (4) hours of practice weekly in variable health scenarios. Prerequisites: NURS 5000, 5010, 5020, 5040, NURS 6910, NURS 6311 and 6920. Corequisite NURS 6312.

2 credits

NURS 6970 INTEGRATION SEMINAR

Analysis and integration of knowledge, necessary skills and attitudes so that the clinical specialist may provide advanced nursing care. Development of innovative ideas based on evidence for situations related to client care in different scenarios. Corequisite: NURS 6914 or 6915.

3 credits

NURS 6990 RESEARCH PROJECT

Application of the research process during the elaboration of a research project related to the specialization area in the Program. Use of statistical methods for the analysis of the data obtained. Oral and written presentation of the problem, review of literature, methodology, results, conclusions and recommendations for the improvement of the nursing practice. Prerequisite: NURS 6090.

3 credits

Courses in Open Information Computer Systems (COIS)

COIS 5100 RELATIONAL DATA BASES

Analysis of databases. Includes a general view and cost-benefit. Emphasis on Codd's relational model, its implications in the development of the Database Management Systems (DBMS) and the SQL language. Creation and maintenance of a data bank in standard SQL. Requires additional time in an open lab.

3 credits

COIS 5120 CLIENT-SERVER NETWORKS AND ARCHITECTURE

Discussion of the basic concepts of telecommunications and local networks. Includes the different connection architectures and open systems. Emphasis on client-server architectures, technologies, middleware and clients. Analysis of benefits, costs and risks, communication between processes, remote processes, cooperative environments, distributed architectures and future trends. Requires additional time in an open lab.

3 credits

COIS 5130 DESIGN METHODOLOGY AND ADVANCED TOOLS

Application of the top down design methodology and the entity-relation model for the standardized design of a database. Design, development and implementation of a relational central bank. Development of complex data models. Includes advanced design tools. Requires additional time in an open lab.

3 credits

COIS 5200 APPLICATION OF PROGRAMMING LANGUAGES IN DATABASES

Comparison of languages of the third and fourth generation. Application of a visual programming high-level language. Analysis of programming principles oriented towards the object. Management of libraries, subroutines, controls and designers to produce high quality programs oriented to programming for information systems with data banks and interaction with SQL. Requires additional time in an open lab. Prerequisites: COIS 5100, 5130.

3 credits

COIS 5210 DATABASE MANAGEMENT

Analysis of the administration and modification of a database. Includes management of users, accounts, functions and privileges. Database space administration. Emphasis on backup, recovery, integrity and concurrent access. Requires additional time in an open lab. Prerequisites: COIS 5100, 5120.

3 credits

COIS 5220 REENGINEERING PROCESSES

Solution for data requirements in organizations. Crisis and identifying opportunities. Reengineering process in organizations (BPR). Redesigning processes, The role of information technologies. Leadership. Handling projects on a computer. Migration towards open and distributed settings. Case studies. Requires additional time in an open laboratory. Prerequisite: COIS 5120.

3 credits

COIS 5300 ANALYSIS OF OPEN SYSTEMS AND COMPUTER AIDED SOFTWARE ENGINEERING (CASE)

Analysis of the cycle for the development of an open information system. Includes analysis of strategies and diagrams. Application of Computer Aided Software Engineering (CASE) for the analysis, design, development and documentation of an open information system. Emphasis on the development of an information system viability study. Requires additional time in an open lab. Prerequisites: COIS 5130, 5210, BADM 5060.

3 credits

COIS 5400 RAPID APPLICATION DEVELOPMENT

Use of rapid application development systems (RAD). Design and construction of programming blocks, forms, reports and other applications using databases. Emphasis on the functional prototype of an open information system requiring a database. Requires additional time in an open lab. Prerequisites: COIS 5200, 5210.

3 credits

COIS 6200 SYSTEM TUNING, TROUBLESHOOTING, CODIFICATION, SECURITY AND QUALITY

Detailed review of relational databases to verify and correct initiation parameters that solve performance problems. Evaluation of the measurements taken on the equipment operating the database to make recommendations. Detailed review of code development aspects in applications affecting the performance of a database. Includes security, physical and logical protections and recovery from disasters in open information systems. Requires additional time in an open lab. Prerequisite: COIS 5210.

3 credits

COIS 6250 MULTIMEDIA AND INTERFACE

Creation, copying and managing images and sounds. Includes animation, storage, compression, integration of videos and other means. Interface design. Emphasis on person-computer dialogue, windows, integration of multimedia into a database. Requires additional time in an open lab.

3 credits

COIS 6360 SOCIAL IMPACT OF COMPUTERS

Professional ethics. The risk of technology. Critical systems. Technology and work. Accessibility of information. Privacy. Computer crimes. Copyright and pirating. Other social problems.

3 credits

COIS 6370 GEOGRAPHIC INFORMATION SYSTEMS

Computerized application of Geographic Information Systems (GIS). Analysis of types of maps and graphic representations. Review of the impact of GIS in planning. Requires additional time in an open lab.

3 credits

COIS 6380 DECISION SUPPORT SYSTEMS (DDS) IN THE DECISION MAKING PROCESS

Analysis of support systems for decision-making and their integration into data banks and information systems. Integration with a knowledge bank. Includes the structures of decision-making models and the investigation of operations. Emphasis on executive support systems (ESS). Requires additional time in an open lab. Prerequisite: BADM 5060.

3 credits

COIS 6970 SEMINAR ON ADVANCED TOPICS IN OPEN SYSTEMS

Study the problems related to the field of open information computer systems. Prerequisite: Approval from the Program Coordinator.

3 credits

COIS 6975 RESEARCH SEMINAR

Identification of a research topic in the field of open information computer systems. Research methodology. Using computer tools for research. Analysis of literature, selection of a methodology and development of a proposal or article. Prerequisite: approval of the Program Coordinator.

3 credits

COIS 6980 PROJECT DEVELOPMENT IN OPEN INFORMATION SYSTEMS

Design and development of an open information system in a client/server architecture. Establishment of the data requirements of an organization. Creation of a relational database using advanced designed tools. Installation of a database allowing for access of different types of users (different privileges and accounts). The system must show that it observes the rules of data integrity, concurrence, management, tuning and maintenance. A formal public presentation of the system, with prior authorization of the project professor and the Coordinator of the Program is required. Students will register in this course as many times as necessary until finishing their project. Prerequisites: COIS 5300, 5400, 6200. Grade: P/NP.

3 credits

Courses in Physics (PHYS)

PHYS 5000 PHYSICS FOR TEACHERS AT THE ELEMENTARY LEVEL

Analysis of the logic of physics. Emphasis on the concepts that constitute the foundations of the laws that govern movement, energy and its conservation. Includes the different manifestations associated with heat and its transfer. Analysis of the interaction of fields and areas of electromagnetism: waves and optics. Application of practical laboratory experiences in the teaching and learning processes. Requires 30 hours of lecture and 30 hours of closed lab.

3 credits

Courses in Psychology (PSYC)

PSYC 5010 HISTORY AND SYSTEMS OF PSYCHOLOGY

The development process of psychology from a historical, philosophical, and scientific perspective. Critical analysis of the influence of other schools of thoughts, like occidental philosophy, oriental philosophy, scientific empiricism, and naturalism, in the creation of the body of knowledge of contemporary psychology.

3 credits

PSYC 5030 ETHICS AND LEGAL ASPECTS OF PSYCHOLOGY

Evaluation of the philosophical systems related to the state and federal standards that regulate the professional practice of school psychology, psychological counseling and industrial/organizational psychology. Includes the analysis of controversies that arise in professional practice and the alternatives to solve them.

3 credits

PSYC 5033 INTERVIEW PROCESSES AND TECHNIQUES

Management of the psychological interview based on communication theories. Emphasis on the application of the different interview modalities in different populations and the analysis of behaviors, attitudes and feelings that affect it. Includes skills for the systematic analysis of scientific literature related to this subject. Concurrent with PSYC 6410.

2 credits

PSYC 5040 PHYSIOLOGICAL PSYCHOLOGY

Development of knowledge on neuroanatomy, neurophysiology and human pharmacology as the biological base of motor, sensorial, affective and cognitive processes. Emphasis on the relation of the central nervous system in the processing of emotions, motivations and cognition.

3 credits

PSYC 5050 DEVELOPMENTAL PSYCHOLOGY

Analysis of the theories and approaches that study development from a holistic perspective. Emphasis on personality development and the theories that seek to explain the formation of the I (psychoanalytic, of the conduct and learning, humanistic - existentialist, cognitive).

3 credits

PSYC 5060 PSYCHOLOGY OF PERSONALITY

Theories and personality research within the psychodynamic, humanist, behavioral and cognitive models. Analysis of their relationship with aspects such as: development, learning, and motivation, conflict and culture.

3 credits

PSYC 5100 COGNITION, MOTIVATION AND LEARNING

Synthesis of the cognitive, affective and perceptual processes. Discussion of learning theories and the factors that interact to explain human conduct and thought.

3 credits

PSYC 5150 ADVANCED STATISTICS

Analysis of inferential statistical methods applied to behavioral sciences: measures of correlation and regression, t tests, ANOVA (up to mixed designs of two routes or double classification) and nonparametric tests. Includes the use of computerized statistical analysis programs. Concurrent with PSYC 6421.

2 credits

PSYC 5153 PRINCIPLES OF MEASUREMENT AND CONSTRUCTION OF PSYCHOLOGICAL TESTS

Methods for the analysis and construction of items to estimate reliability, validity and test standardization. The development of tests used in diverse psychological service centers. Analysis of the ethical and social controversies in the use of psychological tests in Puerto Rico. Prerequisite: PSYC 5150.

3 credits

PSYC 5200 CONTEMPORARY SOCIAL PSYCHOLOGY

Review of contemporary trends in social psychology, such as: symbolic interactionism, ethnomethodology, cognitive orientation and constructionist, critical and postmodern perspective. Includes analysis of studied trends based on their meaning for the Puerto Rican society.

3 credits

PSYC 5220 METHODOLOGY OF RESEARCH IN PSYCHOLOGY

Evaluation of research methodologies, that apply to psychology. Includes interview, questionnaire, observations, "Q-sort", scales and tests. Discussion of studies that include naturalistic and systematic observation; field studies, "ex post facto" and co relational; and the evaluation of programs for the analysis of the different research levels. Prerequisites: PSYC 5150, 6421. Concurrent with PSYC 6422.

2 credits

PSYC 5280 ROLES AND FUNCTIONS OF THE SCHOOL PSYCHOLOGIST

Roles of the school psychologist as a diagnostician, therapist, consultant and trainer. Analysis and application of the skills and knowledge related to the prevention and intervention of emotional and learning problems. Functions involved in consulting and training teachers, administrators and parents in the school system.

3 credits

PSYC 5285 PSYCHOLOGICAL COUNSELING

Development of psychological counseling as a specialization. Synthesis of the psychological advisor's areas of competencies. Includes topics related to human diversity, gender, age, special populations, occupational and vocational topics, among others.

3 credits

PSYC 5295 CONSULTING, COLLABORATION AND SCHOOL ORGANIZATION

Summary of the consulting, collaboration and school organization models with emphasis on their application to particular situations. Discussion of the systems that influence the development and conduct of children and adolescents, including the school and family system.

3 credits

PSYC 6050 INTERVENTION MODELS AND TECHNIQUES I

Evaluation and comparison of the classic and traditional psychotherapeutic approaches. Emphasis on the application of intervention strategies for each model. Includes the process of creating cases and use of simulations. Prerequisite: PSYC 5285.

3 credits

PSYC 6051 INTERVENTION MODELS AND TECHNIQUES II

Evaluation of contemporary psychotherapeutic models. Emphasis on the identification of contemporary, alternative or complementary intervention strategies. Includes simulations of intervention strategies and techniques with groups, couples or families. Prerequisite: PSYC 6050.

3 credits

PSYC 6090 PSYCHOPATHOLOGY

Review of the varied approaches that study deviant behavior, mental and behavior disorders. Includes causes, manifestations, severity levels and classification systems. Prerequisite: PSYC 5050.

3 credits

PSYC 6110 PSYCHOLOGICAL AND LEARNING PROBLEMS IN CHILDREN AND ADOLESCENTS

Evaluation of the traditional and contemporary approaches that study emotional, behavioral, and learning disturbances in children and adolescents. Includes causes, manifestations, severity levels, and the classification systems used in the diagnosis of these disorders. Prerequisite: PSYC 5050.

3 credits

PSYC 6113 COUNSELING AND PSYCHOTHERAPY MODELS

Diverse models of counseling and psychotherapy designed with behavioral, cognitive, rational, humanist and psychodynamic approaches. Review of the theoretical basis of these models as well as case studies. Prerequisite: PSYC 6090.

3 credits

PSYC 6114 COUNSELING AND PSYCHOTHERAPY TECHNIQUES

Application of diverse models of counseling and psychotherapy according to the different schools of thought. The acquisition of counseling and psychotherapy techniques and the practical aspects of this acquisition by utilizing role playing and other ways of practicing the use of the different models. Prerequisite: PSYC 6113.

3 credits

PSYC 6214 INTERVENTION AND PSYCHOTHERAPY MODELS WITH CHILDREN AND ADOLESCENTS

The diverse psychotherapeutic models and behavior management techniques utilized in work with children and adolescents. Critical analysis of research available on the application of existing intervention models in the context of Puerto Rican society and culture. Intervention strategies and psychological models from various approaches and their adequacy in the treatment of diverse clinical problems. Prerequisite: PSYC 6110.

3 credits

PSYC 6215 APPLIED BEHAVIORAL ANALYSIS WITH CHILDREN AND ADOLESCENTS

Description of theories, principles and procedures of behavioral analysis applied to children and adolescents. Emphasis on procedures and techniques designed to modify specific behaviors. Includes the development of competencies for the application of principles, problem analysis, and selection of effective and ethical procedures and design of programs. Prerequisite: PSYC 5100.

3 credits

PSYC 6216 PSYCHO EDUCATIONAL EVALUATION AND INTERVENTIONS WITH EXCEPTIONAL CHILDREN

Evaluation of exceptional children. Use of psycho educational interventions to obtain the goals and development of cognitive and academic skills in children with diverse abilities, incapacities, strengths and needs. Prerequisites: PSYC 6260, 6914. Corequisite: PSYC 6428.

2 credits

PSYC 6260 COGNITIVE ASSESSMENT

Review of the theoretical and practical aspects of administration, scoring and interpretation of cognitive tests most frequently used in Puerto Rico with diverse populations. Integration of the most recent research. Prerequisites: PSYC 5033, 5153. Corequisite: PSYC 6914.

3 credits

PSYC 6270 PERSONALITY ASSESSMENT

Review of the theoretical and practical aspects of the administration, scoring and interpretation of personality tests most frequently used in Puerto Rico with diverse populations. Integration of the most recent research. Prerequisites: PSYC 5033, 5153. Corequisite: PSYC 6915.

3 credits

PSYC 6300 PERSONNEL PSYCHOLOGY

Consideration of recent psychological literature in the area of personnel, including recruitment, interview, employee evaluation, work analysis, location, handling of conflicts and productivity motivation.

4 credits

PSYC 6303 PSYCHOLOGICAL AND SOCIAL ASPECTS IN ORGANIZATIONAL BEHAVIOR

Perception, motivation and attitudes and their effect on the work environment. Analysis of the concepts of power and influence, the process of change, conflict management, satisfaction, organizational commitment as elements of the organizational culture. Emphasis on the analysis and development of techniques to manage groups effectively.

3 credits

PSYC 6304 STRATEGIES FOR QUALITY IN THE ORGANIZATION

Consideration of the main strategies of Total Quality and the concepts of Organizational Development and their application to industrial/organizational psychology. Emphasis in their impact for the empowerment of human resource, client orientation, excellent leadership and process improvement.

3 credits

PSYC 6305 STRATEGIES FOR CONTINUOUS IMPROVEMENT AND DECISION MAKING

Application of Statistical Process Control in problem solving and decision-making. Special attention to measurement techniques and analysis of data to reduce process variation. Analysis of the psychological elements in decision-making and problem solving. Prerequisite: PSYC 6304.

2 credits

PSYC 6306 PSYCHOLOGICAL DIMENSIONS IN THE EDUCATION AND TRAINING OF HUMAN RESOURCES

Review of the different learning and teaching styles, adult education, planning, material preparation, diagnosis type evaluation and follow up. Design of education and training programs for different types of organizations. Prerequisites: PSYC 6300, 6303.

4 credits

PSYC 6308 CURRENT ASPECTS OF INDUSTRIAL/ORGANIZACIONAL PSYCHOLOGY

Analysis of research and literature on current topics observed in the contemporary practice and their implications to the professional work with organizations. Special emphasis will be given to matters that characterize the individual, groups, organizations and their background.

3 credits

PSYC 6313 DEVELOPMENT AND APPLICATION OF INSTRUMENTS FOR MANAGERIAL INFORMATION

Application of psychological measurement principles to the construction, development and validation of instruments. The use of scales, questionnaires, observation guidelines, interviews and test development.

3 credits

PSYC 6314 PSYCHOLOGICAL EVALUATION IN THE INDUSTRIAL/ORGANIZATIONAL ENVIRONMENT

Psychological testing in selection, professional development and placement. Tests that measure the areas of personality, cognition, aptitude, occupational preferences and administrative and supervisory skills. Prerequisite: PSYC 5153.

3 credits

PSYC 6316 PSYCHOLOGY OF LEADERSHIP

The concept of leadership from a behavioral perspective. An analysis of the roles of the organizer, facilitator, teacher and technician that are executed during supervision. Emphasis on the concepts of vision, values and leadership behavior. Prerequisites: PSYC 6300, 6303.

3 credits

PSYC 6317 PROFESSIONAL CONSULTING

The diverse models of psychological consulting within organizations, the steps in the consulting process and the elements related to the role of consultant. A review of the client/supplier relationship in areas such as assessment, use of interdisciplinary teams, contract negotiations, written reports, ethical implications, legal forums and others. Prerequisites: PSYC 6300, 6303.

3 credits

PSYC 6410 PRACTICE IN INTERVIEW PROCESSES AND TECHNIQUES

Practice on interview processes and techniques. Preparation of interview videos with children, adolescents and adults to refine skills. Evaluation of interviews in a group context. Concurrent with PSYC 5033. Grade: P/NP.

1 credit

PSYC 6421 PRACTICE IN ADVANCED STATISTICS

Practice in data analysis and interpretation with the use of computerized programs. Includes writing of statistical analysis results following selected professional formats. Concurrent with PSYC 5150. Grade: P/NP.

1 credit

PSYC 6422 PRACTICE IN PSYCHOLOGY RESEARCH

Practice in the development of bibliographical research skills, review of specialization related research, and the professional APA writing style. Prerequisites: PSYC 5150, 6421. Concurrent with PSYC 5220. Grade: P/NP.

1 credit

PSYC 6428 PRACTICE IN PSYCO EDUCATIONAL EVALUATION AND INTERVENTIONS WITH EXCEPTIONAL CHILDREN

Practice in psycho educational evaluation with exceptional children. Emphasis on the administration and interpretation of cognitive and learning mental process evaluation instruments and in the development of goals and appropriate interventions for this population. Concurrent with PSYC 6216. Grade: P/NP.

1 credit

PSYC 6914 PRACTICE IN COGNITIVE ASSESSMENT

Supervised practice directed to cognitive assessment. Emphasis on the administration, correction and interpretation of cognitive tests; preparation of case histories, writing of the report and discussion of results. Includes specific training in psychological tests. Concurrent with PSYC 6260. Grade: P/NP.

1 credit

PSYC 6915 PRACTICE IN PERSONALITY ASSESSMENT

Supervised practice directed to personality assessment. Emphasis on the administration, correction and interpretation of personality tests; preparation of case histories, writing of the report, and discussion of results. Includes specific training in psychological tests. Concurrent with PSYC 6270. Grade: P/NP.

1 credit

PSYC 6925 PRACTICE IN PSYCHOLOGICAL RESEARCH

Development and participation in a project of scientific research under the supervision of a faculty member according to the student's area of specialization. Requires 160 hours of practice distributed in agreement with the supervisor. Prerequisites: PSYC 5220. Grade: P/NP.

2 credits

PSYC 6930 PRACTICE I IN PERSONAL AND PROFESSIONAL DEVELOPMENT IN PSYCHOLOGY

Living and educational experience aimed for the personal and professional formation of the psychologist under the supervision of a faculty member. Emphasis on intra and interpersonal development and in skills related to: the psychological interview, conceptualization of psychological situations, professional assessment and professional decision-making. Use of portfolio as a strategy for self-evaluation and the evaluation of learning. Grade: P/NP.

(Fee equivalent to 1 credit)

PSYC 6931 PRACTICE II IN PSYCHOLOGICAL COUNSELING

Practical experiences aimed for the development of psychological evaluation skills. Integration and application of the skills of interviewing, review of records, writing of record, preparation of psychological evaluation reports. Development of skills related to feedback of test results, initial intervention, and consulting to parents and adults. The supervised practice will be carried out under business hours of the practice center where the student will be placed. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Prerequisites: PSYC 5260, 5270, 6914, 6915, 6930. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 6932 PRACTICE III IN PSYCHOLOGICAL COUNSELING

Practical experiences aimed for the development of psychological intervention skills including psychological interview, psychological evaluation, psychodiagnosis, creation of the psychotherapeutic plan and psychotherapy. Emphasis on the brief psychotherapy models aimed for the prevention and promotion of mental health and socio-emotional adjustment. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Prerequisite: PSYC 6931. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 6933 PRACTICE I: PERSONAL AND PROFESSIONAL DEVELOPMENT

Supervised practice directed to the personal and professional formation of the psychologist. Emphasis on the intra and interpersonal development and on the skills related to professional assessment and decision making. Use of portfolio as a self-evaluation strategy. Requires a minimum of 30 hours of supervised practice. Prerequisite: PSYC 5030. Grade: P/NP.

1 credit

PSYC 6934 PRACTICE II IN PSYCHOLOGICAL COUNSELING

Supervised practice aimed to develop evaluation skills relevant to the Psychological Counseling specialization. Emphasis on the use and administration of instruments and strategies for data interpretation, and report preparation. Requires a minimum of 167 hours of supervised practice. Prerequisites: PSYC 5010, 5030, 5050, 5285, 6260, 6270, 6914, 6915, 6090, 6933. Grade: P/NP.

3 credits

PSYC 6935 PRACTICE III IN PSYCHOLOGICAL COUNSELING

Supervised practice to strengthen the psychological evaluation skills relevant to the Psychological Counseling specialization and to initiate the integration of the intervention models typically used in this specialization. Emphasis on the application of diverse psychotherapeutic modalities such as the psychotherapy or the vocational, individual, couple, family and group counseling. Requires a minimum of 167 hours of practice with a variety of populations during the regular working hours of the practice center. Prerequisites: PSYC 6050, 6051, 6934. Grade: P/NP.

3 credits

PSYC 6936 PRACTICUM IV IN PSYCHOLOGICAL COUNSELING

Supervised practice to strengthen the integration skills of the models typically used in the psychological counseling specialization. Emphasis on the application of diverse psychotherapeutic modalities such as psychotherapy or vocational, individual, couple, family and group counseling. Requires a minimum of 167 hours of practice with different populations during the regular working hours of the practice center. Prerequisites: PSYC 6934, 6935. Grade: P/NP.

3 credits

PSYC 6941 PRACTICE II IN SCHOOL PSYCHOLOGY

Practical experiences aimed for the development of psychological evaluation skills. Integration and application of the skills of interviewing, review of records, writing of records, preparation of psychological evaluation reports. Development of skills related to: feedback of test results, initial intervention, and consulting of school administration, teachers, and parents. The supervised practice will be carried out under the business hours of the practice center where the student will be placed. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Prerequisites: PSYC 5260, 5270, 6914, 6915, 6930. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 6942 PRACTICE III IN SCHOOL PSYCHOLOGY

Practical experiences aimed for the development of intervention skills in school psychology including psychological interview, psychological evaluation, psychodiagnosis, consulting, creation of an individual psychotherapeutic plan and application of psychotherapy techniques to infants, children and adolescents. Emphasis on the brief psychotherapy models aimed for the prevention and promotion of mental health and socio-emotional adjustment of children and adolescents. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Prerequisite: PSYC 6941. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 6944 PRACTICE II IN SCHOOL PSYCHOLOGY

Supervised practice in the psychological and psycho educational evaluation skills. Emphasis on the skills related to administration, correction, interpretation of psycho educational and psychological evaluation instruments, writing of pertinent recommendations and feedback of the evaluation findings. Requires 167 hours of supervised practice during regular working hours of the practice center. Prerequisites: PSYC 5010, 5030, 5050, 6110, 6216, 6260, 6270, 6428, 6914, 6915. Grade: P/NP.

3 credits

PSYC 6945 PRACTICE III IN SCHOOL PSYCHOLOGY

Supervised practice to strengthen the psychological and psychoeducational evaluation skills and to initiate the integration of the skills acquired with the professional competencies of school psychology, such as counseling to schools, parents and organizations. Requires a minimum of 167 hours of supervised practice during the regular working hours of the practice center. Prerequisites: PSYC 6214, 6944. Grade: P/NP.

3 credits

PSYC 6946 PRACTICUM IN SCHOOL PSYCHOLOGY

Supervised practice to strengthen the psychological intervention for the integration of skills acquired with the professional competencies of school psychology. Emphasis on counseling to schools and to parents and students.

Requires a minimum of 167 hours of supervised practice during the regular working hours of the practice center. Prerequisites: PSYC 6214, 6944, 6945. Grade: P/NP.

3 credits

PSYC 6951 PRACTICE II IN INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

Experiences that familiarize the student with the varied scenarios related to the practice of Industrial/Organizational Psychology. Development of professional skills related to organizational evaluation and diagnosis. Application of the different theories, instruments, and research methods to compile and conceptualize information. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Prerequisites: PSYC 6314, 6930. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 6952 PRACTICE III IN INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

Practical experiences through the placement of students in different scenarios such as: industry, government, service organizations, and community institutions. Individual supervision under a faculty member aimed for the development of skills related to position analysis and description, professional development plans, personnel evaluation, personnel interviews, and personnel services like the Employee Assistance Program, among others. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Prerequisite: PSYC 6951. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 6954 PRACTICE II IN INDUSTRIAL/ORGANIZACIONAL PSYCHOLOGY

Supervised practice in diverse scenarios related to industrial/organizational psychology for the application of varied theories, research instruments and research methods in the compilation and conceptualization of information. Emphasis on the development of professional skills related to psychological evaluation, personnel evaluation, interviews, among others. Requires a minimum of 167 hours of supervised practice. Prerequisites: PSYC 6933, 6314. Grade: P/NP.

3 credits

PSYC 6955 PRACTICE III IN INDUSTRIAL/ORGANIZACIONAL PSYCHOLOGY

Supervised practice for the development of skills related to training, description and analysis of positions, professional development plans, and personnel service such as Employee Assistance Programs and Wellness Programs, among others. Requires a minimum of 167 hours of supervised practice in different scenarios such as private companies, service organizations, government and communitarian institutions. Prerequisites: PSYC 6954, 6306. Grade: P/NP.

3 credits

PSYC 6956 PRACTICE IV IN INDUSTRIAL/ORGANIZACIONAL PSYCHOLOGY

Supervised practice in a real work scenario aimed to develop an organizational intervention project. Integration of the measurement and evaluation skills with the organizational development skills. Requires a minimum of 167 hours of supervised practice in different scenarios such as private companies, service organizations, government and communitarian institutions. Prerequisites: PSYC 6954, 6955. Grade: P/NP.

3 credits

PSYC 6960 ADVANCED SEMINAR IN PSYCHOLOGICAL COUNSELING

Evaluation of multiple aspects of the professional practice of psychology in service settings. Emphasis on the analysis of topics such as: family psychotherapy, counseling and psychotherapy with woman, group counseling and psychotherapy with severely medically ill patients, among others. Prerequisites: PSYC 6090, 6051.

3 credits

PSYC 6963 ADVANCED SEMINAR IN PSYCHOLOGICAL EVALUATION

Review of the theories, approaches and procedures that integrate advanced psychological evaluation techniques. Critique of the standards that affect the practice. Includes the evaluation of legal decisions that challenge or confirm the validity of psychological evaluation and testimonies of expert psychologists. Prerequisites: PSYC 6260, 6270, 6914, 6915.

3 credits

PSYC 6973 ADVANCED SEMINAR IN SCHOOL PSYCHOLOGY

Valuation of the multiple aspects involved in the professional practice of psychology in school and psycho educational settings. Includes psychological development and development disorders, evaluation, intervention, consultation, and ethical norms. Prerequisites: PSYC 5295, 6110.

3 credits

PSYC 6974 ADVANCED SEMINAR IN PERSONNEL PSYCHOLOGY

1-3 credits

PSYC 6980 RESEARCH IN INDUSTRIAL/ORGANIZACIONAL PSYCHOLOGY

Review of scientific research methodology in the industrial/organizational psychology field. Includes the evolution of research, use of traditional and contemporary qualitative and quantitative methods, methods of analysis and publishing of results within the organization and in professional forums.

3 credits

PSYC 6983 SEMINAR ON PSYCHOLOGICAL RESEARCH

Writing of a research proposal related to the student's specialization. Emphasis on the application of the quantitative or qualitative methodology. Prerequisites: PSYC 5220, 6422. Grade: P/NP.

2 credits

PSYC 6989 INTERNSHIP IN SCHOOL PSYCHOLOGY

Integration of the knowledge and skills in providing services pertinent to school psychology. Requires 1,200 internship hours to be completed in a period of 1-2 years. A minimum of 600 internship hours will be completed in a school scenario. Grade: P/NP.

Quota equivalent to 6 credits

PSYC 6990 THESIS

Development of a qualitative or quantitative research on a subject pertinent to psychology. Includes the supervision of a Thesis Committee and the defense of the thesis before the Psychology Graduate Program Faculty. Students will register as many times as necessary until finishing their research work. Prerequisites: PSYC 5150, 5220, 6421, 6422 and specialization courses. Grade: P/NP.

3 credits

The following courses (PSYC 5231, 5232, 6000, 6005, 6010, 6015, 6020, 691A, 691B, 691C and 697F are for the exclusive use of the Master in Science Degree in Psychological Counseling in Family.

PSYC 5231 PSYCHOLOGICAL MEASUREMENT I

Analysis of the types of psychological cognitive tests, interpretation, use and application to the individual and the family. Study of the controversies related to the use of these in the diagnosis and treatment of human conflicts (45 hours lecture). In addition, the student must complete concurrently 25 hours of supervised practice in the administration, interpretation and writing of reports of the cognitive tests most used in Puerto Rico.

3 credits

PSYC 5232 PSYCHOLOGICAL MEASUREMENT II

Analysis of the types of psychological tests of personality, interpretation, use and application in the measurement of psychological characteristics of the individuals and the family. Discussion of the controversies related to the use of these and their application to human conflicts (45 hours of lecture). In addition, the student must complete concurrently 25 hours of supervised practice in the administration, correction, interpretation and writing of reports of the psychological tests of personality most used in Puerto Rico. Prerequisite: PSYC 5231.

3 credits

PSYC 6000 THEORETICAL FOUNDATIONS OF FAMILY THERAPY

Study and analysis of the historical development of family therapy theories from their fundamental bases to post-modernism. Emphasis on the different models that conceptualize family dynamics and the therapeutic techniques used in systemic intervention.

3 credits

PSYC 6005 FAMILY PSYCHOPATHOLOGY

Analysis of current situations of family life and the dysfunctional dynamics generated in the home environment. Emphasis on the negative effect in the development of children; in domestic violence and the nontraditional family styles that can generate pathology.

3 credits

PSYC 6010 COUNSELING TECHNIQUES AND INDIVIDUAL, AND GROUP AND FAMILY PSYCHOTHERAPY

Application of the psychotherapeutic techniques for intervention with individuals and families. Development of the skills and techniques that the effective administration of individual, group and family therapy requires. Includes the simulation of intervention strategies with individuals, groups, couples and families. Prerequisites: PSYC 5033, 5050, 6000, 6005 and 6410 (practice course that take contender with PSYC 5033).

3 credits

PSYC 6015 THE NONTRADITIONAL FAMILY

Analysis of the contemporary topics brought up by the emerging styles of the nontraditional family and their individual, social and communitarian effect.

3 credits

PSYC 6020 INTERVENTION WITH FAMILIES IN CRISIS

Application of the intervention theories in crisis situations in diverse familiar structures. Emphasis on the development of the necessary skills for intervention in situations of familiar crises and mental health in the family. Prerequisites: PSYC 6000, 6005, 6010, 6015.

3 credits

PSYC 691A SUPERVISED PRACTICE IN PSYCHOLOGICAL COUNSELING I

Application of skills and intervention techniques in psychological counseling with individuals and families. Recognition, interpretation and application of interview techniques. Supervised experience for a period of 200 hours per academic term in institutions or in public or private agencies is required. Prerequisites: Approval of the Practice Supervisor and have approved the courses PSYC 5030, 5033, 5040, 5050, 5060, and 6410 (practice course that is taken concurrently with PSYC 5033). Grade P/NP.

2 credits

PSYC 691B SUPERVISED PRACTICE IN PSYCHOLOGICAL COUNSELING II

Application of skills and intervention techniques in psychological counseling with individuals and families. Conceptualization, evaluation, diagnosis and treatment plan. Supervised experience for a period of 200 hours per academic term in institutions or in public or private agencies is required. Prerequisites: Approval of the Practice Supervisor and have approved PSYC 691A, 5231, 5232, 6005, 591A. Grade P/NP.

2 credits

PSYC 691C SUPERVISED PRACTICE IN PSYCHOLOGICAL COUNSELING III

Application of skills and intervention techniques in psychological counseling with individuals and families. Integration and therapeutic intervention. Supervised experience for a period of 200 hours per academic term in institutions or in public or private agencies is required. Prerequisites: Approval of the Practice Supervisor and have approved all courses of the Program, except courses PSYC 6925, 697F.

2 credits

PSYC 697F ADVANCED INTEGRATION SEMINAR

Integration of multiple aspects of psychological counseling practice in scenarios offering aid for individuals and the family. Emphasis on the study, analysis and discussion applied to problems and present trends, such as: family rights,

mediation and group dynamics, human sexuality, deviant behavior and mental disorders of children and adolescents; among others topics. Includes the incorporation of topics and unique events that may allow the update of the curriculum of the masters degree in light of new and emerging knowledge in psychological counseling. Prerequisite: have passed at least 90% of the program courses. Grade: P/NP.

3 credits

PSYC 7010 HUMAN DIVERSITY

Study of aspects inherent to the role of culture and individual diversity and their relation with research and practice of psychology in Puerto Rico. Analysis of the psychological and ethical implications related to: race, ethnic group, religion, gender, sexual orientation, and social class, among others.

2 credits

PSYC 7020 NEUROPSYCHOLOGY

Fundamental training on the theories and systems that explain the cerebral basis of behavior and the psychological, normal and dysfunctional processes in school, industrial, and Psychological Counseling scenarios.

3 credits

PSYC 7030 QUANTITATIVE RESEARCH

Critical analysis of descriptive, experimental and quasi-experimental designs applied to the development of needs studies, opinion polls, quasi-experimental and experimental research in psychology.

2 credits

PSYC 7035 CORRELATION AND REGRESSION

Statistical analysis to estimate the correlation between two ordinal, or interval nominal variables by means of parametric and nonparametric coefficients of correlation. Evaluation of the linear regression and the bivariate factorial analysis. Use of statistical application for data analysis. Prerequisite: PSYC 7030.

2 credits

PSYC 7040 QUALITATIVE RESEARCH

Critical analysis of the philosophical bases and the types of studies used in qualitative methodology, as well as the methods for data compilation, such as the ethnographical interview, observation, and profound interview, among others. Application to special projects of concepts related to the categorization of data, and the triangulation of qualitative data.

2 credits

PSYC 7045 ANALYSIS OF QUALITATIVE DATA

Review of the processes related to data collection and the way to analyze information in the qualitative methodology. Use and analysis of data collected by means of qualitative strategies of observation, qualitative interviews, focal groups, documents, and visual and interactive methods, among others. Prerequisite: PSYC 7040.

2 credits

PSYC 7050 DESIGN AND EVALUATION OF PSYCHOLOGICAL PROGRAMS AND SERVICES

Principles, theories and strategies that guide the planning and design of psychological programs and services. Emphasis on the use of the scientific method and research in action approach applied to the design and evaluation of programs and psychological services. Development of a project of planning and evaluation of a psychological service program, according to each area of specialization. Corequisite: PSYC 8912.

2 credits

PSYC 7970 SPECIAL TOPICS

1-3 credits

PSYC 7971 ADVANCED RESEARCH SEMINAR

Analysis of selected topics in agreement with the novel perspective of research.

2 credits

PSYC 8210 ADULTHOOD: PSYCHOLOGICAL PERSPECTIVES

Adulthood as a dynamic process of development where the individual has to make constant transitions and changes in relation to family, work and society. Analysis of social problems from the psychological perspective that adults face, such as couple relations, change of social roles, retirement, social participation, health situations, and sexuality, among others. Application of concepts on evaluation, intervention, and ethical issues in the management of these situations of Psychological Counseling.

3 credits

PSYC 8220 PSYCHOTHERAPEUTIC INTERVENTION WITH FAMILIES

Study of different styles, configurations, and models of the contemporary family. Discussion of the main models, paradigms, and psychological intervention techniques with families including the systemic model, the structural model, the psychodynamic model, among others. Application of evaluation, diagnosis and psychological intervention methods, as well as prevention strategies, pertinent to situations that families confront.

3 credits

PSYC 8230 EVALUATION AND INTERVENTION IN POPULATIONS WITH SPECIAL CONDITIONS

Analysis of the current problems of persons with special characteristics, severe conditions and handicaps. Study of new federal and state legislation that defines and regulates the standards of service with emphasis on ethical implications and intervention with those populations. The course will give training on the methods of evaluation, diagnosis and prevention and psychological intervention strategies with those populations. Corequisite: PSYC 8913.

2 credits

PSYC 8240 SEMINAR IN PSYCHOLOGICAL EVALUATION

Theories, approaches, and procedures that allow an advanced integration of psychological testing techniques, cognitive evaluation and personality evaluation within the conceptual frame of the clinical-experimental method of generating hypothesis. The course is aimed for the evaluation of persons with handicaps, organic conditions or psychological dysfunction.

3 credits

PSYC 8250 PSYCHOTHERAPEUTIC INTERVENTION WITH COUPLES

Elements involved in the election and formation of a couple, interaction patterns, functional and dysfunctional, as well as, Psychological Counseling models applied to situations of traditional and non-traditional couples. Analysis of pertinent research to the intervention strategies of current problems such as violence, rupture, infertility, socio-emotional addiction, co-dependency, and other crisis situations.

3 credits

PSYC 8260 SEMINAR: HANDLING HIGH RISK PSYCHOLOGICAL CASES

Review of the theoretical, ethical, and legal aspects of the process of determining dangerousness or high risk. Discussion of the methods of evaluation, diagnosis, and psychological management of these groups. Among the topics that will be discussed in this seminar are persons with crisis situations, suicide attempts, victims of crime or violence, persons with self control problems, survivors of catastrophic events, persons with limiting or terminal diseases and aggressors, among others.

1-3 credits

PSYC 8270 GROUP PSYCHOTHERAPY

Study and application of postulates and practices of the different approaches to group psychotherapy. Emphasis on the evaluation and selection of psychotherapeutical approaches according to the particular needs of the different populations.

3 credits

PSYC 8280 ALTERNATIVE AND COMPLEMENTARY THERAPIES

The theoretical and philosophical approaches, techniques, methods, and procedures used in psychology and medicine to promote physical and mental health of human beings from a holistic perspective. Analysis of recent research regarding the mind-body approach and its effectiveness in management and intervention of different conditions such

as depression, anxiety, tension, high blood pressure, migraine, and chronic diseases, among others. Application of therapies such as creative visualization, relaxation, meditation, reiki, yoga, and acupressure.

3 credits

PSYC 8310 PROFESSIONAL STANDARDS IN SCHOOL PSYCHOLOGY

Critical analysis of the different types of interventions and roles carried out by the school psychologist and their applicability to the context of current Puerto Rican society and culture. Emphasis on the issues related to the professional work of the school psychologist at the doctoral level: professional supervision, teaching at the graduate level, and the planning and evaluation of programs, and professional practice, among others. Analysis of professional, ethical and legal controversies in this area.

3 credits

PSYC 8320 SCHOOL ORGANIZATION AND OPERATION

Analysis of the different aspects in school organization and operation. Organizational theory applied to the educational scenario; processes of organizational change and the implications for the school personnel, the development, planning, and evaluation of psycho-educational programs.

3 credits

PSYC 8330 PSYCHOLOGICAL EVALUATION AND INTERVENTION WITH INFANTS AND PRESCHOOL CHILDREN

Study of different evaluation and intervention methods from the time of birth to five years of age. Emphasis on the evaluation of the cognitive and socio-emotional development of early childhood from an ecological and interaction perspective. Discussion of the importance of the participation of parents in the evaluation and intervention process. The course will have a supervised practice component where the student will develop the skills of administration, assessment and interpretation of evaluation findings. Corequisite: PSYC 8914.

2 credits

PSYC 8340 NEUROPSYCHOLOGICAL EVALUATION

Study of current research and theories about the brain-behavior relation, central nervous system dysfunction and their evaluation. Emphasis on individualized neuropsychological evaluation, oriented to the processes and generation of hypothesis. Issues related to common patterns of neuropsychological deficit and neuropsychological constructs and their neuroanatomical correlation in children and adults. Corequisite: PSYC 8915.

2 credits

PSYC 8415 DESIGN AND ORGANIZATIONAL TRANSFORMATION

Discussion of processes related to the design and restructuring of organizations. Emphasis on the psychological and organizational impact of the processes of change and transformation with their implications on work culture and environment. Presentation of different design modalities, including traditional bureaucracy, reengineering, organic structures, and high performance organizations.

2 credits

PSYC 8425 MEASUREMENT IN INDUSTRIAL PSYCHOLOGY

Application of the principles of psychological testing in the creation, development and validation of instruments. Development of scales, questionnaires, inventories, observation guides, interview guides, and tests, biodata, focal groups, categorization and asset mapping. Requires the use of computers to make statistical analyses related to the assessment of reliability and validity of the instruments.

2 credits

PSYC 8430 SEMINAR IN INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

Analysis of issues related to the professional practice of Industrial/Organizational psychology and the use of the skills acquired in an integrated fashion. Emphasis on the independent work of the student, analytical skills and the integration of theoretical, practical and methodological concepts. Focus on the ability of the psychologist to deliver judgments and act in accordance to the norms of the profession.

3 credits

PSYC 8445 DECISION MAKING AND CONFLICT MANAGEMENT

Presentation and analysis of decisional behavior theories and their applications in individual and group contexts. Emphasis on processes of strategic planning, risks taking, conflict management, negotiation, and sensitivity toward human diversity.

2 credits

PSYC 8455 MANAGEMENT OF KNOWLEDGE IN THE ORGANIZATION

Application of advanced technology to the process of professional preparation and training. Analysis of electronic simulations and of the use of online learning. Analysis of human response to the use of technology and virtual reality. Use of the computer and the intra and inter networks as a learning tool of the employee.

2 credits

PSYC 8465 DEVELOPMENT OF HIGHLY EFFECTIVE WORKTEAMS

Application of strategies of highly effective teams in the contemporary organization. Development of skills in formation, empowering, and supervision of teams in the world of work. Emphasis on homing, multinational and virtual teams.

2 credits

PSYC 8490 ANALYSIS OF ORGANIZATIONAL ENVIRONMENTS

Analysis of the following environments: government, communitarian organizations, family businesses, cooperatives, churches and enterprises with social initiatives. Application of the concepts and intervention skills of industrial/organizational psychology in these scenarios.

2 credits

PSYC 8515 PROFESSIONAL CONSULTING

Discussion of the principles and basic concepts of psychological and organizational consulting. Comparison of intervention models and strategies in consulting in view of recent studies. Discussion of ethical aspects in the process of consulting. Development of experiences related to the role of the consultant in organizations, industries, schools, programs, and service agencies.

2 credits

PSYC 8912 PRACTICE IN THE DESIGN AND EVALUATION OF PSYCHOLOGICAL PROGRAMS AND SERVICES

Supervised practical experience in which the student will develop the skills to elaborate a design for the evaluation of an intervention, a psychological program or service, including methodology, instruments, compilation and analysis of data, and writing the evaluation report. Requires the use of computers. Corequisite: PSYC 7050. Grade: P/NP.

1 credit

PSYC 8913 PRACTICE IN EVALUATION AND INTERVENTION IN POPULATIONS WITH SPECIAL CONDITIONS

Supervised practical experience in the methods of psychological evaluation, and diagnostic of special conditions and neuropsychological handicaps, strategies of psychological intervention for these populations and the role of professional consulting in this field. Corequisite: PSYC 8230. Grade: P/NP.

1 credit

PSYC 8914 PRACTICE IN PSYCHOLOGICAL EVALUATION AND INTERVENTION WITH INFANTS AND PRESCHOOL CHILDREN

Supervised practical experience in which the student will develop the skills of administration, assessment and interpretation of the findings in psychological evaluation and intervention with infants and pre-school children. Corequisite: PSYC 8330. Grade: P/NP.

1 credit

PSYC 8915 PRACTICE IN NEUROPSYCHOLOGICAL EVALUATION

Supervised practical experience in which the student will develop the skills of administration, assessment and interpretation of the findings in neuropsychological evaluation. Corequisite: PSYC 8340. Grade: P/NP.

1 credit

PSYC 8916 PRACTICE IN INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

Practical experiences aimed for the development of skills for organizational evaluation and diagnosis. Application of the different theories, instruments, and methods of research to conceptualize such information. Emphasis on the work of the organizational industrial psychologist in these interventions and in the consulting processes. Requires the completion of a minimum of 160 hours of practice under the supervision of a faculty member, 8 hours a week of practice in the assigned center and 2 additional hours of composition and reading outside the center. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 8917 INTERNSHIP

An integrating experience of 2,000 hours in which students of the specializations of Psychological Counseling or School Psychology must show, under the supervision of a faculty member of the Doctoral Program in Psychology, their ability to integrate knowledge and skills, when offering a variety of services in Psychological Counseling and school psychology. The student is provided the opportunity to work in a practice scenario with a diversity of situations or clients, a variety of problems, and different types of programs and human services, using different psychological interventions. Grade: P/NP.

(Fee equivalent to 6 credits)

PSYC 8918 PRACTICE IN ORGANIZATIONAL/INDUSTRIAL PSYCHOLOGY II

Practical experience aimed at the development of skills in the components of organizational transformation, supervision and teaching. Emphasis on the performance of the organizational industrial psychologist in professional activities and in the consulting processes. One hundred sixty (160) hours of practice under the supervision of a faculty member, 8 hours in a practice scenario and 2 additional hours of writing and reading outside the center are required. Prerequisite: PSYC 8916. Grade: P/NP.

3 credits

PSYC 8991 DISSERTATION A

Application of the steps in scientific research for the preparation of the doctoral proposal, under the supervision of a faculty member. The student will work on the research proposal with the counseling of a doctoral dissertation committee. Grade: P/NP.

(Fee equivalent to 3 credits)

PSYC 8992 DISSERTATION B - CONTINUATION OF DISSERTATION

The student will continue working on the research under the supervision of the doctoral dissertation committee. Grade: P/NP.

(Fee equivalent to 3 credits)

Courses in Quality Organizational Design (QODS)

QODS 5010 STRATEGIC MANAGEMENT: INNOVATION AND CHANGE

Tools of quality management and its philosophies. Necessary. re-engineering to achieve quality in products and services. Short and long-term success management, strategic framework for problem solving. Study and analysis of organizational changes to achieve innovation and competitiveness. Emphasis on the role of the organizational leader to bring about innovation and change.

3 credits

QODS 6020 ACCOUNTING AS A TOOL FOR EXECUTIVE ACTION

Study of managerial decisions through the techniques of planning and control. Analysis of profit planning, responsibility accounting, patterns of cost behavior and the application of accounting data for basic planning and control decisions.

3 credits

QODS 6035 MARKETING INFORMATION AND COMPETITIVE ADVANTAGE

Analysis of marketing and consumer data. Use and analysis of these for developing competitive market strategies.

3 credits

Courses in Religious Education (RELI)

RELI 5010 HISTORY AND PHILOSOPHY OF RELIGIOUS EDUCATION

Review of the historical trajectory and the philosophical principles that govern religious education. Emphasis on the study of the ideas and concepts that characterize the field of religious education.

3 credits

RELI 5215 HISTORY OF THE CHURCH

Review of the historical study of the Church from its origins to the 21st century. Analysis of the topics related to the cultural shock and the relations between the Church and the State. Discussion of the influences of the Christian denominations in the social, political, historical and anthropological contexts in relation to Western Civilization.

3 credits

RELI 5320 INTRODUCTION TO THEOLOGY

Systematic and interdisciplinary analysis of Christian thought. Identification of select topics within theology in relation to Western Civilization. Comparison of the main theological doctrines in relation to the Christian faith.

3 credits

RELI 5430 BIBLICAL ANALYSIS

Analysis of Biblical passages using exegetic, theological, sociological and hermeneutic methods. Emphasis on the contemporary religious currents such as the mujerista theology and the theologies of liberation, among others.

3 credits

RELI 5540 ECUMENICAL THOUGHT

Discussion of the history of Ecumenicalism, its movements and the development of these in the light of the World-wide Council of Churches and Vatican II. Analysis of theology and its relation to the mission of the Christian Church in Modern and Contemporary Time.

3 credits

RELI 5650 RELIGIOUS PLURALISM

Review of some religions of the world and their relationship with Christianity. Social analysis of each of these by means of an interfaith dialog where the beliefs of each social and Faith group are respected.

3 credits

RELI 5760 THE HISTORICAL JESUS: SOCIAL MESSAGE

Historical analysis of the figure of Jesus of Nazaret in his social environment. Exploration of his message of liberation and justice. Evaluation of his doctrinal teachings and the interpretation of his religious dialogue; simultaneously with his theology and pastoral work.

3 credits

RELI 5870 CHRISTIAN ECLESIOLOGY

Analysis of the development of the Churches and their theological thought. Distinguish the social crises and the role of the churches by epochs and doctrines. Emphasis on intervention with topics like political conflicts, ecology, bioethics, poverty, and marginalization.

3 credits

RELI 5990 ETHICS AND PASTORAL ACTION

Review of the topics related to ethics and religion from a contemporary perspective. Consideration of the relation of the Christian communities and society. Exploration of the relationship between ethics and religion as a social phenomenon.

3 credits

RELI 6020 TEACHING STRATEGIES IN RELIGIOUS EDUCATION

Evaluation of learning theories and the models of education that guide the educational practice in the diverse contexts of religious education. Analysis of the implications of the integration of technology and research in action as a means to reflect on educational practices.

3 credits

RELI 6030 DESIGN AND EVALUATION OF CURRICULUM IN RELIGIOUS EDUCATION

Discussion of the basic concepts for the design, construction and evaluation of a religious educational curriculum. Use of the necessary tools for the construction and evaluation of the curriculum. Analysis of diverse models of curricular design and their application.

3 credits

RELI 6040 EDUCATIONAL LEADERSHIP IN RELIGIOUS EDUCATION

Analysis of the principles and theories related to educational leadership (administrative, strategic, didactic, communitarian) and their implications for educational practice in religious education.

3 credits

RELI 6975 INTEGRATION SEMINAR

Integration of the knowledge and the skills acquired in the courses that make up the Master of Arts Degree in Religious Education. Emphasis on the analysis of Christian thought and the appropriate research in the discipline. Grade P/NP. Prerequisite: Approval of the Director of the School of Theology.

3 credits

RELI 6910 PRACTICUM

Emphasis on intervention in the field of Religious Education in organizations with Christian or religious educational bases. Placement in an educational scenario for a minimum of 200 hours. Grade P/NP. Prerequisite: Authorization of the Director of the School of Theology.

3 credits

Courses in Risk Management in Health Care (RMHC)**RMHC 5000 RISK MANAGEMENT IN HEALTH CARE**

Study of the concepts and methodology of risk management in health care. Emphasis on the design and supervision of a risk management program.

2 credits

RMHC 5010 RISK QUALITY AND MANAGEMENT IN HEALTH CARE

Study of the concepts of quality process in health care services and their relation with risk management to promote a quality culture. Emphasis on the application of quality tools and techniques applicable to risk analysis.

3 credits

RMHC 5020 UNCERTAINTY AND RISK IN THE HEALTH CARE INDUSTRY

Study and development of a risk management and financing plan in different scenarios of the health care industry. Analysis of cases of commercial risk management applications.

3 credits

RMHC 5030 PATIENT SECURITY AND RISK HANDLING

Study of theories, methods and tools used to analyze medical errors and their influence in the patient security movement and their optimization within the organizational culture. Emphasis on the risk manager role and the ethical approach to common conflicts. Discussion of adverse events in medicine handling, surgical procedures, medicine and critical care, and in emergencies psychiatry, pediatrics and in the neonatology unit as areas representing common risks.

4 credits

RMHC 5040 LEGAL ASPECTS OF RISK MANAGEMENT IN HEALTH CARE

Study of the various laws and regulations that apply to the health care industry in Puerto Rico and the United States, as well as other legal aspects related to the functions of a risk manager.

4 credits

Courses in Social Work (SOWO)

SOWO 5011 HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT I

Theories of human behavior in the environment, in social contexts, in organizations and in the community are integrated. The concept of oppression and how this is fomented through social structures, in ideologies, in language and in power relationships is examined.

3 credits

SOWO 5012 HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT II

The theories of human behavior in the person's social, group and family environment. Critical analysis of developmental theories, of the concepts of diversity and of oppression as well as of intervention with a strengths and empowerment approach. Prerequisite: SOWO 5011.

3 credits

SOWO 5013 FUNDAMENTALS OF PROFESSIONAL PRACTICE I

Critical analysis of the historical development of the profession in Puerto Rico and the United States and its relation to the factors that influenced the development of the profession. General practitioner's social intervention process and focus on strengths. Review of cultural diversity and historically destitute and oppressed groups. Documentation of the general practice process in social work.

3 credits

SOWO 5014 FUNDAMENTALS OF PROFESSIONAL PRACTICE II

Study of the practical and theoretical aspects necessary to begin working with groups, communities and organizations from a general practitioner's perspective. Analysis of the organizational context and its relation to the practice of social work. Basic deliberating, planning, intervention and evaluation skills used in the process of working with groups, communities and organizations with an emphasis on oppressed and marginalized groups. Prerequisites: SOWO 5013.

3 credits

SOWO 5015 SOCIAL POLICY AND SOCIAL WELFARE SYSTEMS

General vision of the historical development of the social welfare system in Europe, the United States and Puerto Rico. Critical examination of the social welfare policies and programs in the United States and how they impact Puerto Rico. Analysis of the social policy, programs and services and their impact on destitute and oppressed groups. Study of state intervention in the formulation of social policy and development of the social welfare system and social change.

3 credits

SOWO 5016 RESEARCH IN SOCIAL WORK

Key concepts, terminology and phases of research such as identifying problems, hypotheses, instruments, samples, methods and design. Critical analysis of the innovative methodologies in social work research. The researcher's ethical dilemmas and practices that impact historically oppressed and marginalized groups.

3 credits

SOWO 5913 PRACTICUM I

Application of knowledge and skills of the intervention process, general overview of social and administrative processes and focus on strengths and empowerment. Intervention skills using the problem solution process. Emphasis on direct service to individuals and families and indirect services when related to administrative processes. 200 hours. Grade: P/NP.

2 credits

SOWO 5914 PRACTICUM II

Emphasis on intervention with different systems such as: groups, communities and organizations in a professional work context. Carrying out different roles with diverse groups with multiple problems. Direct services as well as indirect services when dealing with administrative processes. 200 hours. Prerequisite: SOWO 5913. Grade: P/NP.

2 credits

SOWO 6029 DIVERSITY AND OPPRESSION

Study of theoretical frames for the analysis of social, political, cultural and economical forces that generate and maintain oppression on different groups in Puerto Rico. Emphasis on the study of different migratory populations, homosexuals, women, elderly people, and people with economic disadvantages, and groups discriminated for reasons of ethnicity among others. Use of perspectives of empowerment and strengths as alternate reference frames for the advanced practice of social work.

3 credits

SOWO 6031 STRENGTH PERSPECTIVES IN FAMILY INTERVENTION

Intervention methods with families from the focus on strengths to facilitate empowerment. Prerequisite: SOWO 6029.

3 credits

SOWO 6032 WORKING IN GROUPS WITH FAMILIES

The process of study groups as a medium for facilitating the strengthening of family with emphasis on risk families and vulnerable groups. Analysis of the importance relating the family with other community groups to facilitate the empowerment process with the purpose of achieving social change. Prerequisite: SOWO 6031.

3 credits

SOWO 6033 EVALUATION OF PROFESSIONAL PRACTICE

Use of qualitative and quantitative methods for evaluating professional practice. Critical analysis of both methodologies and their contribution to the field of social work. Prerequisites: SOWO 5016, 6029.

3 credits

SOWO 6034 FAMILY INTERVENTION MODELS

Intervention models which facilitate the empowerment process with different types of families, recognizing their cultural diversity, gender, social class, age, sexual orientation and ethnic origins. Prerequisites: SOWO 6032, 6033.

3 credits

SOWO 6035 COMMUNITY, FAMILIES AND SOCIAL CHANGE

The modalities of community social work and the community work process as a means of relating families with community resources that meet their needs. Emphasis on work with families that historically have been destitute and oppressed with the purpose of fomenting a better quality of life for them. Prerequisites: SOWO 6032, 6033.

3 credits

SOWO 6036 PROGRAM PLANNING AND EVALUATION

Review of the program planning process in human service organizations. General overview of the planning, methods and evaluation terminology and techniques to determine the impact of family programs. Critical analysis of the use of an evaluation to broaden and obstruct social justice and self-determination in historically destitute and oppressed groups. Critical analysis of the ethics in evaluating programs. Prerequisite: SOWO 6033.

3 credits

SOWO 6037 ADMINISTRATION IN SOCIAL WORK

Critical study of principles and processes in the administration of human service agencies. Administration is studied as a method of social work from the conceptual and practical perspective. Analysis of the organizational theory and different ethical orientations and the conflicts in administrating human services and the diverse roles held by the social work administrator. Emphasis on the administrative incidentals and empowerment of agency clientele and personnel. Prerequisite: SOWO 6029.

3 credits

SOWO 6038 HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT IN SOCIAL AGENCIES

Review of the duties of a social worker as a personnel manager in the context of the social agency profession. Analysis of the principles and techniques in the selection, training, supervision and evaluation of social agency personnel. Review of federal and state legislation, trends and matters such as: cultural diversity, Participating management, incidentals and empowerment of the clientele and personnel in these types of agencies. Prerequisite: SOWO 6037.

3 credits

SOWO 6039 PROPOSALS FORMULATION

Review of the processes and dilemmas related to the formulation and presentation of proposals. Analysis of the nature and sources of financing. Includes the formulation of the proposal, follow-up and authorization. Requires the preparation of a proposal. Prerequisite: SOWO 6038.

3 credits

SOWO 6043 ADMINISTRATION OF NON-TRADITIONAL AGENCIES

Organization, development and inherent dilemmas in non-traditional agencies from an administrative perspective. Analysis of objectives, structures, government, personnel patterns and leadership characteristics necessary to manage these agencies. Study of concepts such as: diversity, shared power, participation in decision making. Empowerment and social change. Prerequisite: SOWO 6039.

3 credits

SOWO 6044 SOCIAL WORK AND WOMEN

Analysis of the situation of women in Puerto Rico and the theoretical foci which explain their reality. Study of the organizations, programs and services existing in Puerto Rico for this group.

3 credits

SOWO 6045 SOCIAL WORK AND THE ELDERLY

Review of the biopsychosocial factors in elderly people. Theoretical approximations that explain the relationship between the elderly and their families. Analysis of controversies related to this group and examination of ethical dilemmas.

3 credits

SOWO 6046 IDENTIFICATION AND USE OF COMMUNITY RESOURCES

Programs, rules and procedures pertaining to public and private agencies that offer human services to the Puerto Rican community. Intervention skills oriented towards individual, family and group empowerment in dealing effectively with the community resource barriers, proposals for changes in agencies providing services and development of community resources in the community.

3 credits

SOWO 6047 SOCIAL WORK AND HUMAN SEXUALITY

Discussion of various topics in the area of human sexuality, such as: historical development of sexuality, social construction of sexuality, discussion on sex, gender and sexuality, sexuality orientation, sexuality in the human life cycle. Emphasis on intervention skills.

3 credits

SOWO 6048 ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) IN THE WORK ENVIRONMENT

Analysis of the HIV/AIDS endemia and what it implies for an administrator. Review of the dilemmas and controversies related to AIDS at the work place. Legal aspects such as: discrimination at the work place, mandatory HIV testing, notification of results, the right to confidentiality and the patient rights in relation to public protection.

3 credits

SOWO 6049 MANAGERIAL INFORMATION SYSTEM IN SOCIAL WORK

General overview of the use of computers in social work administration. Planning and designing a system of managerial information in human services organizations. The impact that the technology of information has had on

social work. Emphasis on ethical dilemmas concerning the use of a client's information. Application of commercial programs. Requires 30 hours of lecture and 15 hours of lab.

3 credits

SOWO 6053 ADVANCED TECHNIQUES IN PREVENTION AND INTERVENTION WITH FAMILIES WITH SPECIAL NEEDS

Study of families with special needs including their different structures, ethnicity, race, social class and social cultural factors. Special attention to intervention and prevention related to vulnerable families and the resources for achieving change by using the perspectives of strengths and empowerment.

3 credits

SOWO 6054 SOCIAL WORK AND EMPLOYEE AID PROGRAMS

Examination from an administrative perspective of the development, function, and services that the Employee Assistance Programs render. Considers also are the controversies and dilemmas inherent to these. Analysis of the interrelation between occupational social work and the programs of employee assistance. The different models used for rendering services and their adaptation to public and private work scenarios. Analysis of institutional policies and policies on integration between management, labor unions, employees, and their families.

3 credits

SOWO 6055 SOCIAL WORK AND HIV/AIDS

Analysis of the AIDS/HIV endemia. Biosocial aspects related to the condition. Intervention skills in using the help process with infected people and people affected by the virus. Review of prevention strategies. Dilemmas and controversies related to the condition.

3 credits

SOWO 6056 INTERVENTION WITH FAMILIES AND PATIENTS WITH TERMINAL ILLNESSES

The most common terminal illnesses in Puerto Rico and their psychological and socioeconomic implications. Emphasis on the intervention process with families within the context of their strengths and their support networks. Social intervention strategies and techniques for dealing with physical and mental handicaps and death.

3 credits

SOWO 6911 PRACTICUM III: DIRECT SERVICE

Practical experiences aimed to integrate knowledge and skills in family intervention in an organizational context, consistent with the principles and values of the social work profession, from an ecosystemic perspective of strengths and empowerment in families, and emphasis on prevention and social change. Within the practice scenario context, the social and institutional policy, family needs, and the institutional and community resources are considered in relation to the diversity, social and economic justice, cultural competence, knowledge of social research, and the social reality of the families, for intervention with individuals and families. Requires a minimum of 167 hours per trimester. Prerequisite: SOWO 5914 or be admitted in the advanced program. Grade: P/NP.

2 credits

SOWO 6912 PRACTICUM IV: DIRECT SERVICE

Practical experiences for the integration of knowledge and skills in family intervention, at an advanced level, considering the family and couples therapy modalities. The different models of structural therapy, communication and solution of problems in agreement with diversity, social and economic justice, and cultural competence in families are considered. The course integrates practice evaluation and the analysis of the social and institutional policies for the implementation of these intervention modalities. Requires a minimum of 167 hours per trimester. Prerequisite: SOWO 6911. Grade: P/NP.

2 credits

SOWO 6913 PRACTICUM V: DIRECT SERVICE

Practical experiences with family groups and other modalities of family intervention that allow the integration of theoretical knowledge and development of skills consistent with the purposes, principles and fundamental values of social work in the advanced level practice. Emphasis on strategies at the group level that reflect a commitment with the cultural competency, diversity, social justice and excluded and oppressed groups. In addition, the use of strategies

that integrate research as an evaluation tool for the practice will be promoted. The differential use of intervention models with diverse groups of families in harmony with the empowerment and strengths perspectives is promoted. Requires a minimum of 167 hours per trimester. Prerequisite: SOWO 6912. Grade: P/NP.

2 credits

SOWO 6914 PRACTICUM III: ADMINISTRATION IN SOCIAL WORK

Practical experiences directed to provide students the opportunity to integrate theoretical knowledge to the analysis and administration of a social services organization. Expands the development of skills consistent with the purpose, values, and ethics of social work administration. Involvement in the analysis of philosophy, social policies and the organizational culture of the agency with an approach towards the empowerment and strengths of the organization's components. Requires a minimum of 167 hours per trimester. Prerequisite SOWO 5914 or be admitted in the advanced program. Grade: P/NP.

2 credits

SOWO 6915 PRACTICUM IV: ADMINISTRATION IN SOCIAL WORK

Application of knowledge and skills relative to the participating process of planning in a human service agency, the coordination processes and the application of principles of structures for the organization's offering of services from a strengths, systemic, and empowerment approach. Also includes the application of administrative practice on the agency's human resources. Requires a minimum of 167 hours per trimester. Prerequisite: SOWO 6914. Grade: P/NP.

2 credits

SOWO 6916 PRACTICUM V: ADMINISTRATION IN SOCIAL WORK

Learning experiences directed towards the integration of theoretical knowledge and skills with a systemic, strengths and empowerment approach in the administration of social agencies, with emphasis on the implementation of the action plan, proposal formulation, search of financial resources for the agency, and the application of models and techniques for program evaluation. Requires a minimum of 167 hours per trimester. Prerequisite: SOWO 6915. Grade: P/NP.

2 credits

SOWO 7130 CONCEPTUAL APPROACHES IN CLINICAL SOCIAL WORK

Analysis of the conceptual foundation of the three dimensions that integrate the social-clinical intervention applied to individuals, family, couples and group therapy. Integration of several conceptual models with an echo-systemic, cognitive-behavioral and problem solving approach for intervention. Includes ethical aspects of the social-clinical work. Requires a minimum of 15 hours of lab.

3 credits

SOWO 7140 COORDINATED HANDLING OF MENTAL HEALTH AND CLINICAL SOCIAL WORK

Review of the historical aspects and social policies regarding the coordinated handling of mental health services. Critical analysis of the state and federal laws regulating the independent practice of clinical social work. Identification of the strategic and operational resources in the use and planning of services: quality of service, benefits administration, claims and lawsuits. Emphasis on the critical analysis of the Revised DSM IV, its origin and evolution. Includes ethical aspects related to the use of diagnosis and drugs.

3 credits

SOWO 7150 FAMILY THERAPY IN SOCIAL WORK

Analysis of social work intervention in family therapy in Puerto Rico. Discussion of clinical models of intervention in social work beginning with contemporary family therapy approaches which contemplate the complexities families confront. Application of the therapeutic process and the social work function in family therapy. Critical examination of the conditions of oppression, discrimination and the lack of opportunities that families face and which condition their family function. Emphasis on the importance of professional ethics in family therapy. Requires a minimum of 15 hours of lab. Prerequisites: SOWO 7130, 7140.

3 credits

SOWO 7153 SOCIAL WORK IN COUPLES THERAPY

Application of social work intervention with couples. Discussion of the steps in beginning to work with traditional and nontraditional couples. Analysis of the fundamental elements in the function of couples such as: diversity,

decision making, problem solving, finances, values, ethics, gender, religion, race, sexual orientation and sexual conditions. Review of how these elements affect the therapeutic reasoning. Requires a minimum of 15 hours of lab. Prerequisites: SOWO 7130, 7140.

3 credits

SOWO 7154 GROUP THERAPY IN SOCIAL WORK

Application of group therapy with different theoretical frameworks to a wide range of biopsicosocial conditions in diverse populations and the role of social work in promoting behavior changes in participants. Emphasis on the cognitive-behavioral model and the strengths approach. Discussion of protocols used in social work scenarios to develop the individual transformation process, maintain cohesion, group tasks and objectives. Requires a minimum of 15 hours of lab. Prerequisites: SOWO 7130, 7140.

3 credits

SOWO 7156 PRACTICUM IN CLINICAL SOCIAL WORK

Practical experience at the post-masters level directed towards the application and integration of clinical social intervention models for individuals, families and groups. Students must complete 180 hours of work in a mental health scenario. Requires that students have approved the 12 credits of the theoretical courses, which include SOWO 7153. Corequisite: SOWO 7154.

3 credits

Courses in Spanish (SPAN)

SPAN 5140 TEXT PRODUCTION

Application of the current theories on the process of writing to the production of written text. Emphasis on expository and argumentative text writing such as the essay, the research report, article review or the monograph in different media and formats, including the electronic medium. Includes the discussion and the practice of support strategies to plan, to write and to review documents. Requires skills in the use of computers.

3 credits

SPAN 6140 THE TEACHING OF SPANISH AS A SECOND LANGUAGE

Common elements in the teaching of a second language; techniques used in teaching Spanish as a second language; emphasis on writing techniques.

3 credits

SPAN 6904 IMPORTANCE AND PERTINENCE OF APPLIED LINGUISTICS IN THE STUDY OF THE SPANISH LANGUAGE IN PUERTO RICO

Analysis of linguistics as an applied science that permits the study and monitoring of Spanish as a language and its current pertinence. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

SPAN 6905 APPLICATION OF ADVANCED GRAMMAR IN MODERN COMPOSITION

Theoretical and practical analysis of the postulates and concepts that serve as the basis for the study and development of the Spanish language. Production of oral and written speeches. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

SPAN 6906 CRITICAL VIEW OF PUERTO RICAN LITERATURE: 20TH CENTURY TO THE PRESENT

Critical study of the development of Puerto Rican literature through the analysis of representative works and authors of the different genres and literary movements, including the 20th century to the present. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

SPAN 6907 IMPORTANT FIGURES IN CONTEMPORARY SPANISH-AMERICAN LITERATURE

Study of the general background of the development of Spanish-American Literature based on the analysis of representative works and authors of the different trends and literary genres, from the 20th century XX to the present. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

SPAN 6908 NEW APPROACHES OF THE TEACHING OF SPANISH

Study of new models for the teaching of Spanish and their application to pedagogical practices of Spanish in Puerto Rico. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

SPAN 6909 STUDY AND APPLICATION OF READING AND WRITING AS TEACHING TOOLS

Study of teaching theories and techniques that apply to the planning and development of reading and writing skills. Analysis of novel approaches and resources directed to the development and practice of skills that stimulate innovation in teaching. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

SPAN 6910 TRAJECTORY AND EVOLUTION OF THE CONCEPT OF IDENTITY IN PUERTO RICAN POETRY OF THE 20TH CENTURY

Emphasis on the identification and examination of expressions of national affirmation arising in Puerto Rican poetry during the 20th century. Presentation of an integrated view of poetic discourse revealing a clear trend towards the search for and affirmation of a Puerto Rican national identity from different perspectives. Development of a curricular segment. Course designed for students in the Master of Education in Curriculum and Teaching of Spanish.

3 credits

Courses in Speech-Language Pathology (SPLP)

SPLP 5100 ANATOMY, PHYSIOLOGY AND NEUROLOGY OF THE MECHANISMS OF SPEECH, LANGUAGE AND HEARING

Review of the anatomical, physiological and neurological bases of speech production. Emphasis on the study of the structures and mechanisms of breathing, phonation, resonance, articulation, hearing and the nervous system.

3 credits

SPLP 5105 FOUNDATIONS OF AUDIOLOGY

Analysis of the anatomy of the ear, the physiology of the central peripheral auditory system, types of hearing loss and their tests. Emphasis on the administration and interpretation of these tests. Review of the methods of auditory screenings with different populations in diverse scenarios.

3 credits

SPLP 5110 NORMAL DEVELOPMENT OF SPEECH AND LANGUAGE

Review of the processes related to the normal acquisition of speech and language. Analysis of the main theoretical perceptions related to the normal acquisition and development of speech and language. Emphasis on the development of language components during the periods from childhood to adolescence.

3 credits

SPLP 5120 SEMINAR: CONTEMPORARY TOPICS AND MULTICULTURAL AND METHODOLOGIC CONSIDERATIONS

Discussion of contemporary topics and review of scientific literature related to the pathologies of speech and language. Emphasis on the multicultural aspects in the evaluation and intervention with diverse populations.

1 credit

SPLP 5215 PROFESSIONAL ETHICS IN SPEECH-LANGUAGE PATHOLOGY

Analysis of the ethical and legal aspects related to the professional practice of Speech-Language Pathology. Discussion of the ethical codes of the Puerto Rico Speech-Language Pathology and Audiology Organization (OPPHLA for its abbreviation in Spanish), the “American Speech and Hearing Association” (ASHA).

3 credits

SPLP 6000 INTRODUCTION TO AUDITORY HABILITATION/ REHABILITATION

Review of the principles and strategies in dealing with problems related to hearing impediments in children and adults. Emphasis on the development and preservation of communication through lip reading, auditory training and the use of technology in auditory habilitation/ rehabilitation. Prerequisite: SPLP 5105.

3 credits

SPLP 6100 ARTICULATION AND PHONOLOGY DISORDERS

Analysis of the development of sound production in children’s speech. Discussion of the factors that affect phonological development and auditory-motor learning. Review of the differential diagnosis of the phonological disorders against oro-motor disorders. Discussion of clinical cases to apply the methodologies used in the identification and treatment of such disorders. Prerequisites: SPLP 5100 and 5110.

3 credits

SPLP 6101 LANGUAGE DISORDERS IN CHILDREN I

Analysis of language disorders in the children from birth to five years of age. Evaluation and intervention of the different language pathologies in the context of language components. Review of research related to language disorders in children. Prerequisite: SPLP 5110.

3 credits

SPLP 6102 LANGUAGE DISORDERS IN CHILDREN II

Analysis of language disorders in school age and adolescent children, as well as the linguistic and cognitive processes related to the performance of children in the classroom in language skills (listening, speaking, reading and writing). Evaluation of the functions of the speech-language pathologist in the diagnosis and treatment of students with language learning problems. Prerequisite: SPLP 6101.

3 credits

SPLP 6150 SIGN LANGUAGE

Description of the theoretical and practical aspects of sign language. Organization of the basic vocabulary required for the elaboration of phrases, sentences and messages using the American Sign Language (ASL).

3 credits

SPLP 6210 FLUENCY DISORDERS

Review of the theories, development, nature and symptoms of stuttering and other disorders of fluency in children and adults, as well as the intervention strategies used in dealing with such disorders. Analysis of clinical cases methodologies used in the diagnosis and intervention of different fluency disorders. Prerequisite: SPLP 5110.

3 credits

SPLP 6215 VOICE DISORDERS

Review of the etiology, symptoms, development, diagnosis, intervention and prevention of voice disorders in children and adults. Prerequisite: SPLP 5110.

3 credits

SPLP 6320 DIAGNOSTIC METHODS IN SPEECH-LANGUAGE PATHOLOGY

Application of the diagnostic principles and procedures in Speech-Language Pathology to establish a differential diagnosis. Emphasis on the procedures of evaluation, interview techniques, data compilation, integration and interpretation, as well as in the documentation and writing of evaluation reports. Discussion of the evaluations of different clinical cases with diverse conditions. Prerequisites: SPLP 5100, 6102, 6210, 6215.

3 credits

SPLP 6325 ACQUIRED LANGUAGE DISORDERS

Analysis of the neuropathology, symptoms and speech and language rehabilitation in individuals with aphasia and other related disorders that affect communication in the adult. Comparison with other disorders, such as: dementia, cerebral trauma, vascular brain accident and damage to the right hemisphere to establish a differential diagnosis. Evaluation, treatment and prognosis of such conditions. Prerequisite: SPLP 5100.

3 credits

SPLP 6405 AUGMENTATIVE AND ALTERNATE AID FOR COMMUNICATION

Discussion of the theoretical and practical aspects of the augmentative and alternate aids for communication (AAC) and their impact in the life of people with severe communication impediments. Evaluation of the available equipment, their characteristics and uses. Discussion of strategies for the implementation of AAC to satisfy the communication needs of clients. Prerequisite: SPLP 6102.

3 credits

SPLP 6430 DYSPHAGIA IN CHILDREN AND ADULTS

Review of the anatomy and physiology of the normal swallowing process in infants, children and adults. Includes the anatomical and physiological factors that affect the process. Description of swallowing disorders associated with structural, neurological and behavioral disorders. Emphasis on the evaluation methods in the treatment of such disorders. Prerequisite: SPLP 5100.

3 credits

SPLP 6435 MOTOR DISORDERS IN SPEECH

Review of the neurological disorders that affect the production of speech. Discussion of the procedures used in the evaluation of speech disorders associated with neuromotor disorders. Emphasis on neuropathology and the habilitation/rehabilitation of individuals with apraxia and dysarthria. Prerequisite: SPLP 6100.

2 credits

SPLP 6440 WRITTEN LANGUAGE DISORDERS

Evaluation of the reading and writing processes in children with language disorders. Analysis of the relation of oral skills and speech skills with the reading and writing processes, as well as of the function of the speech and language pathologist in the intervention with school age children who present such disorders. Prerequisite: SPLP 6102.

2 credits

SPLP 6535 SUPERVISION AND ADMINISTRATION IN SERVICES OF SPEECH AND LANGUAGE PATHOLOGY

Discussion of the models, theories and principles of clinical supervision in Speech and Language Pathology Analysis of the administrative aspects of the profession in reference to the offering of services and the supervision of other professionals of the area.

3 credits

SPLP 6910 CLINICAL PRACTICE I

Application of the skills, techniques and treatment of speech and language disorders of children and adults with a variety of communication disorder evaluations. Implementation of counseling interventions with the patients and their families. Design and elaboration of intervention plans and the writing of evaluation and progress reports. Requires the student to complete a minimum of 160 hours of supervised practice. Grade: P/NP Prerequisite: Have authorization of the Director of the Program. Corequisite SPLP 6535 and SPLP 6970.

3 credits

SPLP 6911 CLINICAL PRACTICE II

Application of the skills, techniques of evaluation and the treatment of communication disorders of speech and language of children and adults. Implementation of counseling interventions with patients and their families. Design and elaboration of intervention plans and the writing of evaluation and progress reports. Application of the skills of supervision and counseling to speech and language therapists. Use of the skills of administration of services in Speech

and Language Pathology. Requires the student to complete a minimum of 240 hours of supervised practice. Grade P/NP. Prerequisite: SPLP 6910.

4 credits

SPLP 6970 INTEGRATION SEMINAR

Evaluation of the diagnostic and intervention aspects of the most common speech-language pathologies in children and adults with communication disorders. Discussion of the content areas evaluated in the Puerto Rico Board examination and in the national examination (PRAXIS) required for the certification of clinical competence (CCC) and for professional practice in speech-language Pathology. Prerequisite: SPLP 6140. Grade: P/NP.

2 credits

Courses in Theology (THEO)

THEO 7000 FUNDAMENTAL THEMES OF CHRISTIAN THEOLOGY

Analysis of fundamental topics of Christian Theology, such as the Doctrine of God, Christology, Ecclesiology, and Eschatology. Special attention to the theological, philosophical, and pastoral contemporary dialog of these topics. Review of tendencies, thinkers, trends, and methodology, particularly from the Latin American perspective.

3 credits

THEO 7010 BIBLICAL STUDIES

Critical study of the sacred writings (Old and New Testament). Special attention to several aspects, such as the historical, social, and theological aspects that frame the books of Christian writings.

3 credits

THEO 7016 EVANGELIZATION IN THE CARIBBEAN

Analysis and interpretation of the religious, theological and social history of the Hispanic Caribbean until the twentieth century. Interdisciplinary review of Christian thought and its connection with the evangelization process of the Caribbean.

3 credits

THEO 7017 THEOLOGY: COLONIAL AMERICA

Analysis and interpretation of the religious and theological phenomenon in the societies of colonial America from the seventeenth century until the beginning of nineteenth century in light of the history of Christian thought.

3 credits

THEO 7019 THEOLOGY: CONTEMPORARY AMERICA

Analysis and interpretation of the religious phenomenon and theology in the societies of contemporary America in the period from 1825 to the present in light of the history of evangelization and other religious currents.

3 credits

THEO 7020 CHRISTIAN ETHICAL PERSPECTIVES

Analysis of the history, methodology, and the theological and philosophical basis of the ethical-Christian school of thought. Study of deontological, utilitarian, contextual, libertarian, and feminist discourses.

3 credits

THEO 7030 HISTORY OF CHRISTIANITY

Study of Christianity from the Apostolic Era, the Patristic Period, the Middle Ages, and the Protestant Reformation to the present. Includes theological development, its ecumenical expressions, and the geographical expansion through the different continents, especially Latin America and the Caribbean.

3 credits

THEO 7100 CONTEMPORARY THEORIES OF CHRISTIAN THEOLOGY

Study of trends, theories, practices, and challenges of Christian education in the context of Catholic Christian and Protestant communities in Latin America, the Caribbean and the United States. Emphasis on both the ecclesial as well as the academia context.

3 credits

THEO 7110 THEOLOGICAL AND PHILOSOPHICAL FOUNDATIONS OF EDUCATIONAL MINISTRY
Readings and discussions of several contemporary approaches to Christian education, such as those from Horace Bushnell, George Albert Coe, Lewis J. Sherrill, James Smart, C. Ellis Nelson, Thomas Groome, and Paulo Freire. Emphasis on educational philosophies, and theories of human development relevant to Christian education.

3 credits

THEO 7120 CURRICULA AND METHODS OF POPULAR EDUCATIONAL THEOLOGY
Review of different alternative theological education curricula, programs, and strategies for popular sectors, with special emphasis on the models developed by fundamental ecclesiastical communities in Latin America and the Caribbean.

3 credits

THEO 7130 EDUCATION FOR PEACE, HOPE AND SOCIAL JUSTICE
Study of educational models of Christian Churches that foster brotherhood relations and social coexistence. Analysis of the theological, pedagogical, and social dimensions in the contemporary world context.

3 credits

THEO 7140 CHRISTIAN EDUCATION AND MORAL FORMATION
Review of the critical role that the teaching of faith and Christian values play on moral formation in its personal and community character. Study of different approaches and methodologies on spiritual and moral development in a pluralist world.

3 credits

THEO 7150 CHRISTIAN EDUCATION AND CONTEMPORARY DEBATES ON GENDER
Analysis of the impact that theological education has had on contemporary discussions about gender. Study of its connection with topics of ethnic group and social class. Emphasis of the role of this impact on the teaching-learning processes and on curriculum design in the Puerto Rican and Latin American context.

3 credits

THEO 7160 CHRISTIAN EDUCATION, MODERNISM AND POSTMODERNISM
Study of paradigms that have framed history and human life in Occident. Emphasis on the postulates and the impact of modernism, the different trends of postmodernism, and the critical Christian attitudes facing them.

3 credits

THEO 7170 CHRISTIAN ECUMENISM AND RELIGIOUS EDUCATION
Study of the biblical, theological and traditional bases of Christian Ecumenism. Examination from a historical perspective, of its presence in Puerto Rico and the rest of the world, with special emphasis on the last two decades. Evaluation of its achievements, goals, forecasts, and impact on Christian education.

3 credits

THEO 7180 SPIRITUALITY AND THE RELIGIOUS EXPERIENCE IN PUERTO RICO
Interdisciplinary analysis of the search for sanctity and spirituality in our particular context. Study of the heterogeneous character of Puerto Rican spirituality, as well as the factors that influence and legitimize it. Study of native movements, their models of spirituality and the recent development of an inclusive and socially committed ecumenical spirituality.

3 credits

THEO 7190 CLASSIC EXPONENTS OF CHRISTIAN SPIRITUALITY
Readings and critical discussions of classic texts of Christian thinkers and mystics from the Middle Ages to the XIX century. Includes works from Saint Augustine, Eckhardt, Kempis, Francis of Assisi, Catalina de Siena, Martin Luther, Thomas of Aquinas, Teresa de Avila, San Juan de la Cruz, Ignatius Loyola, Juan Wesley, Fray Luis de León, Tomás Merton, among others.

3 credits

THEO 7200 TOWARDS A PUERTO RICAN PASTORAL WORK

Evaluation of different approaches to pastoral work in the Puerto Rican context. A critical examination of the impact that the socio-cultural, political, and economical reality has on the different dimensions of pastoral work. Evaluation and reinterpretation of the sources of Christian faith facing the complexity of pastoral work in the XXI century.

3 credits

THEO 7210 PASTORAL WORK AND THE ESCHATOLOGY

A critical examination of the historical roots and trajectory of theological work as eschatology, in other words, hope that searches understanding. Evaluation, from an interdisciplinary perspective and a pastoral approach, of the Christian eschatological discourse in different historical contexts starting from the writings of the New Testament. Study of the proposal for hope and vision of the future in the theological-political discourses, in the patristic period, the Middle Ages, illustration, modernism and postmodernism with special attention to the Latin American, Caribbean, and Puerto Rican context.

3 credits

THEO 7220 NEW RELIGIOUS MOVEMENTS IN THE AMERICAS

A systematic study from the pastoral perspective of historical, sociological and spiritual aspects of new religious groups and sects in Puerto Rico and the Americas. Includes the groups of new conscience, oriental religions and those originated in Puerto Rico and Latin America.

3 credits

THEO 7230 GERONTOLOGY AND PASTORAL ACTION

Review of the ways that the elderly experiment religion and spirituality in a society that it is also getting old. From an interdisciplinary perspective, the course covers the complete life of the elderly, with emphasis on spiritual claims that are frequently molded by faith and the religious practice. Explanation of the process of getting old as part of the development of the human being and identifying the physical, social, emotional, and economical aspects of this component of the population. An examination of pastoral models and strategies, from a biblical and theological approach, to adequately address their needs.

3 credits

THEO 7240 YOUTH AND PASTORAL ACTION

An exploration of the situations that young people are facing in the Puerto Rican social context and the pastoral response to it from an interdisciplinary approach. Includes social, economical, emotional and spiritual aspects that affect young people. Evaluation of traditional responses to these problems and proposals of new responses from a biblical-theological perspective.

3 credits

THEO 7250 SPANISH-CARIBBEAN THEOLOGICAL METHODS

Critical and comparative analysis of the theological methodologies implicit in Hispano-Caribbean thinking. Study of the cultural, economic, social and political context in which Hispano-Caribbean theological methods arise.

3 credits

THEO 7260 THEOLOGY OF PASTORAL ACTION

Fundamental aspects of pastoral action and the different theological implications from the praxis perspective. Special attention to the analysis of the historical development, method and object of pastoral theology.

3 credits

THEO 7270 CHRISTOLOGY AND PASTORAL ACTION

A theological-pastoral interpretation of the life of Jesus and his relation to the Father, the kingdom, the law, the cult, and the alienated. The theological-pastoral importance of the topic Jesus for history and Christ for faith. Analysis of the temptations of Jesus, his death and resurrection. Starting from Jesus' resurrection, a presentation of the different Christologies, both neotestamentary, as well as contemporary and their implications for pastoral action.

3 credits

THEO 7280 ANTHROPOLOGY AND PASTORAL ACTION

Relation between the biblical anthropology and the presumptions of contemporary anthropology and the implications to pastoral action. Analysis of the great anthropological methods: Pantheist, Gnostic, Fundamentalist, Progressive, Buddhist, Radical, Biblical and Dialectical. Study of the topic of the openness of human beings towards that which is sacred.

3 credits

THEO 7290 ECCLESIOLOGY AND PASTORAL ACTION

Identification of biblical keys with respect to the pastoral action of Jesus, its relation and meaning for the primitive church and the apostolic dynamic. Analysis of the church and pastoral models, the concept of God's kingdom, and the concept of Church as the people of God in its prophetic and institutional dimension as theological keys. Study of the historical evolution of the concept of pastoral action.

3 credits

THEO 8000 MISSION THEOLOGY

Study of different models of mission theologies expressed throughout the history of Christian churches. Emphasis on the impact of Christian missions in the contemporary world with special emphasis on Latin America.

3 credits

THEO 8010 THEORY OF THE THEOLOGICAL METHOD

Study of the theological method as the operative basis of theology. Examination the most distinguished theological methods in contemporary theologies, including the main elements, rules of construction, and critical basis. Identifies the different paths of Puerto Rican theology.

3 credits

THEO 8020 HUMAN SUFFERING AND THE PROBLEM OF EVIL AND LOVE

Analysis of a selection of biblical and theological perspectives that have thought about the correlation between human suffering and the problem of evil and love in the Judeo-Christian tradition. Special attention to the biblical-theological interpretations and responses offered on these topics by the Caribbean and Latin America.

3 credits

THEO 8993 DISSERTATION PROPOSAL

Writing and defense of the dissertation proposal. Students will work under the direction of their doctoral committee until the proposal is approved by the Committee. They will enroll in this course while working on the proposal for the dissertation.

3 credits

THEO 8994 DISSERTATION

Intense work on the research and preparation of the doctoral dissertation. Students will enroll in this course while working under the direction of their doctoral committee. The final grade will be P/NP.

3 credits

Faculty of the University

Central Office Administrators with Faculty Rank

- AVILÉS CRUZ, EVELYN, Instructora. Directora Institucional de Servicios Académicos y Estudiantiles. B.S., M.S., Universidad Interamericana de Puerto Rico
- BOSCIO VARGAS, AMAURY F., Catedrático Auxiliar. Vicepresidente Auxiliar de Investigación Académica y Recursos Externos. B.A. Universidad de Puerto Rico, M.A.T., Montclair State College.
- CABRERA COLLAZO, RAFAEL L., Catedrático de Historia. Vicepresidente Asociado de Asuntos Académicos. B.A., M.A., Ph.D. Universidad de Puerto Rico.
- COLÓN ORELLANO, MAGGIE, Instructora. Directora Ejecutiva de Recursos Humanos. B.A., M.B.A. Universidad Interamericana de Puerto Rico.
- DE LAS CASAS GIL, ANTONIO, Catedrático Asociado de Física. Vicepresidente Auxiliar de Aprendizaje a Distancia. M.A. Universidad de Zaragoza, España.
- DOMÍNGUEZ RODRÍGUEZ, NORBERTO, Catedrático Auxiliar. Vicepresidente de Asuntos Religiosos. B.A. Universidad de Puerto Rico; M.Div. Seminario Evangélico de Puerto Rico.
- ECHEVARRÍA SANTIAGO, AGUSTÍN, Catedrático. Vicepresidente de Asuntos Académicos, Estudiantiles y Planificación Sistémica. B.A., J.D. Pontificia Universidad Católica de Puerto Rico.
- FERNÓS LÓPEZ-CEPERO, MANUEL J., Catedrático. Presidente de la Universidad. B.B.A., J.D. Universidad de Puerto Rico; LL.M. New York University.
- GONZÁLEZ PÉREZ, YOÍSA, Instructora. Directora Institucional de Planificación, Información Académica y de Investigación. B.A., M.P.L., Universidad de Puerto Rico.
- HUGUET GONZÁLEZ, NICOLÁS B., Instructor. Director Institucional de Retención Estudiantil. B.A., M.Psy., M.B.A. Universidad del Turabo.
- ORTIZ APONTE, MARITZA, Catedrática de Educación. Directora Institucional de Acreditación y Licencias. B.A. Universidad de Puerto Rico; M.B.A., Ed.D. Universidad Interamericana de Puerto Rico.
- RAMÍREZ TORO, GRACIELA, Catedrática de Biología. Directora del Centro de Educación, Conservación e Interpretación Ambiental. M.A. Hood College; Ph.D. Drexel University.
- RIVERA CLAUDIO, NÉLIDA, Catedrática Auxiliar de Gerencia. Directora del Centro para el Desarrollo Profesional y Eventos Especiales. B.B.A. Universidad de Puerto Rico; M.B.A., Ed.D. Universidad Interamericana de Puerto Rico.
- RIVERA GONZÁLEZ, ANTHONY, Catedrático Asociado de Ciencias Políticas e Historia. Director Institucional de Asuntos Curriculares. B.A. Universidad de Puerto Rico; M.A. Bowling Green State University; Ed.D. Universidad del Turabo.
- RIVERA OCASIO, FREDESWINDA, Instructora. Directora Institucional de Recursos Externos. B.S., Universidad Interamericana de Puerto Rico; M.B.A. Universidad de Puerto Rico, Recinto de Río Piedras.
- SAINZ BECERRIL, GUSTAVO RENÉ, Catedrático Auxiliar. Vicepresidente Auxiliar de Aprendizaje a Distancia. M.A., M.Ed., University of Texas at Brownsville.
- SANTIAGO NIEVES, ISAAC, Catedrático Auxiliar de Psicología. Director Ejecutivo de Investigación y Evaluación Sistémica. B.A., Universidad de Puerto Rico; M.S., Ph.D. Universidad Carlos Albizu.
- SARRIERA OLIVERA, CARMEN M., Catedrática Asociada de Español. Directora Ejecutiva del Consejo Universitario. B.A. Universidad del Sagrado Corazón; M.A. University of Washington.
- WOOLCOCK RODRÍGUEZ, KAREN, Catedrática de Biología. Vicepresidenta Asociada de Asuntos Estudiantiles. B.S., M.S., Ph.D. Universidad de Puerto Rico.

Faculty of the Campuses

Faculty Aguadilla Campus

- AGÉSILAS, ELIE A., Catedrático. B.A. Universidad de las Antillas, M.A. Universidad Interamericana de Puerto Rico, Ph.D. University of Tennessee.
- AGÉSILAS, MARIE J., Catedrática Asociada de Inglés. B.A. Universidad de las Antillas; M.A. University of Tennessee; Ph.D. Andrews University.
- AQUINO CRUZ, IRIS N., Catedrática Auxiliar de Psicología. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. Pontificia Universidad Católica de Puerto Rico.
- BETANCOURT LLAMBÍAS, MARÍA, Catedrática de Educación Física. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. University of Iowa.
- CARABALLO RIVERA, JOSÉ E., Catedrático Asociado de Mercadeo. B.A., M.B.A. Universidad Interamericana de Puerto Rico; D.B.A. Argosy University – Sarasota Campus.
- CASTRO GRACIA, JAIME, Catedrático de Educación. B.A., M.Ed. Universidad de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.
- FRAU ORTEGA, ROCÍO I., Catedrática Asociada de Educación. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ed.D. Universidad de Puerto Rico.
- GUILLAMA DE LEÓN, MARISA, Catedrática de Mercadeo. B.B.A., M.A. Universidad de Puerto Rico; Ph. D. Florida International University.
- LÓPEZ SÁNCHEZ, CÉSAR, Catedrático Auxiliar de Religión. B.A. Antillian College; M.A. Princeton Theological Seminary; J.D. Facultad de Derecho Eugenio María de Hostos.
- LUGO DE SÁNCHEZ, ILEANA N., Catedrática Asociada de Gerencia de Hoteles. B.A. Universidad de Puerto Rico; M.A. University of North Carolina at Greensboro; Ph.D. Virginia Polytechnic Institute and State University.
- LUGO IRIZARRY, NORMA, Catedrática Asociada de Educación. B.A. Universidad de Puerto Rico; M.A. Pontificia Universidad Católica de Puerto Rico; Ed.D. Nova University.
- MONTES RAMOS, WINETTE, Catedrática de Educación. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. The Pennsylvania State University.
- NAZARIO GARCÍA, HAYMEÉ, Catedrática de Psicología. B.A. Universidad Interamericana de Puerto Rico; M.S., Ph.D. Centro Caribeño de Estudios Postgraduados.
- NIEVES MÉNDEZ, ANTONIO, Catedrático de Historia. B.A. Universidad Interamericana de Puerto Rico; M.A., Ph.D. Centro de Estudios Avanzados de Puerto Rico y el Caribe.
- OTAOLA EGUÍA, JOSÉ R., Catedrático Asociado de Biología. B.S., M.S. Universidad de Puerto Rico; Ph.D. Capella University.
- PAGÁN GÓMEZ, MARITZA, Catedrática Asociada de Administración de Empresas. B.A., M.B.A. Universidad Interamericana de Puerto Rico; D.B.A. Argosy University.
- PÉREZ CRUZ, ANA M., Catedrática Asociada de Educación Especial. B.A., M.A., Ed.D. Universidad Interamericana de Puerto Rico.
- ROMÁN SILVA, ARIS A., Catedrática de Administración de Empresas. B.A., M.B.A., Ph.D. Universidad de Puerto Rico.
- ROSA ROSARIO, MARÍA G., Catedrática Asociada de Administración de Sistemas de Oficina. B.A. Universidad de Puerto Rico; M.A. New York University; D.B.A. Argosy University.
- VALES MEDINA, ÁNGEL R., Catedrático Asociado de Matemáticas. B.A., M.Ed., Ed.D. Universidad de Puerto Rico.
- VARGAS COLÓN, FELIPE, Catedrático de Educación. Bachiller, Universidad Autónoma de México; M.A. Universidad Interamericana de Puerto Rico; M.A. New York University; Doctor en Pedagogía, Universidad Autónoma de México.

Faculty Arecibo Campus

CARRIÓN PAGÁN, LOURDES, Catedrática de Trabajo Social. B.A., M.A., Ph.D. Universidad de Puerto Rico.
 CONCEPCIÓN SANTIAGO, VÍCTOR MANUEL, Catedrático de Educación. B.A. Universidad de Puerto Rico; M.A., Ed. D. Universidad Interamericana de Puerto Rico.
 DELGADO PÉREZ, IVONNE, Catedrática Asociada de Administración de Empresas. B.S.B.A, M.B.A. Universidad de Puerto Rico, Ph.D. Universidad Interamericana de Puerto Rico.
 DÍAZ JIMÉNEZ, RAMONITA DE LOURDES, Catedrática de Educación. B.A., M.Ed., Ed.D. Universidad de Puerto Rico.
 MOLINA MOLINA, IVÁN, Catedrático Auxiliar de Anestesia. B.A. Universidad Interamericana de Puerto Rico; M.S. Barry University.
 ORTIZ RAMOS, RENEE, Catedrático Auxiliar de Gerencia, B.F.T. Universidad de San Luis Potosí; México, M.F.T. Universidad de Tamaulipas; México, M.B.A. Universidad de Puerto Rico, D.B.A. Universidad del Turabo de Puerto Rico
 RAMOS GIRAU, JOSUÉ R., Catedrático Auxiliar de Anestesia. B.S., M.S. Universidad Interamericana de Puerto Rico.
 SÁNCHEZ SERRANO, CARLOS I., Instructor de Anestesia, B.S.N. Universidad Metropolitana de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico, CRNA, RN
 VELÁZQUEZ BENJAMÍN, FRANCIÉ, Catedrático de Educación. B.S. Universidad de Puerto Rico; M.Ed., Ed.D. University of Massachusetts.
 VELÁZQUEZ MORALES, FLORENCIA, Catedrática Auxiliar de Trabajo Social, B.S. Universidad Central de Bayamón, M.S.W. Universidad de Puerto Rico.

Faculty Barranquitas Campus

ÁLVAREZ SWIHART, PATRICIA, Catedrática Asociada de Inglés. B.A. Universidad de Puerto Rico, Recinto Universitario de Mayagüez; M.A., Ed. D. Universidad de Puerto Rico, Recinto de Rio Piedras.
 ARUN ALOK, Catedrático Auxiliar de Biotecnología. BS. y M.S. University of Delhi, India; Ph.D. Université Pierre et Marie Curie, Francia.
 CINTRÓN SERRANO, FILOMENA, Catedrática Asociada de Español. B.A., M. A. Universidad de Puerto Rico; Ph.D. Centro de Estudios Avanzados de Puerto Rico y el Caribe.
 COLÓN RIVERA, DAMARIS, Catedrática Auxiliar de Enfermería. B.S.N. Universidad Interamericana de Puerto Rico; M.S.N. y D.N.S Universidad de Puerto Rico, Recinto de Ciencias Médicas.
 CONCEPCIÓN MÁRQUEZ, FRANCISCO J., Catedrático Auxiliar de Justicia Criminal. B.A. Universidad Central de Bayamón; J.D. Universidad de Puerto Rico; LL.M. American University; Ph.D. Universidad Interamericana de Puerto Rico.
 GUERRERO DÍAZ, OMAR. Catedrático Auxiliar Ciencias de la Salud. B.S. Universidad de Puerto Rico: MD Universidad Autónoma de Guadalajara.
 LEBRÓN KURI, ALFREDO J., Catedrático Auxiliar Desarrollo Empresarial y Gerencial: Recursos Humanos. B.B.A Universidad de Puerto Rico: M.B.A Universidad Metropolitana; Ph.D. Universidad Interamericana de Puerto Rico
 MORALES SÁNCHEZ, LUIS R., Catedrático de Educación. B.A. Universidad de Puerto Rico; M.A., Ed. D. Universidad Interamericana de Puerto Rico.
 MORALES SANTIAGO, GAMALIEL, Catedrático Asociado de Educación. B.A. Universidad Interamericana de Puerto Rico; M.A. Universidad de Puerto Rico; M.Th. Seminario Evangélico de Puerto Rico; Ed.D. Universidad de Puerto Rico.
 NEGRÓN BERRÍOS, JUAN A., Catedrático de Química / Profesor Investigador Distinguido. B.S. Pontificia Universidad Católica de Puerto Rico; M.S. University of Arkansas; Ph.D. Universidad de Puerto Rico.
 PIZARRO SANTIAGO, VILMA G., Catedrática Asociada de Inglés. B.A., M.A., Ed.D. Universidad de Puerto Rico.
 RODRÍGUEZ MORALES, ROSA C., Catedrática Asociada de Educación. B.A., M.S. Universidad de Puerto Rico; M.A., Ed.D. Universidad Interamericana de Puerto Rico.
 SANTIAGO DÍAZ, ORLANDO, Catedrático de Español/Profesor Investigador Distinguido. B.A., M.A. Universidad Interamericana de Puerto Rico; Ph.D. Universidad de Valladolid, España.
 ZAYAS RODRÍGUEZ, WILFREDO, Catedrático Auxiliar de Contabilidad y Desarrollo Empresarial y Gerencial. B.S. Universidad de Puerto Rico: M.B.A. Universidad Central de Bayamón; Ph. D. Universidad Interamericana de Puerto Rico.

Faculty Bayamón Campus

- ALVARADO ZAYAS, IRMA, Catedrática Asociada de Administración de Empresas. B.B.A. Universidad de Puerto Rico; M.B.A. Universidad Interamericana de Puerto Rico; Ph.D. Universidad Interamericana de Puerto Rico.
- CORREA GUZMAN, ALBERTO, Catedrático Asociado en Matemáticas. M.A., Ed.D. Universidad Interamericana de Puerto Rico.
- DEL TORO DELGADO, LUIS, Catedrático Asociado de Psicología. B.B.A. Universidad de Puerto Rico; M.S., Ph.D. Centro Caribeño de Estudios Postgraduados.
- DI LEO TORRES, GRACE, Catedrática Auxiliar de Administración de Empresas. B.B.A. University of Western Sydney; M.B.A. Universidad Interamericana de Puerto Rico; Ph.D. Northcentral University.
- DÍAZ NEVÁREZ, OTONIEL, Catedrático Auxiliar de Ingeniería Mecánica. B.S.M.E., M.S.C.E., Ph.D. Universidad de Puerto Rico.
- FERRER RODRÍGUEZ, IVÁN, Catedrático de Biología. B.S., M.S., Ph.D. Universidad de Puerto Rico.
- HENDRICKS KIRCHNER, TIMOTHY J., Catedrático Auxiliar de Biología. B.S., B.A. John Hopkins; Ph.D. Case Western Reserve University.
- LUGO CHINCHILLA, ANA M., Catedrática Asociada de Biología. B.S., M.S., Ph.D. Universidad de Puerto Rico.
- MATCHETT, ASHLEY ARTHUR, Catedrático Auxiliar de Ciencias Forenses. B.S., Ph.D. University of Central Lancashire.
- MENÉNDEZ CÓRDOVA, MARCOS, Catedrático Asociado de Administración de Empresas. B.B.A. Universidad de Puerto Rico; M.B.A. Universidad Interamericana de Puerto Rico; Ph.D. Fordham University.
- MEZA CASTILLO, OMAR, Catedrático Asociado de Ingeniería Mecánica. B.S. Universidad Nacional del Santa, Perú; M.S. Universidad de Puerto Rico; Ph.D. West Virginia University.
- MIGNUCCI GIANNONI, ANTONIO, Catedrático de Biología. B.S. Colorado State University; M.A. University of Rhode Island; Ph.D. Universidad de Puerto Rico.
- MONTALVO FIOLE, FRANCISCO, Catedrático Auxiliar de Administración de Empresas. B.S. Embry-Riddle Aeronautical University; M.B.A. Baruch College; D.B.A. Case Western Reserve University.
- OLIVARES PACHECO, CARLOS J., Catedrático de Ciencias de Computadoras. B.S., M.B.A. Universidad del Sagrado Corazón; M.B.A., Ph.D. Universidad Interamericana de Puerto Rico.
- PÉREZ DÍAZ, EDUARDO, Catedrático Asociado de Ingeniería Mecánica. M.S. Universidad de Puerto Rico; Ph.D. West Virginia University.
- QUINTANA MÉNDEZ, JAVIER, Catedrático Asociado en Ingeniería Eléctrica. B.S.E.E. Universidad de Puerto Rico; M.S., Ph.D. Rensselaer Polytechnic Institute.
- RIVERA BETANCOURT, HARRY, Catedrático Auxiliar de Química. B.S., Ph.D. Universidad de Puerto Rico.
- RIVERA MARCHAND, BERT, Catedrático de Biología. B.A. Universidad Interamericana de Puerto Rico; M.S., Ph.D. Universidad de Puerto Rico.
- RIVERA PAGÁN, ZULMA, Catedrática Asociada de Biología. B.S., M.S., Ph.D. Universidad de Puerto Rico.
- RODRÍGUEZ DURÁN, ARMANDO, Catedrático de Biología. B.S., M.S., Universidad de Puerto Rico; Ph.D. Boston University.
- SALGADO MANGUAL, RAFAEL, Catedrático Asociado de Ingeniería Mecánica, Ph.D. Universidad Carlos III, Madrid, España.
- SERRANO NÚÑEZ, YOLANDA, Catedrática Asociada de Biología. B.S., M.S. Universidad de Puerto Rico; Ph.D. Universidad Complutense de Madrid.
- SANTIAGO RÍOS, VANESA, Instructora de Administración de Empresas. B.B.A. Universidad de Puerto Rico; M.B.A. Universidad Católica de Puerto Rico; Ph.D. Universidad Interamericana de Puerto Rico.
- VARDAR ERGIN, NEDIM, Catedrático Asociado de Ingeniería. B.S.E.E., M.S.E.E. Yildiz Technical University. Ph.D. Illinois Institute of Technology.

Faculty Fajardo Campus

- BATISTA GARCÍA, NORMA L., Catedrática Asociada de Trabajo Social. B.S. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ed.D. Universidad de Puerto Rico.
- DEL VALLE RIVERA, WILFREDO, Catedrático de Mercadeo. M.B.A. Universidad Interamericana de Puerto Rico. Ph.D. Capella University.

GARCÍA RAMÍREZ, CARLOS I., Catedrático Asociado de Ciencias de Computadoras. B.A., M.S. Universidad de Puerto Rico; Ph.D. University of Utah.

GONZÁLEZ LABOY, MILLIE, Catedrática Auxiliar de Microbiología. B.S. Universidad de Puerto Rico, M.S. Ohio State University, Ph. D. Universidad de Puerto Rico.

MALDONADO VILLAMIL, FRANCISCO J., Catedrático Asociado de Educación. B.A. Universidad de Puerto Rico; M.A. Fordham University; Ed.D. Universidad Interamericana de Puerto Rico.

MONTES OLMEDA, PORFIRIO, Catedrático de Educación. B.A. Universidad de Puerto Rico; M.A. Fordham University; Ed. D. Universidad Interamericana de Puerto Rico.

ORTIZ RODRÍGUEZ, MADELINE, Catedrática Asociada de Ciencias de Computadoras. B.A., M.Ed. Universidad de Puerto Rico; Ph. D. University of Florida.

SAGARDÍA OLIVERA, PAULA, Catedrática. B.A. Universidad de Puerto Rico; M.A. Fordham University; Universidad de Puerto Rico, Ed. D. Universidad Interamericana de Puerto Rico.

PADÍN ZAMOT, GERARDO, Catedrático Auxiliar de Administración de Empresas. B. A., M. A., Ph.D. Universidad Interamericana de Puerto Rico.

SIERRA LÓPEZ, JOSÉ L., Catedrático Asociado de Trabajo Social. B.A. Universidad de Puerto Rico; M.S.W. Universidad Interamericana de Puerto Rico; Ph.D. Universidad de Puerto Rico.

SUÁREZ HERRERO, ISMAEL, Catedrático de Educación. B.A. Universidad de Puerto Rico; M.A. New York University; Ed. D. Universidad Interamericana de Puerto Rico.

Faculty Guayama Campus

BIRD CARMONA, ARTURO, Catedrático Asociado de Historia. B.A., M.A. Universidad de Puerto Rico; Ph.D. The University of Iowa.

DE JESÚS ALICEA, ANGELA, Catedrática de Enfermería. B.S.N., M.S.N., C.N.S. Universidad de Puerto Rico, Recinto de Ciencias Médicas; Ph.D. The Pennsylvania State University.

FEBRES SANTIAGO, SAMUEL F., Catedrático de Educación. B.A. Universidad Interamericana de Puerto Rico; M.A.E. Universidad de Puerto Rico; M.A., M.Ed. Temple University; Ph.D. Seton Hall University.

GONZÁLEZ MERCADO, NELSON, Catedrático de Historia. B.A., M.A. Universidad de Puerto Rico; Ph.D. Centro de Estudios Avanzados de Puerto Rico y el Caribe.

JUSINO CAMPOS, EDGARDO, Catedrático de Español. B.A., M.A., Ph.D. Universidad de Puerto Rico.

MORALES COLÓN, ROSALÍA, Catedrática de Administración de Sistemas de Oficina. M.A. New York University; B.A., M.A., Ed.D. Universidad de Puerto Rico.

MULERO LÓPEZ, MINERVA, Catedrática Asociada de Enfermería, B.S.N., Universidad de Puerto Rico, Recinto de Humacao; M.S.N., Recinto de Ciencias Médicas, Ph.D., Pontificia Universidad Católica de Puerto Rico.

PAGÁN LÓPEZ, JANICE N., Catedrática Asociada de Educación. B.A., M.A. Universidad de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.

ROBLES TORRES, RAY, Catedrático de Educación. B.A. Pontificia Universidad Católica de Puerto Rico; M.S. State University of New York; Ph.D. The Pennsylvania State University.

VELÁQUEZ GONZÁLEZ, MARISOL, Catedrática Asociada de Enfermería, B.S.N., M.S.N., Universidad de Puerto Rico, Recinto de Ciencias Médicas; Ph.D., Pontificia Universidad Católica de Puerto Rico.

Faculty Metropolitan Campus

ACEVEDO RODRÍGUEZ, LUIS A., Catedrático Auxiliar de Justicia Criminal. B.A. Universidad Interamericana de Puerto Rico; J.D. Pontificia Universidad Católica de Puerto Rico.

AGUIRRE ESQUER, LUIS, Catedrático de Trabajo Social. M.S.W., Ed.D. Universidad de Puerto Rico.

ALLENDE GOITÍA, NOEL, Catedrático Asociado de Música. M.A. Universidad de Puerto Rico; Ph.D. Michigan State University.

ÁLVAREZ PÉREZ, GISELA, Catedrática Asociada de Psicología. Ph.D. Centro Caribeño de Estudios Postgraduados.

ARAGUNDE TORRES, RAFAEL A, Catedrático de Educación. Doctorado en Filosofía y Letras, Universidad Pontificia de Salamanca.

ARCHILLA DÍAZ, SHEILA, Catedrática de Trabajo Social. M.S.W. Universidad de Puerto Rico; Ph.D. Ohio State University.

ARIAS MORALES, WILLIAM E., Catedrático de Biología. B.S., M.S., Ph.D. Universidad de Puerto Rico.

ARILL BENITEZ, AMY, Catedrática Asociada de Inglés. B.A., M.A., Ed.D. Universidad de Puerto Rico.

ARTEAGA NARVÁEZ, EDILBERTO, Catedrático Asociado de Física. M.S. Universidad de Puerto Rico Licenciado en Matemáticas y Física, Universidad del Atlántico, Colombia. Ed.D. Universidad de Puerto Rico, Recinto de Río Piedras.

AVILÉS RUIZ, ZORAIDA, Catedrática Asociada de Trabajo Social. M.S.W. Universidad de Puerto Rico, Ph.D. Universidad de Puerto Rico.

AYALA DÍAZ, RAMÓN, Catedrático Asociado de Administración de Empresas. B.A., M.B.A. Universidad Interamericana de Puerto Rico; Ph.D. Economía Internacional, Universidad del País Vasco.

AYES SANTIAGO, ZULMA, Catedrática de Español. B.A. Universidad Interamericana de Puerto Rico; M.A. Pontificia Universidad Católica de Puerto Rico; Doctorado en Letras, Universidad Nacional Autónoma de México.

BARRIENTOS BATRES, SALOMÓN, Catedrático Auxiliar de Arte. M.A., Ph.D. Universidad de Puerto Rico; Arquitecto, Universidad Nacional Autónoma de México.

BELÉNDEZ SOLTERO, PILAR, Catedrática de Educación. B.S., M.Ed. Universidad de Puerto Rico; Ph.D. Harvard University.

BENABE, LUIS, Catedrático Asociado de Administración de Empresas. B.S. Universidad de Puerto Rico; M.B.A. Rutgers The State University.

CARABALLO RÍOS, ÁNGEL LUIS, Catedrático de Ciencias de Computadoras. B.S. Universidad de Puerto Rico; M.S. University of Massachusetts; Ph.D. The Pennsylvania State University.

CASTILLO COLÓN VÍCTOR L. Catedrático de Economía. B.A., M.S. Universidad de Puerto Rico; Ph.D. Doctor en Economía, Universidad Nacional Autónoma de México.

COLLAZO RIVERA, CARMEN, Catedrática de Educación. B.A., M.P. Universidad de Puerto Rico; Ph.D. Florida State University.

COLÓN CORA, RAFAEL, Catedrático de Recursos Humanos. B.S., M.P.A. Universidad de Puerto Rico; Ph.D. Northwestern University.

COLÓN TORRES, BALTAZARA, Catedrática de Economía. B.A. Universidad de Puerto Rico; M.A., Ph.D. Rutgers The State University.

COMMANDER MORALES, MILAGROS, Catedrática de Inglés y Lingüística. B.A., M.A. Pontificia Universidad Católica de Puerto Rico; Ph.D. New York University.

CORTÉS GONZÁLEZ, CARLOS, Catedrático Asociado de Educación. B.A., M.A., Ed.D. Western Michigan University.

CRESPO FERNÁNDEZ, LEILA, Catedrática de Psicología. Ph.D. Universidad de Puerto Rico.

CRUZ RIVERA, YASMINE, Catedrática de Español. B.A. Universidad del Sagrado Corazón; M.A., Ed.D. Universidad de Puerto Rico.

CUBANO MERCADO, MIGUEL, Catedrático de Música. B.A. Universidad de Puerto Rico; M.A. Conservatorio Nacional de Aubervillers; Diploma de Composición de la Schola Cantorum; Ed.D. Universidad Interamericana de Puerto Rico.

CUÉ GARCÍA, FELIX, Catedrático de Economía y Administración de Empresas. B.A., M.A. Universidad Interamericana de Puerto Rico; Ph.D. Oklahoma State University.

DE LA CUÉTARA, RAMÓN, Catedrático de Ciencias de Computadoras. B.S., M.D. Universidad de Puerto Rico.

DELBREY PÉREZ, ALFRED, Catedrático Asociado de Psicología. Ph.D. University of Alabama.

DÍAZ APONTE, CARLOS A., Catedrático Asociado de Ciencias de Computadoras. B.S. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. Universidad del Turabo.

DOMENECH DEL PILAR, MICHAEL, Catedrático de Teología. B.A. Universidad de Puerto Rico; M. Div. Seminario Evangélico de Puerto Rico; Ed. M, Ed. D. Teachers College, Columbia University; Ed.D., Universidad de Puerto Rico.

EMMANUELLI MUÑIZ, MIRNA, Catedrática de Español. B.S. Pontificia Universidad Católica de Puerto Rico; M.A., Ph.D. Universidad de Puerto Rico.

ESCOBAR VÁZQUEZ, JOSEFINA, Catedrática Asociada de Educación. B.A., M.Ed. Universidad de Puerto Rico, Ed.D. Universidad Interamericana de Puerto Rico.

FÁBREGAS TROCHE, HILDA L., Catedrática de Biología. B.S., D.M.D. Universidad de Puerto Rico.

FLORES MARTÍNEZ, LUIS A., Catedrático Asociado de Educación. B.A., M.S., J.D. Universidad Interamericana de Puerto Rico; M.L.S. Universidad de Puerto Rico; Ph.D. Walden University.

FONSECA SEPÚLVEDA, CARLOS M., Catedrático Asociado de Administración de Empresas. B.A., M.B.A. Universidad de Puerto Rico, Ph.D., Universidad Complutense de Madrid, España.

FREYRE SERRA, JORGE, Catedrático y Profesor Distinguido de Economía. M.A., Ph.D. Yale University; Doctor en Derecho, Universidad de La Habana.

GARCED MUÑOZ, AILEEN, Catedrática Auxiliar de Inglés y Lingüística. B. A., M. A. Universidad de Puerto Rico; Ph. D. Universidad de Puerto Rico.

GARCÍA ARROYO, MATILDE, Catedrática de Inglés y Lingüística. B.A., M.A. Universidad de Puerto Rico, Ed.D. New York University.

GARZA PONCE DE LEÓN, EDMUNDO, Catedrático Auxiliar de Finanzas. B.S., M.B.A. Universidad de Puerto Rico.

GODOY VITORINO, FILIPA, Profesor Investigador. Ph.D. Universidad de Puerto Rico

GÓMEZ BERRÍOS, NÉLIDA, Catedrática Asociada de Contabilidad. B.B.A. Universidad de Puerto Rico; M.S. Universidad Mundial; Ph.D. Universidad Interamericana de Puerto Rico

GONZÁLEZ CORDERO, LIVIER I., Catedrático de Biología. B.S.M.T., M.S., Ph.D. Universidad de Puerto Rico.

GONZÁLEZ VÉLEZ, PEDRO A. Catedrático de Historia. Ph.D en Historia, Universidad de Puerto Rico.

HERNÁNDEZ GONZÁLEZ, PABLO JESÚS, Catedrático Asociado de Historia. Doctor en Historia, Universidad de Sevilla, España; Licenciatura en Historia, Universidad de La Habana, Cuba.

HERNÁNDEZ ROMÁN, DÉBORA, Catedrática Asociada de Español. B.A., M.A. State University of New York; Ph.D. Universidad de Puerto Rico.

IRVINE BLANCO, ILEANA, Catedrática de Educación. Ph.D. Fordham University.

ITURRONDO BÁEZ, MILAGROS, Catedrática de Sociología. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Doctor en Sociología, Universidad Complutense de Madrid.

JUMAH, AHMAD, Catedrático de Finanzas y Contabilidad. M.B.A. Universidad Interamericana de Puerto Rico; Ph.D. Manchester Business School.

KARMAN FERNÁNDEZ, JUAN C, Catedrático Asociado de Tecnología de la Información. B.B.A. Universidad de Puerto Rico; M.I.S. Universidad del Sagrado Corazón; D.B.A. Universidad del Turabo.

KORTRIGHT ROIG, DINAH, Catedrática de Español. B.A., M.Ed. Universidad de Puerto Rico; Ph.D. Universidad Complutense de Madrid.

LEBRÓN DÍAZ, NOEMÍ, Catedrática Asociada de Educación. B. A. Universidad de Puerto Rico; M.A., Ed.D. Universidad Interamericana de Puerto Rico.

LLORÉNS RIVERA, ANTONIO A., Catedrático Asociado de Economía. B.A., M.A. Universidad de Puerto Rico; Ph.D. The Ohio State University.

LÓPEZ RAMÍREZ, NORMA I., Catedrática de Biología. B.S., M.Ed. Universidad de Puerto Rico; Ph.D. The Pennsylvania State University.

LÓPEZ SIERRA, HÉCTOR, Catedrático de Sociología. B.B.A. Universidad de Puerto Rico; M.A. Seminario Evangélico de Puerto Rico, Th.M. Lutheran School of Theology; Ph.D. Graduate Theological Foundation; Ph.D. Universidad de Puerto Rico.

MALDONADO MOLL OLGA, Catedrática de Sistemas de Oficina. B.B.S. Universidad de Puerto Rico; M.A. New York University; Ph.D. Argosy University.

MALDONADO MORALES, Ivelisse J., Catedrática Auxiliar de Psicología. B.A. Universidad de Puerto Rico; M.S., Psy.D. Universidad Carlos Albizu

MARTÍNEZ CALIMANO, ENRIQUE., Catedrático Asociado en Negocios Internacionales y Contabilidad. B.B.A. Universidad de Puerto Rico; M.B.A. Universidad Metropolitana; D.B.A. Argosy University, Florida.

MEDINA RODRÍGUEZ, FREDDY R., Catedrático de Biología. B.S., M.S. Universidad de Puerto Rico; Ph.D. University of Cincinnati.

MEJÍAS TORRES, IDA, Catedrática Asociada de Tecnología Médica. B.S., M.T. (ASCP) Universidad Interamericana de Puerto Rico; Ph.D. Universidad de Puerto Rico.

MÉNDEZ RAMOS, ALEJANDRO. Instructor de Contabilidad. B.B.A. Universidad de Puerto Rico; M.B.A. Universidad Interamericana de Puerto Rico.

MILÁN OLIVIERI, ARLINE, Catedrática de Recursos Humanos. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; M.A. New York University; Ph.D. Walden University.

MIRANDA RODRÍGUEZ, ELIZABETH A., Catedrática de Tecnología Médica. M.S.W. Universidad de Puerto Rico; Ph.D. Ohio State University.

OLIVER RUSSO, ANN MARIE, Catedrática de Educación. B.A. College of Saint Elizabeth; M.Ed. Pontificia Universidad Católica de Puerto Rico; M.A., Ed.D. Universidad Interamericana de Puerto Rico.

ORTIZ GARCÍA, ÁNGEL, Catedrático Auxiliar de Contabilidad; B.B.A., M.B.A, Universidad Interamericana; J.D., Universidad de Puerto Rico

ORTIZ GUEVARA, MAGDALENA, Catedrática Asociada de Administración de Empresas. B.B.A., M.B.A. Universidad de Puerto Rico; M.B.A., J.D. Universidad Interamericana de Puerto Rico.

ORTIZ VIDAL, VÍCTOR, Catedrático de Psicología. B.B.A. Universidad de Puerto Rico; M.S., Ph.D. Centro Caribeño de Estudios Postgraduados.

PAGÁN CABRERA, CARMEN JULIA, Catedrática de Teología. B.S. Universidad de Puerto Rico; M.Div. Seminario Evangélico de Puerto Rico; Ed.D. Columbia University.

PÉREZ CARTAGENA, ERNESTO, Catedrático Asociado de Educación. B.A., M.A. Universidad de Puerto Rico; Ph.D. University of Connecticut.

PEREZ QUIÑONES, LUZ I, Catedrática de Historia. B.A. Universidad de Puerto Rico; M.A. University of Bridgeport; Ph.D. Universidad de Valladolid.

PÉREZ ROLÓN, JORGE. Catedrático de Música. M.M. Manhattan School of Music; Ed.D. Columbia University.

PUIG CAMPOS, RAQUEL. Catedrática Auxiliar de inglés y lingüística. B. A., Ph. D. Universidad de Puerto Rico.

QUINTANA RIVERA, HILDA E., Catedrática de Español. B.A. Universidad de Puerto Rico; M.A., Ph.D. State University of New York.

RIVAS MORALES, ANA MARÍA, Catedrática Asociada de Relaciones Laborales. B.A., M.P.A. Universidad de Puerto Rico; Ed.D. Gerencia y Liderazgo Educativos, Universidad Interamericana de Puerto Rico.

RIVERA CARRASQUILLO, ELBA I., Catedrática de Matemáticas. B.A., M.Ed. Universidad de Puerto Rico; Ed. D. Universidad Interamericana de Puerto Rico.

RIVERA DE MÁRQUEZ, ELBA, Catedrática de Educación Comercial. B.S. City University of New York; Universidad Interamericana de Puerto Rico; Ph.D. New York University.

RIVERA RODRÍGUEZ, ÁNGEL, Catedrático Asociado de Economía. B.A. Universidad de Puerto Rico; M.A. Harvard University.

RIVERO VERGNE, ALICIA, Catedrática de Psicología. B.A., M.Ed. Universidad de Puerto Rico; Ph.D. Michigan State University.

RODRÍGUEZ ACEVEDO, AMELIA, Catedrática Auxiliar de Psicología. B.A., Ph.D. Universidad de Puerto Rico.

RODRÍGUEZ DEL TORO, VIVIAN, Catedrática de Psicología. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. Seton Hall University.

ROE, ALICIA, Catedrática de Ciencias Terrestres. B.A. Universidad de Puerto Rico; M.A. Indiana University; Ph.D. University of Miami.

ROSA SOBERAL, ROSALIE, Catedrática de Trabajo Social. B.A., M.S.W. Universidad de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.

ROSARIO ALVAREZ, NICOLÁS, Catedrático de Negocios Internacionales. B.B.A. Universidad de Puerto Rico; M.B.A., Ph.D. Universidad Interamericana de Puerto Rico.

ROSARIO CRESPO, MELVIN, Catedrático Auxiliar Justicia Criminal. B.A., M.A. Universidad del Sagrado Corazón; J.D. Universidad Interamericana de Puerto Rico.

RUBERO SANTIAGO, MARÍA DELIA, Catedrática de Educación. B.A., M.A., Universidad Interamericana de Puerto Rico; Ph.D. Seton Hall University.

RUIZ MERCADO, ÁNGEL L., Catedrático de Economía. B.A. Universidad de Puerto Rico; M.A. Universidad de California en Berkeley; Ph.D. Universidad de Gales.

SANABRIA RÍOS, DAVID, Profesor Investigador. Ph.D. Universidad de Puerto Rico.

SANTIAGO CENTENO, ZORAIDA, Catedrática de Psicología. M.S., Ph.D. Centro Caribeño de Estudios Postgraduados.

SANTIAGO PÉREZ, JAIME., Catedrático Asociado de Psicología. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. Universidad de Puerto Rico.

TEXIDOR CARMONA, MIGDALIA, Catedrática Auxiliar de Tecnología Médica. M.A. New York University; M.T. Universidad de Puerto Rico.

TOSADO ACEVEDO, RAFAEL, Catedrático Asociado de Microbiología. B.S., M. S., Ph. D. Universidad de Puerto Rico.

VALLÉS SIFRE, JOSÉ R., Catedrático Asociado de Ciencias de Computadora. B.B.A. West Virginia University; M.A. Universidad Interamericana de Puerto Rico; Ph.D. Capella University.

VAN TRIESTE, ROBERT, Catedrático de Inglés y Lingüística. M.A. Universidad de Puerto Rico; Ph.D. New York University.

VÁZQUEZ ORTEGA, GENEROSA, Catedrática de Educación. B.S. Universidad de Puerto Rico; M.S. Pennsylvania State University; Ph.D. New York University.

VÁZQUEZ MEDINA, JUAN H, Catedrático de Educación. Ph.D. Florida State University.

VÁZQUEZ ROSADO, MARÍA DE LOS A., Catedrática Asociada de Psicología. B.A. Universidad de Puerto Rico; M.S. Centro Caribeño de Estudios Posgraduados; Ph.D. Universidad de Puerto Rico.

VEGA LOZADA, FREDRICK, Catedrático de Negocios Internacionales. J.D. Universidad de Puerto Rico; M.B.A. Long Island University; LL.M. Universidad de Strathclyde.

VÉLEZ CRUZ, FRANCISCO, Catedrático Asociado de Educación. B.A., M.A. Universidad Interamericana de Puerto Rico; M.Ed. University of Cincinnati; Ed.D. Universidad Interamericana de Puerto Rico.

VÉLEZ OYOLA, ÁNGEL, Catedrático Asociado de Teología. B.A. Universidad del Turabo; M.A. Centro de Estudios Avanzados de Puerto Rico y el Caribe; M.A. Barry University; Th.M. Gordon Conwell Theological Seminary; C.A.E.S. Boston College; Ed.D. Graduate Theological Foundation; Doctor en Historia de América, Universidad de Sevilla; Pós-Doutorado Pontificia Universidade Católica do Río de Janeiro.

VÉLEZ SERRA, VIDAL, Catedrático de Educación. B.A. Universidad de Puerto Rico; M.A. New York University; Ph.D. University of Connecticut.

VIVES AMENGUAL, EVANGELINA, Catedrática de Contabilidad. B.B.A. Universidad de Puerto Rico; M.B.A., Ph.D. New York University; J.D. Brooklyn Law School.

Faculty Ponce Campus

ÁLVAREZ BERRÍOS, MERLIS P., Catedrática Auxiliar de Química. Ph. D. Universidad de Puerto Rico.

ÁLVAREZ PEÑA, JACQUELINE, Catedrática de Recursos Humanos y Gerencia. B.S., M.B.A., Ph.D. Pontificia Universidad Católica de Puerto Rico.

ÁLVAREZ TRUJILLO, HÉCTOR, Catedrático Asociado de Historia. B.A. Universidad Interamericana de Puerto Rico; M.A. City College of New York. Ed. D. Walden University.

BAHAMONDE RODRÍGUEZ, MANUEL, Catedrático Asociado de Religión y Psicología. B.A. Universidad de Puerto Rico; M.Div. Seminario Evangélico de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph. D., Pontificia Universidad Católica de Puerto Rico.

BATIZ ORTIZ, RENÉ, Catedrático Auxiliar de Mercadeo. B.B.A. Universidad de Puerto Rico; M.B.A. Universidad Interamericana de Puerto Rico; Ed. D. Nova South Eastern University.

CARABALLO PAGÁN, OMAIRA, Catedrática Asociada Estudios a Distancia. B.A., M.A. Universidad Interamericana de Puerto Rico; Ed.D. Nova Southeastern University

CARATINI SOTO, MILAGROS, Catedrática de Inglés. B.A. Universidad Interamericana de Puerto Rico; M.Ed. Pontificia Universidad Católica de Puerto Rico; Ph.D. New York University.

CEDEÑO FELICIANO, CÉSAR A., Catedrático Auxiliar de Educación. B.A. Universidad de Puerto Rico; M.Ed., Ed.D. Pontificia Universidad Católica de Puerto Rico.

CLAMPITT DUNLAP, SHARON, Catedrática de Inglés. B.A., M.A. Universidad Interamericana de Puerto Rico; Ed.D. Universidad de Puerto Rico.

COLÓN ACOSTA, VILMA E., Catedrática de Biología. B.S., M.Ed. Universidad de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.

COLÓN ROSA, HÉCTOR W., Catedrático Asociado de Matemáticas. B.S. Universidad de Puerto Rico en Cayey; M.S. Universidad de Puerto Rico, Recinto de Ciencias Médicas; Ed.D. Universidad de Puerto Rico en Río Piedras.

CORDERO MORALES, EUNICE, Catedrática Auxiliar de Mercadeo. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; D.B.A. Pontificia Universidad Católica de Puerto Rico.

CORDOVES AVILÉS, JOSÉ L., Catedrático Asociado de Educación Especial. B.A. Universidad de Puerto Rico; M.A. Caribbean University. Ph. D. Walden University, Minnesota.

CORREA SUÁREZ, LISBEL, Catedrática Auxiliar en Educación. B.A. Universidad de Puerto Rico; M. Ed. Caribbean University; Ed. D. Nova Southeastern University.

DONCEL VÁZQUEZ, MARÍA M., Catedrática de Español. B.A., M.A. Universidad de Puerto Rico; Ph.D. Universidad de Valladolid, España.

FELIBERTY RUBERTÉ, VÍCTOR A., Catedrático Auxiliar de Religión. B.S. Universidad de Puerto Rico; M. DIV. Seminario Teológico de Colombia en Georgia; C.A.S. Seminario San Pedro y San Pablo en Trujillo Alto; Ph. D. Universidad Interamericana de Puerto Rico.

FELICIANO QUIÑONES, BERNARDETTE, Catedrática de Matemáticas. B.S., M.A. Pontificia Universidad Católica de Puerto Rico; M.S. Salem State College; Ed.D. Teacher's College, Columbia University en New York.

FERRER TORRES, EDMY J., Catedrática Asociada de Ciencias Forenses y Química. B.S., M.S., Ph.D. Universidad de Puerto Rico.

GALARZA RIVERA, MARÍA P., Catedrática Asociada de Recursos Humanos y Gerencia. B.S.S. Universidad de Puerto Rico; M.B.A. Pontificia Universidad Católica de Puerto Rico; D.B.A. Argosy University, Sarasota.

GONZÁLEZ CHÉVERE, ORLANDO, Catedrático Asociado de Educación. B.A., M.A. Universidad del Sagrado Corazón; Ed.D. Pontificia Universidad Católica de Puerto Rico.

LABOY VÉLEZ, LILLIAM, Catedrática Asociada de Mercadeo. B.B.A., M.B.A. Universidad de Puerto Rico; D.B.A. Argosy University.

LOYSELLE MIRÓ, ANNIVETTE, Catedrática de Español. B.A. Universidad de Puerto Rico; M.A. New York University; Ph.D. Universidad de Valladolid, España.

MALDONADO SANTIAGO, VÍCTOR, Catedrático Auxiliar de Español. B.A. Universidad de Puerto Rico; M. A. Caribbean University; Ph. D. Centro de Estudios Avanzados de Puerto Rico y el Caribe.

MATTEI RODRÍGUEZ, LUCAS, Catedrático Asociado de Historia. B.A. Pontificia Universidad Católica de Puerto Rico; M.A. Centro de Estudios Avanzados de Puerto Rico y El Caribe; Ph.D. Universidad de Valladolid, España.

MUÑIZ RIVERA, EDGARDO L., Catedrático Asociado de Sistemas de Información. B.B.A., D.B.A. Pontificia Universidad Católica de Puerto Rico; M.B.A. Universidad del Sagrado Corazón.

ORTIZ RIVERA, EILEEN, Catedrática de Comercio Internacional y Mercadeo. M.B.A. Texas Agronomy and Management International University; B.B.A., Ph.D. Universidad Interamericana de Puerto Rico.

OSORIO CANTILLO, CELIA M., Catedrática Auxiliar de Química. B.S. Universidad del Atlántico, Colombia; M.S., Ph. D. Universidad de Puerto Rico.

PÉREZ MATOS, IVETTE, Catedrática Auxiliar de Educación. B.A. Universidad Interamericana de Puerto Rico; M.A. University of Phoenix; Ed.D. Pontificia Universidad Católica de Puerto Rico.

PÉREZ MIRANDA, MIGDALIA, Catedrática de Español. B.A., M.A., Ed.D. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico.

PLANCHART MÁRQUEZ, ORLANDO, Catedrático de Matemáticas. Licenciado en Educación, Universidad de Oriente, Venezuela; M.S. Instituto Politécnico Nacional de México; Ph.D. Universidad Autónoma de Morelos, México.

RAMÍREZ DOMENECH, JOSÉ L., Catedrático Auxiliar de Biología. B.S. Universidad de Puerto Rico; Ph. D. Louisiana State University at Baton Rouge.

RAMÍREZ MELLA, JENNIE T., Catedrática de Biología. B.S., M.S., Ph.D. Universidad de Puerto Rico.

RÍOS GONZÁLEZ, ÁNGEL M., Catedrático de Ciencias Ambientales. B.S., M.S. Universidad de Puerto Rico; Ph.D. State University of New York.

RIVERA MONTALVO, DIANA, Catedrática Auxiliar de Finanzas. B.A., M.A. Universidad Interamericana de Puerto Rico; Ed.D. Nova Southeastern University, Florida.

RIVERA VEGA, LUZ M., Catedrática Asociada de Matemáticas. B.S., M.Ed. Pontificia Universidad Católica de Puerto Rico; M.S. Salem State College, Massachusetts; Ed.D. Columbia University, New York.

RODRÍGUEZ PRÍNCIPE, HERMINIO, Catedrático Asociado de Contabilidad. B.B.A., M.B.A. Pontificia Universidad Católica de Puerto Rico; D.B.A. Argosy University, Florida.

RODRÍGUEZ RODRÍGUEZ, ALBERTO, Catedrático Asociado de Inglés. B.A., M.Ed. Pontificia Universidad Católica de Puerto Rico; Ed.D. Nova Southeastern University.

SANTIAGO MELÉNDEZ, DELMA O., Catedrática Asociada de Historia. B.A., M.A. Universidad de Puerto Rico; Ph.D. Universidad Interamericana de Puerto Rico.

TEISSONNIERE ORTIZ, ARNALDO, Catedrático Asociado de Recursos Humanos. B.A., M.P.A. Universidad de Puerto Rico; J.D. Pontificia Universidad Católica de Puerto Rico. D.E.A. Universidad de Valladolid, España.

TORRES CRUZ, ELBA, Catedrática de Español. B.A., M.A. Pontificia Universidad Católica de Puerto Rico. Ph.D. Universidad de Valladolid, España.

TORRES MORALES, RAMÓN, Catedrático Asociado de Administración en Empresas. B.S. Pontificia Universidad Católica de Puerto Rico; M.B.A. Florida Institute of Technology; M.S.E. California State University; D.B.A. Pontificia Universidad Católica de Puerto Rico.

TORRES NAZARIO, MARCOS, Catedrático de Educación y Matemática. B.A., M.A., Ed.D. Universidad Interamericana de Puerto Rico.

TORRES ROSARIO, VIRGENMINA, Catedrática Auxiliar en Psicología. B.S., Psy.D. Pontificia Universidad Católica de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico.

TORRES SANTIAGO, MADELINE, Catedrática Asociada de Administración de Sistemas de Oficina. B.A. Universidad de Puerto Rico; M.A. New York University; Ed.D. Universidad Interamericana de Puerto Rico.

VELÁZQUEZ ÁLVAREZ, JOAQUIN, Catedrático Asociado de Salud y Educación Física. B.A., M.A. Universidad Interamericana de Puerto Rico; HCD de la Organización Mundial de la Salud Pública; A.MD The Open International University for Complementary Medicines; N.MD, John F. Kennedy College of Nutritional Arts and Sciences.

VÉLEZ, NATALIA, Catedrática Auxiliar de Idiomas. Maestría The Samara State University, Russia; Ph.D. The Bavarian Julius-Maximilians University, Würzburg, Germany.

VÉLEZ GRANELL, CARLOS, Catedrático Asociado de Ciencias Biomédicas. B.S. Pontificia Universidad Católica de Puerto Rico; Ph.D. Escuela de Medicina de Ponce.

VÉLEZ MIRANDA, SAMUEL, Catedrático Asociado de Gerencia Industrial. B.S.I.E. Universidad de Puerto Rico; M.B.A., Ph.D. Universidad Interamericana de Puerto Rico.

VILLA RODRÍGUEZ, JOEL, Catedrático Asociado de Justicia Criminal. B.A. Pontificia Universidad Católica de Puerto Rico; M.A. Universidad de Puerto Rico; Ph.D. Universidad Complutense de Madrid, España.

VILLA RODRÍGUEZ, JOEL, Catedrático Asociado de Justicia Criminal. B.A. Pontificia Universidad Católica de Puerto Rico; M.A. Universidad de Puerto Rico; Ph.D. Universidad Complutense de Madrid, España.

Faculty San Germán Campus

ACEVEDO SEGARRA, RAÚL, Catedrático de Educación. Ph.D. New York University.

ACEVEDO SEMIDEY, EVELYN, Catedrática de Educación. B.S. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ed.D. Brigham Young University.

ACOSTA MEDINA, MARCOS, Catedrático Auxiliar de Tecnología de Ingeniería Electrónica. B.S.E.E. Universidad Autónoma de Santo Domingo, M.E.E. Universidad de Puerto Rico, Ed.D. Universidad Interamericana de Puerto Rico.

ALVARADO RODRÍGUEZ, NYVIA, Catedrática de Biología. B.S. Universidad Interamericana de Puerto Rico; M.S. Universidad de Puerto Rico; Ph.D. Escuela de Medicina de Ponce.

ÁLVAREZ PONS, FRANCISCO, Catedrático Asociado de Educación Física. B.A., M.A. Pontificia Universidad Católica de Puerto Rico, Ph.D. Florida State University.

ASENCIO TORO, GLORIA, Catedrática de Psicología. B.A. Universidad de Puerto Rico; M.S. Instituto Psicológico de Puerto Rico; Ph.D. Universidad de Puerto Rico.

BETANCOURT CASILLAS, NILDA, Catedrática Asociada de Música. B.M., M.M. Temple University.

BODEGA MORA-GRANADOS, MARÍA D., Catedrática de Español. B.A. Universidad Interamericana de Puerto Rico; M.A., Ph.D. Universidad de Puerto Rico.

BONILLA CRESPO, MARÍA, Catedrática de Administración de Sistemas de Oficina. B.A. Universidad de Puerto Rico; M.A. New York University; Ed.D. University of Maryland.

BRAILOWSKY CABRERA, RAQUEL, Catedrática de Antropología y Sociología. B.A. Universidad de Puerto Rico; M.A., Ph.D. State University of New York.

CAAMAÑO DE FERNÁNDEZ, VICENTA, Profesora Emérita de Español. B.A. Universidad Interamericana de Puerto Rico; M.A., Ph.D. Universidad de Puerto Rico.

CABRERA RÍOS, RICARDO, Catedrático Auxiliar de Música. B.A. Universidad de Puerto Rico; M.M. Ed. Florida State University.

COLÓN AGUILAR, NANCY, Catedrática Auxiliar de Educación. B.S., M.A. Pontificia Universidad Católica de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.

CORUM MATTINGLY, MICAH L., Catedrático Auxiliar de Inglés y Lingüística. B.A. Oklahoma State University; M.A. Universidad de Puerto Rico, Ph.D. Hamburg University

DESCHLER, RALPH J., Profesor Emérito de Inglés y Literatura. B.A. Duke University; M.A., Ph.D. Stanford University.

GALARZA LABOY, JAIME, Catedrático Asociado de Biología. B.S., M.S. Universidad de Puerto Rico.

GARCÍA BERNAL, BALBINO, Catedrático Asociado de Matemáticas. Licenciado en Matemáticas, Universidad de los Andes; Diplome Mathematiker, Westfalischen Wilhelms-Universität; Doktors del Naturwissenschaften, Ludwig-Maximilians-Universität Munchen.

GARCÍA VERA, MARÍA, Catedrática Asociada de Arte. B.A. Universidad Interamericana de Puerto Rico; M.F.A. University of Florida.

GEORGE HAMP, RUTH L., Catedrática Asociada de Educación Física. B.S. Wheaton College; M.Ed. University of Arizona; D.P.E. Indiana University.

GONZÁLEZ MEDEROS, ÁNGELA, Catedrática Asociada de Química. B.S. Química-Universidad Central de Venezuela; M.S., Ph.D. University of Massachusetts.

GRANIOLA RODRÍGUEZ, AURORA, Catedrática Asociada de Educación. B.A. Universidad de Puerto Rico; Ed.D. University of Illinois.

GUASP SOTO, ZAYRA M., Catedrática Asociada de Psicología. B.A. Universidad Interamericana de Puerto Rico; M.A., Ph.D. Universidad Carlos Albizu.

GUTIÉRREZ FERNÁNDEZ, ILIA, Catedrática Asociada de Educación Física. B.A. Universidad Interamericana de Puerto Rico; M.Ed. Oregon State University, Ed.D. Universidad Interamericana de Puerto Rico.

HERNÁNDEZ CRUZ, JUAN E., Catedrático de Sociología. B.A., M.A. Universidad de Puerto Rico; Ph.D. New York University.

HERNÁNDEZ SOTO, OSVALDO, Catedrático Asociado de Educación Física. B.A., M.A., Ed.D. Universidad Interamericana de Puerto Rico.

IRIZARRY GUZMÁN, CARLOS E., Catedrático de Contabilidad y Finanzas. B.B.A. Universidad Interamericana de Puerto Rico; M.B.A. Pontificia Universidad Católica de Puerto Rico; D.B.A. Nova Southeastern University.

IRIZARRY RAMÍREZ, ELBA T., Catedrática Asociada de Educación. B.S. Universidad de Puerto Rico, M.A. Seminario Evangélico de Puerto Rico, Ed.D. Universidad Interamericana de Puerto Rico.

KING GREENWALD, JONATHAN, Catedrático de Economía. Ph.D. University of California.

LANDRY, JACQUES, Catedrático de Música. B.A. University of Ottawa; Prof. Superior, Conservatorio Real de Música, Madrid; D.M.A. University of Miami.

LECOMPTE MONTES, ÁLVARO, Catedrático de Matemáticas. Magister der Naturwissenschaften, Dr. Rer. Nat., Universidad de Viena.

LEÓN RODRÍGUEZ, JANET, Catedrática Auxiliar de Artes Plásticas. B.A., M.F.A. Universidad Interamericana de Puerto Rico.

LLANOS VARGAS, LINA S., Catedrática Auxiliar de Matemáticas. B.S. Universidad de Colombia; M.S. Universidad de Puerto Rico; M.A., Ed.D. Universidad Interamericana de Puerto Rico.

LÓPEZ SULLIVAN, PEDRO, Catedrático Asociado de Tecnología Electrónica. B.S.E.E., M.S.N.E., M.S.E.E. Universidad de Puerto Rico, Ed.D., Universidad Interamericana de Puerto Rico.

LÓPEZ TORRES, DALILA, Catedrática Asociada de Educación. B.A. Universidad de Puerto Rico; M.A., Ed.D., Universidad Interamericana de Puerto Rico.

MARTÍNEZ ALDEBOL, MARY LUZ, Catedrática Auxiliar de Educación. B.S., Universidad de Puerto Rico; M.A. Universidad de Phoenix; M.S., Ed.D. Universidad Interamericana de Puerto Rico.

MARTÍNEZ ARROYO, FELIPE, Catedrático de Filosofía y Religión. B.A. Universidad Interamericana de Puerto Rico; M.Div. Seminario Evangélico de Puerto Rico; Ph.M., Ph.D. Drew University.

MARTÍNEZ TORO, VILMA S., Catedrática Asociada de Biología. B.S. Universidad Interamericana de Puerto Rico, M.S. Universidad de Puerto Rico.

MELÉNDEZ MENÉNDEZ, AURORA, Catedrática de Inglés y Lingüística. B.A. Universidad de Puerto Rico; M.A. Universidad Interamericana de Puerto Rico; Ph.D. Universidad de Nueva York.

MOE, CAROL, Catedrática Asociada de Inglés. B.A. Drake University; M.A. University of Illinois; Ph.D. University of California.

MOJICA COMAS, AGNES, Catedrática Asociada de Ciencias Políticas. B.A. Universidad de Puerto Rico; M.A. University of London.

MONTALVO BENET, RAQUEL, Catedrática Asociada de Música. B.A. Universidad Interamericana de Puerto Rico; M.M., Ph.D. University of Miami.

MORALES COLLADO, MILSA, Catedrática Asociada de Ciencias Secretariales. B.S.S. Pontificia Universidad Católica de Puerto Rico; M.A. Kean College of New Jersey; M.A. New York University; Ph.D. University of Maryland.

MORALES RODRÍGUEZ, GARY, Catedrático de Música. B.A. Universidad Interamericana de Puerto Rico; M.S., Ed.D. University of Illinois.

MORENO CEPERO, MADJA, Catedrática Auxiliar de Música. B.M. Conservatorio de Música; M.M. University of Nevada.

NAVEDO RIVERA, MARÍA, Instructora de Artes Plásticas. B.A., M.F.A. Universidad Interamericana de Puerto Rico.

PADILLA CAMACHO, MIRIAM, Catedrática Asociada de Educación. B.A., M.A. Universidad de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.

PADILLA GONZÁLEZ, AILÍN, Catedrática de Administración de Empresas. B.A., M.B.A. Universidad de Puerto Rico, Ph.D. Universidad Interamericana de Puerto Rico.

PERDOMO SÁNCHEZ, LILLIAM, Catedrática Auxiliar de Mercadeo. B.A., B.B.A, M.B.A. Ph.D, Universidad Interamericana de Puerto Rico.

QUINTERO VILELLA, HÉCTOR, Catedrático de Biología. B.S., M.S. Universidad de Puerto Rico; Ph.D. Florida State University.

QUIÑONES HOWELL, ZULMA, Catedrática de Administración de Empresas, Mercadeo y Comunicaciones. B.S. Universidad Interamericana de Puerto Rico; M.B.A. University of Phoenix; Ph.D. Bowling Green State University.

RAMÍREZ TORO, GRACIELA, Catedrática Asociada de Biología. M.A. Hood College; Ph.D. Drexel University.

RESTREPO LÓPEZ, FABIO, Catedrático de Ciencias Bibliotecarias y de la Información. B.S., M.L.S. University of Illinois; Ph.D. Texas Woman's University.

RODRÍGUEZ FERNÁNDEZ, CARMEN, Catedrática Asociada de Psicología. B.A., M.Ed., Ed.D. University of Massachusetts.

RODRÍGUEZ IRIZARRY, WALTER, Catedrático Asociado de Psicología. B.A., M.A. Universidad Interamericana de Puerto Rico; Psy.D. Escuela de Medicina de Ponce.

RODRÍGUEZ RAMOS, INGRID, Catedrática Asociada de Psicología. B.A. Universidad de Puerto Rico; M.S., Ph.D. Universidad Carlos Albizu.

ROMERO GARCÍA, IVONNE, Catedrática de Psicología. M.Ed. Boston College; Ed.D. University of Massachusetts.

ROMEU POLANCO, ELIEZER, Catedrático Asociado de Contabilidad. B.B.A. Universidad Interamericana de Puerto Rico; M.B.A. Pontificia Universidad Católica de Puerto Rico; Ph.D. Universidad Interamericana de Puerto Rico.

ROSADO NAZARIO, SAMUEL, Catedrático Asociado de Música. B.A. Universidad Interamericana de Puerto Rico; M.S. University of Illinois.

SACIUK, OLENA H., Profesora Emérita de Inglés y Literatura. B.A. M.A., Ph.D. University of Illinois.

SANTIAGO CAMACHO, FERNANDO L., Catedrático Asociado de Arte. B.A. Universidad Interamericana de Puerto Rico; M.A.Ed. San Francisco State University.

SELLAS APONTE, JOSÉ R., Catedrático Asociado de Inglés. B.A., M.A. Universidad Interamericana de Puerto Rico; Ed.D. Universidad de Puerto Rico.

SEPÚLVEDA PADILLA, LAURA A., Catedrática Asociada de Finanzas. B.A., M.B.A., Ph.D. Universidad Interamericana de Puerto Rico.

TORO MARTÍNEZ, ARLÍN, Catedrática Asociada de Biología. B.S. Universidad Interamericana de Puerto Rico; M.S., Ph.D. Universidad de Puerto Rico.

TORRES TALAVERA, FÉLIX F., Catedrático Auxiliar de Química. B.S. Universidad Interamericana de Puerto Rico; M.S., Ph.D. New Mexico State University.

VALCÁRCEL ENRÍQUEZ, ANDRÉS, Catedrático Auxiliar de Música. B.M. Conservatorio de Música de Puerto Rico; M.M. University of Akron.

VALENTÍN CARO, MARI OLGA, Catedrática Asociada de Educación. B.A. Universidad de Puerto Rico, M.A., Ed.D. Universidad Interamericana de Puerto Rico.

VÁZQUEZ PÉREZ, AMALIA, Catedrática Asociada de Biología. B.S., M.S.M.T. Universidad Interamericana de Puerto Rico; Ed.D. Universidad Interamericana de Puerto Rico.

VEGA ROSADO, LUZ LEYDA, Catedrática Asociada de Administración de Empresas. B.S., M.B.A., Ph.D. Universidad de Puerto Rico.

VELEZ CARABALLO, AXEL, Catedrático Auxiliar de Química. B.S., M.S. Universidad de Puerto Rico.

VÉLEZ SERRA, DAMIÁN, Catedrático de Educación. B.A., M.A. Universidad Interamericana de Puerto Rico; Ph.D. University of Connecticut.

VÉLEZ TORO, WALDEMAR, Catedrático de Administración de Empresas. B.A., M.B.A. Universidad Interamericana de Puerto Rico; D.B.A. University of Sarasota.

VÉLEZ VÉLEZ, MARITZA, Catedrática Asociada de Psicología. B. A. Universidad de Puerto Rico, Psy. D. Ponce School of Medicine.

VIADA BELLIDO DE LUNA, MARTA L., Catedrática Asociada de Inglés. B.A., M.A. Universidad Interamericana de Puerto Rico, Ph.D., Universidad de Puerto Rico.

VIVONI ALCARAZ, PAUL, Catedrático de Arte. B.A. Universidad Interamericana de Puerto Rico; M.A. University of Northern Iowa; Ed.D. Illinois State University.

WALKER WINCHELL, ROBIN, Catedrática Auxiliar de Biología. B.A. Universidad Interamericana de Puerto Rico; M.A. University of New Mexico.

Index

Page

Academic Admission Requirements for Doctoral Programs	31
Academic Counseling	48
Academic Degrees	26
Academic Norms for Doctoral Programs	58
Academic Norms for Masters' Programs and Professional Certificates	56
Academic Norms of Compliance	60
Academic Units	12
Academic-Administrative Calendars	26
Accreditations	25
Administrative Action Symbols	46
Admission of Audit Students	29
Admission of Foreign Students	29
Admission of Special Students	28
Admission of Transfer Students to Doctoral Programs	31
Admission of Transfer Students to Masters' Programs	30
Admission of Undergraduates to Masters' Degree Courses	30
Admission Requirements for Online Learning Students	33
Admission Requirements for Masters' Programs	29
Admission to Masters' and Doctoral Programs	28
Alumni Association	27
Anesthesia (M.S.)	68
Application for Graduation	59
Applied Mathematics (M.A.)	69
Assistantships	39
Associations	26
Audiovisual Center	48
Audit Students	41
Biology (M.S.)	71
Biotechnology (M.S.)	72
Board of Trustees	10
Business Administration (M.B.A.)	74
Business Administration for Executives (M.B.A.)	79
Business Education (M.A.)	80
Central Office Administrators with Faculty Rank	311
Central Office	12
Change of Address	44
Change of Grades Request	46
Class Attendance	44
Commonwealth Funds	39
Compliance with Requirements of Regulated Professions and Employment	60
Comprehensive Examination Requirements for Doctoral and Specialist Programs	58
Computer Science (M.S.)	81
Computer Science with Specialization in Networks and Security (M.S.)	82
Course Codification System	67
Course Descriptions	177
Course Load	44
Course Offerings and Scheduling	60
Courses in Accounting (ACCT)	177
Courses in Anesthesia (ANES)	178
Courses in Bilingual Education (BLED)	181
Courses in Biology (BIOL)	181
Courses in Biotechnology (BIOT)	185
Courses in Business Administration (BADM)	188

Courses in Business Education (BUED)	199
Courses in Chemistry (CHEM)	202
Courses in Computer Science (COMP)	202
Courses in Computer Science in Networks and Security (CSNS)	204
Courses in Criminal Justice (CJUS)	206
Courses in Economics (ECON)	209
Courses in Education (EDUC).....	209
Courses in Education in Diabetes (DIAB).....	234
Courses in Educational Computing (ECMP).....	234
Courses in Educational Neuroscience (NEUR)	236
Courses in English (ENGL).....	237
Courses in Environmental Sciences (EVSC).....	241
Courses in Family Counseling (FACO).....	243
Courses in Finance (FINA).....	244
Courses in Fine Arts (ARTS)	245
Courses in Geography (GEOG).....	250
Courses in Global Logistics (GLLO).....	250
Courses in Health and Physical Education (HPER).....	251
Courses in History (HIST).....	253
Courses in Human Resources (HURS).....	256
Courses in International Business (INBS)	258
Courses in International Business Administration (IBAD)	259
Courses in Interregional and International Business (INBU)	260
Courses in Labor Relations (LARE).....	261
Courses in Library and Information Sciences (LISC)	262
Courses in Linguistics (LING)	264
Courses in Marketing (MKTG)	265
Courses in Mathematics (MATH)	265
Courses in Mechanical Engineering (MECN)	269
Courses in Music (MUSI).....	271
Courses in Music Education (MUED).....	273
Courses in Music Technology (MUTE)	275
Courses in Nursing (NURS)	275
Courses in Open Information Computer Systems (COIS).....	279
Courses in Physics (PHYS)	281
Courses in Psychology (PSYC)	281
Courses in Quality Organizational Design (QODS)	295
Courses in Religious Education (RELI)	295
Courses in Risk Management in Health Care (RMHC).....	297
Courses in Social Work (SOWO).....	297
Courses in Spanish (SPAN).....	303
Courses in Speech-Language Pathology (SPLP)	304
Courses in Theology (THEO).....	307
Courses On-Line.....	34
Credit-Hours	60
Criminal Justice (M.A.)	84
Diplomas.....	59
Directory.....	20
Discontinuation of Academic Offerings	61
Online Learning.....	33
Doctor of Education Program (Ed.D.)	106
Doctoral Program (Ph.D.).....	132
Doctoral Program in Psychology	156
Education (M.A., M.Ed. and Ed.D.)	86
Education in Diabetes (Professional Post-Baccalaureate Certificate).....	113
Educational Computing (M.A.)	114

Educational Neuroscience (M.A.)	115
Educational Resources System	48
Email Courses	34
English (Teaching of English as a Second Language) (M.A.)	116
Entrepreneurial and Managerial Development (Ph.D.)	117
Environmental Science (M.S.)	123
Experimental Courses	52
Expiration Norm for for Doctoral Program Courses	58
Expiration Norm for Master’s Level and Professional Certificate Courses	57
Faculty Aguadilla Campus	312
Faculty Arecibo Campus	313
Faculty Barranquitas Campus	313
Faculty Bayamón Campus	314
Faculty Fajardo Campus	315
Faculty Guayama Campus	315
Faculty Metropolitan Campus	315
Faculty of the Campuses	312
Faculty of the University	311
Faculty Ponce Campus	319
Faculty San Germán Campus	321
Family Counseling (Post Master Professional Certificate)	125
Federal Direct Loans	39
Federal Stafford Loan	40
Federal Work Study Program	40
Finance (D.B.A.)	126
Fine Arts (M.F.A.)	127
General Information	22
General Program (M.B.A.)	78
Goals of the University	23
Governance	22
Grading System	45
Graduate Academic Offerings	62
Graduation and Diplomas	59
History of the Americas (M.A., Ph.D. and Combined Program)	131
History of the University	22
Information Access Center (Library)	48
Institutional Codes y CIP Code	62
Institutional Graduation Requirements for Master’s Programs	56
Institutional Mission	23
Institutional Review Board (IRB)	61
Institutional Scholarships	40
Instructional Units	26
Interactive Videoconference	34
International Business (M.I.B.)	134
International Business Administration (M.I.B.A.)	136
Internship Programs	52
Intra-University Transfers	41
Labor Relations (M.A.)	139
Language of Instruction	27
Library and Information Sciences (M.L.S.)	140
Maintenance of Active Status in Doctoral Programs	58
Maintenance of Active Status in Masters’ Degree Programs	56
Master in Education in Curriculum and Teaching (M.Ed.)	95
Master of Arts Program in Education	86
Master’s Program (M.A.)	131
Master’s Program in Psychology	153

Masters in Education (M.Ed.).....	98
Masters of Education (M.Ed.)	101
Masters of Education (M.Ed.)	103
Masters’ and Doctoral Programs	68
Mechanical Engineering (M.S and M.E.)	140
Medical Services.....	48
Minor Specialization in International Marketing.....	136
Minor Specialization in International Relations	136
Minor Specialization in Knowledge Management.....	79
Music Education (M.A.) Metropolitan Campus	143
Music Education (M.A.) San Germán Campus	144
Nursing (M.S.N.).....	146
Objectives of Online Learning.....	33
Open Information Computer Systems (M.S.)	148
Other Provisions of the Satisfactory Academic Progress Norm	55
Other Research Projects.....	61
Parking Service and Traffic Rules on Campuses.....	50
Perkins Federal Loan (formerly NDSL)	39
Ph.D. Program (Students with Bachelor’s in Psychology)	162
Portfolio.....	51
Post Masters Degree Professional Certificate in Clinical Social Work	169
Posthumous Degree	59
Principal Officers of the University.....	12
Probationary Period and Requirements to Maintain Eligibility for Federal and State Financial Aid	54
Proctored Evaluations	34
Professional Certificate in Technology and Administration of Data Banks	149
Professional Counseling	48
Provisional Admission of Transfer Students to Doctoral Programs	31
Provisional Admission of Transfer Students to Masters’ Programs	30
Provisional Admission to Doctoral Programs.....	31
Provisional Admission to Masters’ Programs.....	29
Psychological Counseling with Specialization in Family (M.S.)	150
Psychology (M.A. and Ph.D.).....	153
Publications	27
Readmission to Doctoral Programs	32
Readmission to Masters’ Programs	30
Registration, Program Changes and Partial Withdrawal	41
Religious Activities	49
Religious Education (M.A.).....	165
Religious Life Policy	23
Repeating Courses	45
Requirements to Achieve Satisfactory Academic Progress	53
Residence Halls - San Germán Campus	49
Residency Requirements for Doctoral Programs.....	58
Residency Requirements for Masters’ Programs.....	56
Responsible Conduct in Research Projects (RCR)	61
Responsible Conduct in Research Projects.....	61
Risk Management in Health Care (Professional Certificate in Management)	165
Satisfactory Academic Progress Requirements for Professional Certificates, Masters & Doctoral Programs	53
Services for Veterans and Military Personnel	26
Services Related to the Office of the Registrar.....	41
Social Work (M.S.W.).....	166
Solomon-Pombo Act	43
Special Requirements of Practice and Internship Centers	60
Special Topics	52
Specialization (Industrial/Organizational Psychology) (students with Bachelor’s).....	162

Specialization (Psychological Counseling) (students with Bachelor’s Degree)	163
Specialization (School Psychology) (Ph.D. students with Bachelor’s)	164
Specialization in Accounting (M.B.A.)	76
Specialization in Accounting (M.I.B.A.)	138
Specialization in Administration in Social Work	168
Specialization in Aerospace (Mechanical Engineering) (M.E.)	143
Specialization in Aerospace (Mechanical Engineering) (M.S.)	142
Specialization in Bilingual Education (M.Ed.)	98
Specialization in Biology (M.Ed.)	97
Specialization in Biotechnology of Plants	74
Specialization in Business Education (Ed.D.)	109
Specialization in Ceramics (Fine Arts)	130
Specialization in Chemistry (M.Ed.)	97
Specialization in Counseling (Ed.D.)	110
Specialization in Counseling (M.A.)	86
Specialization in Critical Care Nursing (M.S.N.)	148
Specialization in Curriculum and Teaching (Ed.D.)	110
Specialization in Direct Services (Social Work)	169
Specialization in Drawing (Fine Arts)	130
Specialization in Educational Management and Leadership (Ed.D.)	111
Specialization in Educational Management and Leadership (M.A.)	87
Specialization in Energy (Mechanical Engineering) (M.E.)	143
Specialization in Energy (Mechanical Engineering) (M.S.)	142
Specialization in English as Second Language (M.Ed.)	97
Specialization in Environmental and Ecological Sciences (Biology)	72
Specialization in Environmental Biology (Environmental Sciences)	124
Specialization in Environmental Chemistry (Environmental Sciences)	124
Specialization in Finance (M.B.A.)	77
Specialization in Finance (M.I.B.A.)	138
Specialization in General Biotechnology	74
Specialization in Global Logistics (M.I.B.A.)	138
Specialization in Higher Education (Ed.D.)	112
Specialization in History (M.Ed.)	98
Specialization in Human Resources (M.B.A.)	77
Specialization in Human Resources (M.I.B.A.)	138
Specialization in Human Resources (Ph.D.)	122
Specialization in Industrial Management (M.B.A.)	77
Specialization in Industrial/Organizational Psychology	155
Specialization in Information Technology and Library Services (M.Ed.)	103
Specialization in Interdisciplinary Special Education (M.Ed.)	99
Specialization in Interregional and International Business (Ph.D.)	122
Specialization in Managerial Information Systems (M.B.A.)	78
Specialization in Marketing (M.B.A.)	78
Specialization in Marketing (M.I.B.A.)	138
Specialization in Maternal Child Nursing (M.S.N.)	148
Specialization in Mathematics (M.Ed.)	98
Specialization in Medical-Surgical Nursing (M.S.N.)	148
Specialization in Molecular Biotechnology (Biology)	71
Specialization in Painting (Fine Arts)	130
Specialization in Photography (Fine Arts)	130
Specialization in Physical Education (M.A.)	88
Specialization in Printmaking (Fine Arts)	130
Specialization in Psychological Counseling	154
Specialization in School Psychology	155
Specialization in Sculpture (Fine Arts)	130
Specialization in Spanish (M.Ed.)	98

Specialization in Special Education (M.A.).....	91
Specialization in Special Education and Transition Services (Ed.D.)	112
Specialization in Teaching at the Elementary Level (M.Ed.)	101
Specialization in Teaching of Science and Mathematics at the Elementary Level (M.Ed.)	103
Specialization in the Teaching of Mathematics (M.A.)	93
Specialization in the Teaching of Science (M.A.)	94
Specialization in Water Resources and Unit Operations (Environmental Sciences)	124
Speech-Language Pathology (M.S.)	170
Student Academic and Personal Files	43
Student Activities	49
Student Centers.....	50
Student Councils.....	49
Student Financial Aid	39
Student Participation.....	49
Student Records.....	43
Study Benefit Time Limits for Veterans and Beneficiaries	39
Study by Contract	51
Study Modalities and Learning Experiences	51
Subject Codes Used in Catalog and in the System	66
Subspecialization in Sports Training and Performance	91
Subspecialization in Teaching of Physical Education	91
Support Services and Student Life	48
Teaching of Reading and Writing (M.A.).....	85
Technologies and Media Used in Online Learning	33
Teleconference Center	34
Theology (Ph.D.)	172
Tuition, Fees and Other Charges	35
Undergraduate Prerequisites	44
University Policy Regarding Students and Alumni Directory	42
University Teaching (M.A.)	175
Veterans Services	47
Video Courses	34
Vision	22
Warning on Compliance with Copyright Laws and Regulations.....	61
Withdrawal from the University	44
Withdrawal of a Course from the Class Schedule	42