

SISTEMA UNIVERSITARIO ANA G. MÉNDEZ

UNIVERSIDAD DEL ESTE

Carolina, Puerto Rico

Santa Isabel, Yauco, Cabo Rojo, Barceloneta and Utuado



Undergraduate Catalog

2013-2014

Universidad del Este's Undergraduate Catalog 2013-2014

Copyright © 2013 Sistema Universitario Ana G. Méndez. All rights reserved.

No part of this document may be loaned, reproduced or transmitted in any form or by any means or used with purposes other than the one for which it was created, without the permission in writing from the Sistema Universitario Ana G. Méndez.

Table of Contents

Our Profile	7
History of Universidad del Este	7
Mission Statement.....	8
Goals	
Principles	
Licensure and Accreditations	9
Memberships.....	9
Non-Profit Status	10
Non-Discrimination Statement	10
Statement of Policy	10
Student Body	10
Programs and Curriculum	11
Community Relations.....	11
Advisory Board	11
Board of Directors and Administration of the Sistema Universitario Ana G. Méndez	11
Board of Directors of the Sistema Universitario Ana G. Méndez	
Administration of the Sistema Universitario Ana G. Méndez	
Universidad del Este's Administrative Council and Academic Board.....	12
Administrative Council	
Academic Board	
Universidad del Este's Administration and Staff	12
Office of the Chancellor	
Office of the Vice Chancellor	
Office of the Vice Chancellor of Information Resources and Telecommunications	
Office of the Vice Chancellor of Student Affairs	
Office of the Evening and Weekend Programs	
Office of Physical Facilities and Operations	
Off-Campus University Centers Directors	
Admission Requirements	15
General Admission	
Eligibility Index	
Admissions Requirements to some Specific Programs	
Admissions Procedures	
Readmitted Students	15
Requirements for Readmission	
Procedure for readmissions	
Transfer Students.....	15
Requirements for Transfer	
Procedures for Transfer	
Special Students.....	15
Transitory Students	
Requirements for Special and Transitory Student	
International Students	16
Requirements	
Procedure	
Rules and Regulations for Admission and Registration	16

Admissions Policy	
Academic Information.....	17
Registration and Other Related Procedures	
Pre-Registration	
Late Registration	
Reallocation of Students	
Official Admission to Classes	
Corrections or Changes in Names and Addresses	
Classifications of Students	
Re-classification of Students	
Special Conditions and Regulations	
Changes in Programs or Schedules	
Withdrawals	
Class Attendance	
Student Evaluation Procedures	
Grading System	
Incompletes	
Grade Point Average	
Grade Reports	
Students' Records	
Transcripts	
Standards for Satisfactory Academic Progress.....	23
Student Academic Status	
Student Suspension for Academic Reasons	
Academic Probation	
Minimum Grade Average Required by Earned Credit	24
Required Credits and Retention Index per Program.....	24
Definitions	
Veterans and their beneficiaries	
Graduation Requirements	
Family Rights and Privacy Act Information Statement	26
Student Right-To-Know and Campus Security Act	27
Office of the Vice Chancellor of Student Affairs.....	27
Professional Counseling and Guidance Programs	
Advising and Retention Program	
Mentoring Program	
Tutorial Services	
Student Support Services Program	
Health Services*	
Social and Cultural Activities	
Sports Program	
Bookstore	
Veterans and Beneficiaries Services	
Student Activities	
Student Associations	
Student Council	
Academic Dean's List	
Disciplinary Regulations	

Student Financial Aid	32
Grant-Scholarship Programs	33
Federal Pell Grant	
Federal Supplemental Educational Opportunity Grant (SEOG)	
Educational Opportunity Program	
State Student Incentive Grant (SSIG)	
Loan Programs	33
Federal Direct Loan	33
Federal Direct Parent Loan for Undergraduate Students (FDPLUS)	
Work and Study Program	33
Federal Work-Study Program (FWSP)	
Institutional Scholarships Programs	34
Athletic Scholarship	
PR Honor	
How to apply for Financial Aid	34
Eligibility Requirements	
Refunds and Adjustments for Active and New Students	35
Adjustments and Refunds	
Tuition, Fees, and Related Information	37
Tuition Option Payment Plan (TOPP)	
Clear Statement	
Invoices	
Office of the Vice Chancellor of Information Resources and Telecommunications	39
Vision	
Mission	
Description of the unit	
Library	
Sala Florencio Pagán Cruz	
Circulation and Reserve Area	
Inter-Library Loans	
Exhibit Area	
Collection Developments and New Acquisitions	
Educational Technology	
Distance Education	
Computerized Information Technology and Telecommunications	
Hours of Operation	
Staff	
Office of the Director of the Evening and Weekend Programs	41
Mission	
Description of the unit	
Off Campus Site (University Centers)	41
Off Campus Locations with Academic Programs offered	
Academic Programs offered at the Carolina Campus.....	43
Non-Degree Programs.....	45
Special Program	
Army and Air force Reserve Officers Training Corps (ROTC)	

Academic Components of the Programs-General Education, Core and Major.....	47
Description of the academic components	
Assessment Model at Universidad del Este.....	47
Universidad del Este’s Anthem (Institutional Song)	49
IEN Business School	50
School of Education	99
School of Health Sciences	139
School of Social and Human Sciences.....	181
Department of Social Work.....	225
Security and Protection Institute.....	233
School of Science and Technology	240
José A. (Tony) International School of Hospitality and Culinary Arts.....	280
Certificate Programs.....	310
School of Professional Studies.....	313

Our Profile

Universidad del Este (UNE) is a private non-profit institution of higher education and a component of the Sistema Universitario Ana G. Méndez. Its main campus is located in Carolina and five Off-Campus sites in Puerto Rico are located in the towns of Yauco, Utuado, Cabo Rojo, Barceloneta, and Santa Isabel. UNE has three branch campuses in the state of Florida; Metro Orlando campus located in Orlando; South Florida campus located in Miramar; and the Tampa Bay campus located in Tampa. In January 2012, the Capital Area branch campus located in the state of Maryland initiated its academic offerings. The Carolina campus is located in the Eastern part of the island. Its 21 acres suburban campus and its modern and spacious buildings provide an ideal atmosphere for the learning experience.

A professionally oriented institution, Universidad del Este offers over thirty-five baccalaureate programs and twenty associate degrees, including programs in business, education, social work, hospitality management, culinary arts, science and technology and the health sciences. Founded in 1949, as Puerto Rico Junior College, it continued to mature into a four-year institution in 1992 as Colegio Universitario del Este and finally evolving into a university in 2001 as Universidad del Este.

UNE's student population consists mostly of commuting young adults from the surrounding communities. The overall population at UNE is 13,800 and comprised of undergraduate and graduate students. Master's degree programs were initiated in October 2001 at UNE's Carolina campus and in 2005 at the Off-Campus sites.

The academic faculty consists of one-hundred and thirty-three (133) full time professors and over eight hundred and thirty-five part-time professors. Fifty-one per cent of the full time faculty has doctorates while the rest of the faculty possesses master's degrees in their fields of expertise.

History of Universidad del Este

During the 1940's, three distinguished educators, Dr. Ana G. Méndez, Dr. Florencio Pagán Cruz, and Mr. Alfredo Muñiz Souffront, recognized the need for new developments in the field of education that would keep pace with the social and economic advances that were taking place in Puerto Rico at that time. With this in mind, in 1947 they began to lay the groundwork for establishing a modern institution of higher learning.

In 1949, Puerto Rico Junior College was founded and incorporated according to Puerto Rican laws on June 30, 1950. The Puerto Rico Council of Higher Education licensed the Institution on June 27, 1957, which was followed by the Middle States Association of Colleges and Secondary Schools accreditation on May 1, 1959. It has been subsequently reaccredited since 1959 until the present.

In 1992, the institution changed its name to Colegio Universitario del Este in order to incorporate baccalaureate degrees. Finally, in 2001 Universidad del Este completed its transformation and evolution as well as its new name from a junior college to a college to a university by initiating its first master degree programs.

Presently, the Sistema Universitario Ana G. Méndez operates four institutions and a television station: Universidad del Turabo, Universidad Metropolitana, Universidad del Este, the Ana G. Méndez Virtual Campus and the WMTJ-TV station Channels 40/26.

Universidad del Este is a non-sectarian, non-profit, independent, educational institution that serves the people of the Commonwealth of Puerto Rico, the states of Florida and Maryland, but through its collaborative agreements contributes to the international communities in general. In the academic area, Universidad del Este offers technical-professional certificate programs, associate, bachelors and masters in various disciplines such as: criminal justice, social work, health sciences, science and technology, hospitality management, culinary arts, education, and business

administration. The academic programs offered by the Institution can be classified under three categories: occupational and professional programs, transfer programs, and community service programs. One of the principle goals of the Universidad del Este is to educate and develop in its students the work-related and academic skills that will allow them to perform efficiently in jobs, and that will permit them to achieve more advanced academic levels. On account of this, the Institution has designed a diversified and flexible program of studies to prepare each student into a capable professional in the area of his/her specialty.

The Chancellor and the staff direct the administrative activities of the Institution with two governing bodies: the Administrative Council and the Academic Board. The Student Council elected by a governing assembly made up of student delegates also contributes to the student representation in these administrative governing bodies.

Universidad del Este is a teaching institution, therefore it provides its faculty with professional development opportunities in their teaching specialties; it offers teaching support services within its student holistic development framework and it provides the means through which the teaching-learning process occurs in an appropriate environment.

Universidad del Este fosters both the creative activity and educational, scientific, and social research to: promote continuous institutional progress, contribute to the advancement of knowledge, and better serve the community at large.

The principal function of the faculty, according to UNE's philosophy, is to provide responsible and innovative teaching. Faculty enjoys complete academic freedom and participates actively in academic advising processes. Faculty's professional activities on and off campus should follow UNE's basic tenets.

UNE expects to reach academic excellence by means of a well-trained faculty, academic programs sensitive to the needs of students and the job market in adequate and well-equipped physical facilities.

Mission Statement

Universidad del Este is a non-profit, lay, higher education learning community, which is part of the Sistema Universitario Ana G. Méndez. The school has a flexible admissions policy and an ample and varied academic courses offering.

The mission of the Universidad del Este is to promote the integral development of a diverse student population through research, critical-creative thinking, the construction of knowledge and its application.

Academic offerings include certificates, associate degrees, bachelor's degrees, graduate studies and continuing education. These offerings meet the needs and interests of the members of the university community and receive the support of all institutional resources. Study programs incorporate multidisciplinary educational perspectives through learning and teaching strategies that are in harmony with local, regional, and global demands and with the latest technology. The learning vision also incorporates a life-long learning process based on the most effective access to information for its gathering, handling, analysis and application. The Institution is committed to continuous improvement of the teaching-learning process, support services, assessment, research and the appreciation of Puerto Rican culture in harmony with global cultures.

Principles

The principles, which guide the Institution, are wisdom, justice, honor and freedom.

Goals

To fulfill its mission, Universidad del Este proposes:

- To develop a well-rounded person through a multidisciplinary and liberal education.
- To value diverse manifestations of Puerto Rico's cultural-historic patrimony in our national identity and within a globalized culture.
- To help students enrolled at the institution to achieve their educational goal.
- To develop optimum levels in the quality of student life through the broadening of academic support services, team work, the use of emerging technologies and occupational and professional orientation pertinent to a well-rounded education.
- To improve quality levels in the teaching, learning and service processes.
- To strengthen human resource competencies through personal and professional development activities.
- To perform research as a fundamental means to solve problems and as an essential part of institutional duties.
- To develop current and pertinent academic courses that respond to society's needs.
- To improve the quality, efficiency and effectiveness of decision making in institutional administrative procedures.
- To demonstrate leadership in services provided to Puerto Rico and abroad.

Licensures

Puerto Rico Council on Education
P.O. Box 19900
San Juan, Puerto Rico 00910-1900

Regional Accreditation

Middle States Commission on Higher Education
3624 Market Street
Philadelphia, PA 19104-2680

Specialized Accreditations

Accreditation Commission for Programs in Hospitality Administration
American Culinary Federation Education Foundation
Accreditation Council of Business Schools and Programs
International Association for Continuing Education and Training

Memberships

American Association for Adult and Continuing Education
American Association for Counseling and Development.
American Association of Collegiate Registrars and Admissions Officers
American Association of Higher Education
American Council on Education
American Library Association
American Physical Plant Association
Asociación Universitaria de Programas de Honor Puerto Rico
Association for Educational Communications and Technology
College Board of Puerto Rico
Council on Higher Education Association

Hispanic Association of Colleges and Universities
International Facility Management Association
Learning Resources Network
Library Administration and Management Association
National Collegiate Honors Council
Puerto Rico Association of Higher Education
Puerto Rico Association of Honors Programs
Puerto Rico Association for Counseling and Development.
Puerto Rico Chamber of Commerce
Puerto Rico Library Association
Puerto Rico Manufactures Association
The Association for Institutional Research

Non-Profit Status

Universidad del Este is a private, secular, non-partisan educational institution and a member of the non-profit Sistema Universitario Ana G. Méndez, which operates a system of university level institutions.

Non-Discrimination Statement

Universidad del Este does not discriminate on the basis of race, handicap, national or ethnic origin, creed, color, sex, social condition or political, religious, social or trade union beliefs.

Statement of Policy

This catalog includes the main terms concerning the formal relationship between students and Universidad del Este. Regardless of its effective date, the Institution reserves the right to admit, re-admit or register a student only for a semester, part of term or session separately. The Institution binds itself only during the semester, part-of-term for which the student has enrolled and paid his/her tuition fees.

It is the student's responsibility to know and comply with the content of this catalog and all UNE's rules and regulations. This catalog is in compliance with the institution's bylaws, regulations and administrative orders and duties under Federal Law. It is subject to subsequent amendments.

Important Note:

This catalog contains the major points of the current agreement between the students and Universidad del Este. Regardless of the date on which the agreement shall become effective, the Institution will maintain its right to admit, re-admit or register a student only for a semester, part-of-term or session, separately. The Institution will also limit its agreement to the semester, part-of-term or session in which the student has properly enrolled and has paid the corresponding fee.

It is the student's responsibility to know and comply with the instructions expressed herein, which coincide with by-laws and regulations of the Institution, the administrative instructions, and the federal laws on civil rights.

Norms and regulations contained in this document are subject to institutional and/or administrative changes without previous notification.

Student Body

Our student body includes young adults who come mainly from the San Juan - Carolina metropolitan area as well as adjacent towns the off-campus sites serve. The majority are members of families, which have low incomes and are first generation entering college. The student body is also

composed of young adults and working adults that have recently graduated from high school or have done so some time ago. The adults that have entered the working place need to complete an academic degree in order to improve skills in a technical profession or desire an opportunity to obtain an advance degree for professional growth.

Programs and Curriculum

Our admissions policy requires that the student have finish high school or have approved an Equivalency Exam from the Department of Education of Puerto Rico or its equivalence. As a way of helping the students to overcome any cognitive difficulty and adaptation to university life, UNE offers special academic courses; tutorial as well as mentoring programs in order to improve his success in his studies. The academic programs at Universidad del Este are conducive to obtaining a certificate, associate, bachelor, or master degrees. The Certificate program allows the student to continue toward an associate or baccalaureate degree after the student graduates from this level.

The associate, baccalaureate, and master's degree programs are geared toward a profession and to prepare the graduate to enter the employment market immediately. The curricula include courses in general education, core/professional courses, and major courses but emphasis is also given to the technical and occupational courses. The continuing education programs are offered in accordance with the needs of public and private agencies, mainly in skilled areas where employees need to be re-skilled or retrained for a specific job.

Community Relations

Universidad del Este's mission as a learning community is assisted through the relations developed with the community. Among the relations developed with the community are active participation on special projects through professional organizations, the educational consortia's, clinical affiliations, and advisory boards. Universidad del Este participates in these consortia as part of the Sistema Universitario Ana G. Méndez as well as its own self standing partnerships and agreements.

Advisory Board

Universidad del Este has an Advisory Board. This Board provides advice and support to the Institution's administration.

Board of Directors and Administration of the Sistema Universitario Ana G. Méndez

Board of Directors of the Sistema Universitario Ana G. Méndez

Héctor A. Jiménez, President of the Board

Ramiro Millán, Vice President of the Board

José F. Méndez, President of the Sistema Universitario Ana G. Méndez

Florabel G. Mullick, Permanent member of the board

José F. Méndez Jr., Permanent member of the board

Rafael A. Nadal Arcelay, Permanent member of the board

Juan R. Melecio

Antonio J. Colorado

Félix RodríguezSchmidt

José Domingo Pérez

Víctor Hernández

René A. León

José E. de la Cruz Skerrett, Legal Counselor to the board

Administration of the Sistema Universitario Ana G. Méndez

José F. Méndez, President of the Sistema Universitario Ana G. Méndez

José F. Méndez Jr., Executive Vice President

Jorge L. Crespo, Vice President of Planning and Academic Affairs

Alfonso L. Dávila, Vice President of Financial Affairs

Francisco J. Bartolomei, Vice President of Marketing and Student Affairs

Victoria De Jesús, Vice President of Human Resources

Jesús A. Díaz, Vice President of Administrative Affairs

Luis Zayas-Seijo, Vice President of National and International Affairs

Carlos Padín, Chancellor, Universidad Metropolitana

Dennis R. Alicea, Chancellor, Universidad del Turabo

Luis Burgos, Chancellor, Sistema Universitario Ana G. Méndez Florida Campuses

Migdalia Torres, Chancellor, Ana G. Méndez Virtual Campus

Margarita Millán, Vice President and General Manager of System/TV Station

Universidad del Este's Administrative Council and Academic Board**Administrative Council**

The Administrative Council of Universidad del Este is the legislative body of the Institutional policy of the university in accordance with the by-laws of the Sistema Universitario Ana G. Méndez as established by its Board of Directors.

The Chancellor, the Vice Chancellor, Vice Chancellor of Student Affairs, Physical Facilities and Operations Manager, Deans of schools, five faculty representatives, and two student representatives constitute the Administrative Council.

Academic Board

The Academic Board of Universidad del Este regulates all the academic aspects of the Institution. It recommends relevant regulations regarding faculty, curricula, educational projects, and other educational innovations.

The Academic Board consists of the Vice Chancellor, the Associate Deans of the schools, the Library Director, fourteen undergraduate faculty representatives, and two student representatives.

Universidad del Este's Administration and Staff**Office of the Chancellor**

Alberto Maldonado Ruiz, Esq. Chancellor

María S. Díaz, MBA, Vice Chancellor of Administrative Affairs

María I. De Guzmán, MA, Assistant Vice Chancellor of Development and Fundraising

Ivonne D. Arroyo, MBA, Director of Public Relations

Gisela Negrón, MBA, Coordinator of Alumni Affairs

Leanne Cintrón, MA, Coordinator of International Activities

Yamiel Natal, MIS, Coordinator of Information Systems

Office of the Vice Chancellor

Mildred Huertas Solá, EdD, Vice Chancellor

Nilda I. Rosado, MEd, Associate Vice Chancellor of Licensing, Accreditation and Evaluation

Magalie Alvarado Hernández, MPA, Associate Vice Chancellor of Administrative Affairs

María Véaz, EdD, Associate Vice Chancellor of Retention

Luis Iturralde, MBA, Associate Vice Chancellor of Research
Ezequiel Bayuelo, EdD, Associate Vice Chancellor of Institutional Assessment
Claribette Rodríguez, EdD, Assistant Vice Chancellor of Academic Effectiveness
Mildred Rivera, MBA, Assistant Vice President and Dean, School of Professional Studies
Iván Puig, MBA, Dean, José A. (Tony) Santana International School of Hospitality and Culinary Arts
Maria del Carmen Arribas, EdD, Dean, School of Education
Maritza Espina, PhD, Dean, IEN Business School
Jhon Sanabria, PhD, Dean, School of Social and Human Sciences
Wilfredo Colón Guasp, PhD, Dean, School of Sciences and Technology
Haydee Encarnación García, PhD, Dean, School of Health Sciences
Emmanuel Hernandez Agosto, DBA, Associate Dean, School of Professional Studies
Georgina Solivan Quiles, EdD, Associate Dean, School of Technical Studies
Sylvia Esquilín, MBA, Director, Faculty Development

Office of the Vice Chancellor of Information Resources and Telecommunications

Carmen Ortega, MLS, Vice Chancellor for Information Resources
Carlos H. Medina, MA, Director, Educational Technology
Elsa Mariani, MLS, Director, Library
Néstor Más, MBA, Director, Telecommunication and Information Systems

Office of the Vice Chancellor of Student Affairs

Nahomy Cure, EdD, Vice Chancellor of Student Affairs
Karen Rivera Díaz, MBA, Associate Vice Chancellor of Student Affairs
Ramón Fuentes BBA, Associate Vice Chancellor of Enrollment Management
Magda E. Ostolaza, MBA, Associate Vice Chancellor of Marketing and Recruitment
Carmen G. Velázquez, MA, Associate Vice Chancellor of Quality of Life and Student Wellness
Georgina León de Rivera, MA, Associate Vice Chancellor of Athletics and Sports Program
Vacant, Assistant Vice Chancellor for Multidisciplinary Services
Belinda Ruiz, MA, Assistant Vice Chancellor of Scholarships and Internship Program
Vacant, Director, Employment Center
Elisa Quiles, MBA, Registrar
Norberto Pagán Vázquez, BBA, Director of Financial Aid
Ramonita Fuentes, BBA, Director of Admission
Ángel González, BBA, Bursar
Emmanuel Colón, MA, Director of Social and Cultural Activities
Julio Figueroa, MEd, Director, Athletics and Sports Program
Jeffrey Gladstone, MA, Director of Complimentary Educational Services

Office of the Evening and Weekend Programs

Jesús Olivera, MBA, Assistant Vice Chancellor of the Evening and Weekend Division
Adrián Hernández, BBA, Coordinator

Office of Physical Facilities and Operations

Edgar Dixon Rodríguez, Eng., Manager of Physical Facilities and Operations
Juan Boada, Eng., Assistant Manager of Physical Facilities and Operations

Off-Campus University Centers Directors

Maricelli Zaragoza, MA, Director, Yauco Off-Campus Center

Sixto Bermúdez, MBA, Director, Utuado Off-Campus Center
Griselda Correa, MBA, Director, Barceloneta Off-Campus Center
Rosa Pérez, MBA, Director, Cabo Rojo Off-Campus Center
Evelyn Ayala, MA, Director, Santa Isabel Off-Campus Center

Admission Requirements

General Admission

The following are the general admission requirements:

- Graduation from an accredited secondary school or its equivalent.
- An Official Transcript of credits of the school he/she attended or an official document of an institution or agency recognized by the U.S. Department of Education that certifies the equivalency of a high school degree.
- Applicants should submit College Entrance Examination Board (CEEB) scores. This is not required for applicant's ages twenty-five (25) or older.
- Health vaccination certification for applicants younger than twenty-one (21) years.
- Non-refundable application fee (\$15.00).

Eligibility Index

A grade point average of 2.00 for most degree programs is needed, but some specific associate or bachelor degree programs require other specific requirements. (Below is a list of some programs)

Admissions Requirements to some Specific Programs

- Pharmacy Technician(associate program)
 - a. High school grade point average of 2.00 or above.
 - b. Attend an orientation meeting with representatives of the School
- Medical Sonography, Radiologic Technology and Nursing (associate programs)
 - a. High school grade point average of 2.50 or above.
 - b. Attend an orientation meeting with representatives of the School
- Radiological sciences, Medical Sonography and Nursing (bachelor programs)
 - a. High school grade point average of 2.50 or above.
 - b. Attend an orientation meeting with representatives of the School

***Note: See the School section of this catalog for other programs and their admissions requirements.**

Admissions Procedures

- Submit an application for admission.
- Submit an official high school transcript or its equivalent. If the applicant is not a high school graduate, he should submit evidence that he is taking the last credits to complete his requirements.
- Enclose the non-refundable application fee (\$15.00).
- Submit College Entrance Examination Board results if applicant is under the age of 25 years old.
- Applicants for the Health Sciences, Hospitality or Culinary Arts Programs are also required to submit a Health Certificate.
- Meet all admissions requirements by the date scheduled in the Institution's calendar.
- Candidates for admission may be interviewed by representatives of the School.
- Students holding degrees from other accredited higher learning institutions that wish to pursue studies must meet the admissions requirements set forth by the Institution.

- Incomplete applications or those not fulfilling the established requirements will be considered for conditional admission. The Institution may invalidate the student's admission and conditional registration. Students are urged to submit all the required documentation within **45 days** after classes have initiated.
- **Veterans and beneficiaries** should submit all admissions requirements before the first day of classes and **not within the 45 days** after the beginning of classes.

Readmitted Students

An applicant for readmission is a student who has interrupted his studies for one academic year (summer sessions will not be considered) and wishes to continue studying. The student must meet the academic requirements established in the Institution.

Requirements for Readmission

- The applicant must have a grade point average equivalent to the retention index.
- The applicant must have complied with the suspension period for academic index or for disciplinary reasons.
- The applicant may be required to attend an interview with representatives of the School or a guidance counselor.
- The applicant must comply with all requirements of the selected program.
- Compliance with all Universidad del Este's by-laws, rules and regulations.

Procedure for readmissions

- Submit an application for readmission.
- Enclose a non-refundable \$15.00 readmission fee.

Transfer Students

A transfer student is an active or former student of an accredited, post-secondary institution.

Requirements for Transfer

- Passing grades in at least twelve credits from an accredited post-secondary institution.
- Cumulative grade point average equivalent to the retention index.
- A letter of recommendation from the Dean of Student Affairs of the last institution where the applicant studied.
- Comply with the admission requirements for transfer as established by his/her program of choice.
- Compliance with all Universidad del Este's by-laws, rules and regulations.
- Veteran students should submit transcripts from previous trainings taken. No veteran student will be certified until this requirement has been met.

Procedures for Transfer

- Submit an application for transfer.
- Enclose payment of a transfer fee of \$15.00. This is non-refundable.
- Submit an official transcription from the institution the student is transferring from.
- The applicant may be required to: Submit a copy of the catalog of the institution where the student attended if the applicant studied outside of Puerto Rico.

Special Students

Students with an academic degree who wish to take courses to fulfill a professional requirement or complete another major may apply as a Special Student.

Transitory Students

Students who are enrolled in another university or college and wish to take courses not leading to a degree can apply as transitory student. They need an official permit from their university or college.

Requirements for Special and Transitory Student

- Fill out a Special Student application form.
- Enclose payment of an application fee of \$15.00. This fee is non-refundable.
- Applicants with a college degree must submit a copy of the degree or an official permit authorizing them to enroll.
- The applicant may be required to attend an interview with representatives of the School.

International Students

Requirements

- The international student applying for admission, readmission or transfer must meet with the requirements of the program.
- The international student must complete Form I-20 and meet with the Designated School Official (DSO) of the Institution.
- Present a sworn statement certifying financial capability to disburse for his studies.
- The admission of international students is subject to immigration laws.

Procedure

International students applying for admission must meet the requirements set forth by the Institution in the general admissions.

Rights Reserved:

The Universidad del Este reserves the right to admit, readmit, or register any student for any class session, semester or part-of-term. It also reserves the right to suspend temporarily, partially, totally or permanently any student according to the by-laws of the Institution.

Rules and Regulations for Admission and Registration

Students should familiarize themselves with all rules, norms and regulations of the Institution through the *Student Handbook*, *Student Regulation*, and the *Academic Norm sand Administrative Procedures Handbook* that are located at the institution's the website: www.suagm.edu/une

The Institution reserves the right to enforce the observance of those rules, norms and regulations that safeguard the ideals and standards for which it stands, and may ask a student to withdraw if he/she does not comply with these rules or refuses to cooperate with a working member of the Institution. The decision reached by the administration in such cases is final.

All students should examine regularly the bulletin boards in the different buildings of the Institution in order to be informed of official announcements.

Admissions Policy

The two main objectives of the Universidad del Este in the admissions, readmissions, and transfer policies are:

1. To provide admissions to as many qualified applicants as the physical facilities and programs allow.
2. To provide the educational opportunities that will best contribute to the success of those students capable of doing college work.

Academic Information**Registration and Other Related Procedures**

The Office of the Vice Chancellor of Student Affairs determines the registration procedure, and no program of study is valid without the approval of this administrative officer. The Office of the Registrar in coordination with the Office of the Vice Chancellor of Enrollment Management is responsible for the registration process.

The Registrar's Office is responsible for the maintenance of all official academic student records and for issuing transcripts, certifications, registration and graduation certificates, as well as submitting or mailing the grade reports to students.

Candidates for admission, readmission, or transfer and special students may not register until each has received an official and final statement of acceptance from the Office of Admissions. Accompanying this statement, the student will receive a registration schedule with the date and hour assigned to them. This registration schedule should be presented at the registration desk.

The Institution does not necessarily guarantee the class program of study chosen by the student during the early registration period if the course does not attain the minimum of students per section. The Institution does not guarantee the program chosen if the student does not observe the scheduled date and hour for registration. After this period, the Institution may use such offerings for other students, especially in the period scheduled for changes in class programs.

Changes in class programs will only be allowed with the written recommendation of the student coordinators, deans, or other academic representatives. The academic representatives approve the changes in class programs based on the existing requirements. The Registrar's Office will determine if there is space in the requested sections.

Each student is responsible for having met prerequisites prior to registration in a particular continuation course.

Pre-Registration

Pre-registration is the process by which the active student has the opportunity to select the courses for which he will officially register during the registration process.

Late Registration

Late registration will be held after official classes begin, in the period determined for late registration. Students who did not attend early registration or who failed to attend registration on the date assigned may register during the late registration period, provided there is space in the sections they select. No student will be able to register after the period determined for late registration.

After the period allowed for registration, all courses will become a permanent part of the student's record. Students may ask the Registrar to cancel their registration by filling the appropriate cancellation request forms and submitting them to the Office of the Registrar or the Office of the Vice Chancellor of Student Affairs before the end of the late registration period. A student who does not

attend classes and does not follow the corresponding procedures for cancellation of their classes will be penalized by receiving **(WF)** in his permanent record at the Institution.

Reallocation of Students

At the end of the registration period, the Registrar may reallocate students where elimination and rescheduling of courses has taken place. Such changes should take place on the dates designated for this purpose in the Academic Calendar.

Important Note:

Registration is not complete until the student has paid all fees required by the Office of the Treasurer; the official stamps of the Registrar and the Office of the Treasurer have been stamped on his registration class schedule; and he has signed a statement consenting to follow and observe the rules, norms, and regulations of the Institution.

Official Admission to Classes

At the beginning of the semester or part-of-term each student should present his official registration class schedule to each of his professors. This class schedule should be stamped with the official seals of the Office of the Registrar and of the Office of the Treasurer. The absence of any one of these seals or unofficial changes in the class schedule will invalidate it. The student may present a printed copy of his program with official digital seals representing these two offices mentioned above.

Students should attend classes and/or sections where they are enrolled and professors should admit to their classes only those students that have been officially registered in the appropriate courses and sections. The Registrar's Office is not responsible for recording grades of students who attended classes and/or sections in which they were not officially registered.

Corrections or Changes in Names and Addresses

Students with address changes should notify the Registrar's Office. This office will provide them with the appropriate forms to fill out.

The same procedure should be followed for corrections to be made for the change of name. For changes of name, the student must submit a petition legally signed and with a certified affidavit.

Classifications of Students

Students are classified as follows:

A. By credit hours enrolled

1. **Full-time Students**-those who have fulfilled the admission requirements of the Institution and are carrying twelve or more credit hours per semester in a program leading to a degree, diploma or certificate.
2. **Part-time Students**-those who have fulfilled the admission requirements of the Institution and are carrying less than twelve credit hours per semester in a program leading to a degree, diploma or certificate.

B. By credit hours leading to an undergraduate degree

1. **First Year Students**-those with a secondary school diploma or the equivalent who are registered at the Institution in courses leading to a degree.
2. **Second Year Students**-those who have completed a minimum of 31 credit hours of work at the Institution.
3. **Third Year Students**-those who have completed a minimum of 61 credits at the Institution.
4. **Fourth Year Students** - those who have completed a minimum of 91 at the Institution.

5. **Fifth Year Students** - those who have completed a minimum of 121 credit hours at the Institution.

C. By grade point average (See Student Academic Status' section)

1. Students on Academic Probation
2. Students on Academic Suspension
3. Honor Students

D. By type of admission

1. **Special Students** - Those students who come to the Institution with a written authorization from the Institution they attend as regular students, or any other student who enrolls in a course not leading to a degree or a professional certificate.
2. **Readmission Students** - Those students who have interrupted their studies for at least one semester, and wish to continue studying.
3. **Transfer Students** – Those active or former students of an accredited post-secondary Institution.

Re-classification of Students

- Students who wish to change majors may re-classify from one major to another. This also applies to students who wish to change from the program level, for example: from associate to a bachelor degree program. These types of re-classifications are authorized as long as the student complies with the admissions requirement of the new major or new program.

Special Conditions and Regulations

- Students who have registered in the maximum permitted academic load and need three more credits to complete the graduation requirements in the same semester will be allowed to take three additional credits with the written authorization of the appropriate Dean or Associate Dean of the School or Program Director/Coordinator.
- No student will have an academic load greater than 21 credits. The maximum academic load in the summer will be: twelve to fifteen (12-15) credits. An academic load of (18) credits will be permitted to students who are candidates for graduation in the summer and have the written authorization of the appropriate Dean or Associate Dean of the School or Program Director/Coordinator.
- All students will be given a reasonable time in which to graduate or complete their declared major. However, the Institution discourages professional students and will reserve the right to admit, readmit or register any student in any semester, part-of-term session or class. For the same reasons, the Institution reserves the right to suspend a student temporarily or permanently.

Changes in Programs or Schedules

- A student may change their program of study in accordance with the following rules:
 - The student must have written authorization of the Dean or Associate Dean of the School in order to be processed by the Registrar's Office.
 - The Institution will make every reasonable effort to offer courses as announced, but it reserves the right to change the time schedule or to withdraw a course or courses. The School may identify other similar courses to substitute the eliminated course.

Withdrawals

- Total or partial withdrawals are allowed during a regular semester, part-of-term, or summer session as specified in the academic calendar.

- Any student who is officially registered, and completes the required procedure for withdrawal, will receive a withdrawal **(W)** grade.
- Any student, who fails to complete the required procedure for dropping a course before the stipulated date and whose absences exceed the maximum allowed, will receive a withdrawal failure **(WF)**.
- Total withdrawal is allowed at any moment before the date stipulated in the academic calendar of the semester, part-of-term, or summer session.
- Total withdrawal may be considered in the case of a registered student who drops 75% or more of his total course load. This does not include the two summer sessions.
- The deadline for voluntary total withdrawals will be included in the semester or part-of-term academic calendar of classes in the semester or summer session, before the final examinations begin.
- The institution reserves the right to require a student to withdraw from any course or from the Institution, temporarily, for any of the following reasons:
 - a. Possibility of hazard to the health of the student or that of other students, if enrollment were continued.
 - b. Refusal to obey regulations or serious misconduct on the part of the student.
 - c. Deficient academic work (below required scholastic standards).
 - d. Students who withdraw from the Institution or finish their studies without settling their financial obligations forfeit their right to receive grades, transcripts or diplomas.

Class Attendance

- Class attendance is mandatory. The students will be responsible for work missed.
- If a student enrolled in a course never attends each and every class, the professor will identify him as a non-attending student (N/A). The Registrar's Office, then, will adjudicate a withdrawal for non-attendance (WN). Adjustments in, Financial Assistance benefits or total cancellation of Financial Aid and the payment of the total cost of enrollment, as pertinent, will also take effect. Students must visit the Financial Aid Office for information regarding the % of the payment required by the student.
- **Veterans and beneficiaries will have their educational benefits terminated when a Leave of Absence is granted. Once the veteran's returns to classes, the benefits will be reinstated.**

Student Evaluation Procedures

- Professors are required to provide a minimum of three partial grades and one final evaluation activity with the value of a partial grade, during every given semester or part-of-term. These partial grades may consist of tests or any other kind of evaluation activity chosen by the professor.
- Professors may grant an opportunity to make up a test or quiz, which had been previously announced, to any student with a valid excuse.
- Students must complete all work required for a partial grade before the end of the semester; otherwise, he will be given a zero **(0)** for that particular assignment.
- It is the student's responsibility to clarify any questions about partial grades before the date scheduled for the final evaluation activity of the course.
- Students should complete the Institutional Assessment instruments administered in each course at the end of each semester.

Grading System

The unit of measure for determining the course value is the credit, which is equivalent to one-hour of classroom work per week during a given semester or part-of-term or two hours of class per week during a summer session. The accelerated adult program has five or eight-week class sessions per course that meet four-hours per week during a part-of-term.

The credit equivalent for laboratory work has been determined according to the rules of each School.

Scholastic standing in completed courses is indicated by the following letter grades:

Letter grade system and grade points per credit:

A	90 – 100	-	4	excellent
B	80 – 89	-	3	good
C	70 – 79	-	2	satisfactory
D	60 – 69	-	1	deficient
F	0– 59	-	0	failure (no grade credit)

In special cases the following grading system will be used:

W	Withdrawal
WN	Administrative withdrawal (no grade points)
WF	Student deserted the classroom or excessive unjustified absences from course.
IB, IC, ID, IF	Incomplete work. Student absent from final examination or failed to complete and turn in final work assignment, but must have complied with all the partial requirements of the course.
WA	Administrative withdrawal. Processed by the Vice Chancellor of Student Affairs
P	Pass
NP	Non passed
I or E	Repeated Course, reflected in the transcript as included or excluded for grade point average
T	Transfer course
AU	Audit Course
NR	Non Reported (Grade) by professor

A **“W”** indicates a withdrawal from a course with the official approval of the Office of the Registrar.

A **“WN”** Indicates no assistance to a course within the first few days after classes begin (no grade points). Reported to the Office of the Registrar in the official *Student Assistance Register* by the professor.

A **“WF”** indicates a student failure to continue attending his classes and does not officially drop the course.

An **“I”** indicates a student, who is absent from the final examination or failed to complete and turn in final work assignment, but must have complied with all the partial requirements of the course. The professor must calculate the grade with a **(0)** as the final exam.

A **“WA”** indicates an administrative withdrawal approved by the Vice Chancellor of Student Affairs given for one of the following reasons:

1. Possibility of danger to the health of the student or that of other students if enrollment were to be continued.

2. Refusal to obey regulations or serious misconduct on the part of the student.
3. Deficient academic work (below required academic standards).
4. New admissions that do not complete the admissions application with the required documentation by the date scheduled in the Institution's calendar.

Incompletes

A student will receive a provisional grade of Incomplete (I) in the following instances:

- If his absence from a final examination can be justified
- If his absence of not more than 25% of his work in laboratory experiences, practice teaching or seminar can be justified.
- If the student has complied with all partial requirements of the course during the semester or part-of-term.

In order to remove an Incomplete the student should take the corresponding final examination or work requirement within the first 30 days of the subsequent semester or summer session. Those students receiving Incomplete in prerequisite courses during the summer session must take the final examination or work requirement within the first fifteen days of the following summer session.

The professor has the responsibility of removing all Incompletes. The Dean or Associate Dean of the School or the Director or Coordinator of Academic Affairs of the Off-Campus University Center, if the professor is not available, will make the corresponding changes in the official course grade register at the Registrar's Office.

In the case of students not complying with these established rules, the professor will assign a "0" in the corresponding work missed by the student, and will report the final grade to the Registrar after calculating the corresponding grades.

Grade Point Average

The grade point average is obtained by dividing the total number of honor points by the total number of credit hours in which the student has received a final grade, even those where an F or WF is final. The credits taken at UNE will be the only ones used to compute the student's grade point average.

Grade Reports

Once assigned by the professor, the grades are final, unchangeable within the context of the institution's academic discretion, and certified by the Registrar's Office.

Reports of the grades will be available to each student from the Registrar's Office at the end of each academic term and at the end of the Second Summer Session through *MiUNE*, students on line services.

Students' Records

The Office of the Registrar has custody of all students' academic records. These are confidential.

Transcripts

Official transcripts, which bear the seal of the Institution, will not be given to students or alumni, but sent directly to institutions specified by the students in their official requests to the Registrar's Office.

Requests for transcripts of credits should be made fifteen working days in advance. In those cases where a student is in debt with the Institution, the Registrar will not certify the courses approved until the student has satisfied his debt.

Any claim concerning a transcript request should be presented at the Registrar's Office no later than 90 days after making the request.

Important Note:

The admission / registration procedures are essential steps for establishing a relationship between the student and the Institution. However, the payment of the appropriate fees formalizes this relationship semester-by-semester or session-by-session. All of these requirements must be fulfilled in order for a student to be considered in good standing with the Institution.

Standards for Satisfactory Academic Progress

The purpose of the Standards for Satisfactory Academic Progress is to evaluate that the students approve the credits percentage required, with an accumulated academic index equal or higher to the retention index, according to their program of studies. It also establishes a formal process through which students that are encountering academic difficulties can be identified and the necessary help can be provided.

The student has a right to appeal the Institution's determination regarding his/her status if the student understands that there is academic progress and that the Institution's determination is due to an administrative error or that, during the academic year, a critical situation existed that prevented him/her from obtaining satisfactory academic progress as established by the Institution.

Student Academic Status

There will be four types of students based on the cumulative academic grade point average: honor students, students in progress, students on academic probation, and students on academic suspension.

- **Honor Students** - Those students carrying not less than twelve credit hours with a grade point average of 3.50 or more and who fulfill the requirements of the Vice Chancellor of Student Affairs.
 - a. The Vice Chancellor of Student Affairs will announce the names of all honor students, the School to which they belong, their status, and their area of major.
 - b. Honor students are eligible to serve as tutors and as assistants to faculty members.
- **Students in Progress** - Those whose grade point average is equal to or greater than the minimum retention grade point average.
- **Students on Academic Probation** - Those students with a grade point average, earned credit hours, or both, below the standards of the Progress Academic Rule for this category.
- **Students on Academic Suspension** - Those students who have been on extended academic probation and not been able to overcome their academic deficiencies.

Student Suspension for Academic Reasons

Students who fail to meet the academic standards are subject to suspension from UNE for one (1) academic year. The student has the right to study one academic year on probation.

Academic Probation

A suspended student may qualify for academic probation if recommended by the Satisfactory Academic Progress Appeals Committee, upon completion of the following procedure:

- Submit a written request to the Vice Chancellor of Student Affairs who will refer it for probation to the Satisfactory Academic Progress Appeals Committee.
- The Satisfactory Academic Progress Appeals Committee will consider only situations related to student's personal affairs, economic problems or dysfunctions in family relations.

- The probation period will last two semesters.
- Students who do not reach the minimum academic average for retention during the probationary period will be suspended. If the student is placed on a second probationary period and again does not meet the minimum academic average for retention, he will be permanently suspended.
- Veteran students and beneficiaries who were suspended from UNE due to failure to meet the academic standards; and qualify for academic probation, the benefits should remain suspended as well.

The decisions reached by the Satisfactory Academic Progress Appeals Committee will be put in writing and will be final.

Minimum Grade Average Required by Earned Credits

- Readmission to UNE will be based on the norms established by the Institution.
- The Satisfactory Academic Progress Appeals Committee must approve readmission to UNE. As condition for readmission, the student must reach the minimum grade point average required, based on the number of credits in a term of two academic semesters: Otherwise, the student will be dismissed for a period of one academic year. If the student is suspended for a second time he will be permanently dismissed.
- Universidad del Este will not give credit for courses taken by the students at other institutions during the time of their suspension.
- Students dismissed for academic deficiency cannot be registered.

Required Credits and Retention Index per Program

Definitions

- **Attempted Credits** - the number of credits of all registered courses, independently of the grades received. This includes accepted transfer credits.
- **Approved Credits** – the number of credits of all courses in which the grades of A, B, C, D, or P, including transfer credits, are obtained.

The students should approve the courses according to the Standard of Academic Progress for the type of academic program in which the student is enrolled: Certificate, associate and bachelor degrees according to the number of accumulated credits and the accumulative academic grade point average, as established in the *Table of Required Credits and Retention Index per Program*. Students will be able to view these requirements in **the Academic Norms and Administrative Procedures Handbook**, located at the web site: www.suagm.edu/une under student services.

An example representing each academic program is presented on the next page:

Credits Required and Retention Index per Program

Associate Degree Program (54 credits)

Attempted Credits	% Credits Required	Retention Rate
1 - 16	50%	1.50
17 - 32	54%	1.70
33 - 48	58%	1.90
49 - 55	62%	2.00
56 - 72	64%	2.00
73 - 81	67%	2.00

Bachelor Degree Program (120 credits)

Attempted Credits	% Credits Required	Retention Rate
1 - 25	50%	2.00
26 - 50	53%	2.10
51 - 75	56%	2.20
76 - 100	59%	2.30
101 - 125	62%	2.50
126 - 150	65%	2.50
151 - 180	67%	2.50

Veterans and their beneficiaries: Required Credits and Retention Index per Program

Veterans and their beneficiaries must complete their program of studies within the time established by their curriculum **(100%)**. Students who extend their studies **beyond the time (150%)** established by the program cannot continue to receive Veteran's benefits. They need to maintain a retention index of 2.00 when the 100% of the program is completed. The veterans and their beneficiaries should follow the program sequence which is distributed by academic year. If the student is a recipient of the Pell Grant, he may resort to the 150% additional time, established by the Standard for Satisfactory Academic Progress of the Institution. Veterans should be evaluated utilizing both Veteran's Benefits and Pell Grant criteria, if they are beneficiaries of these.

Graduation Requirements

The student usually graduates from the Universidad del Este under the program requirements prevailing at the time of his admission to the Institution; however, the Institution reserves the right to make revisions in the different programs and in the requirements for the degree. Students who do not complete their studies during the time required by their respective programs (program sequence), as well as those who apply for readmission after a period of absence from the Institution, are governed by the rules that apply or are in effect when the student completes his evaluation for graduation. Nevertheless, the student should visit his academic advisor, academic guidance

counselor, the School or Off-campus site Coordinator of Student Services for a progress evaluation of his academic program yearly.

To receive a degree from the Universidad del Este, candidates must meet the following requirements:

- They must have taken the courses required in one of the programs offered by the Institution. Candidates for a certificate must pass the required number of courses in a diversified program of general and professional studies.
- They must have satisfactorily completed the prescribed number of credits with a grade point average of 2.00 (C) or higher or as required in their program of studies. Students receiving associate or bachelor degrees with a grade point average ranging from 3.50 to 3.74 will graduate with honors *Cum Laude*, and those within the 3.75 to 3.89 range will graduate with honors *Magna Cum Laude*, and those with a grade point average ranging from 3.90 to 4.00 will graduate with honors *Summa Cum Laude*.
- They must fill out an application for graduation at the Registrar's Office at the time they enroll for the last semester or summer session.
- They must have satisfied all financial obligations to the Institution. All candidates for graduation will be required to attend Commencement Exercises. Commencement Exercises will be celebrated once during the academic year, at the end of the second semester. Those students who meet the requirements for a degree or certificate at the end of the first or second summer session or at the end of the first semester (August-December) should apply to the Registrar's Office for a certified statement showing that they have completed the requirements of their respective programs of study.

Important Note:

Students should familiarize themselves with all rules, norms and regulations of the Institution through the Student Handbook, Student Regulations, and the Academic Norms and Administrative Procedures Handbook, which are available upon request at the Office of the Vice Chancellor of Student Affairs and at the web site: www.suaqm.edu/une. These documents provide the information and updates as to program requirements, academic policy changes, as well as other academic and administrative changes that may take place during your years of study at the Institution.

Family Rights and Privacy Act Information Statement

In accordance with Public Law 93-380, FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT, students have the right at Universidad del Este to inspect educational records, and correct such records if warranted. The students' records are protected from release of information, open for inspection or review by the student unless he or she waives this right. The parent(s) of U.S.C.S. s. 1152 Internal Revenue Code also has the right to inspect records, which are maintained by the Institution on behalf of the student.

There are two distinct categories of records: (1) Directory Information Records, (2) LIMITED ACCESS RECORDS.

(1.) Directory Information, which may be made public, includes the student's name, last known address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The Office of the Vice Chancellor of Student Affairs will only

release this information or a representative after the petitioner has demonstrated a legitimate need to have such information. Students who do not wish release of “directory information” must complete a statement in the Office of the Registrar no later than the last day of each term; otherwise directory information may be disclosed by the College for legitimate purposes

(2.) Limited Access Records pertain to the permanent academic records of the student, disciplinary records, financial information, and testing data. This category also includes all records maintained officially by the Institution, which do not come under the categories of Directory Information, or Sole Possession Records.

The Institution will not release information in Limited Access Records except after written permission of the student or parent.

Student Right-To-Know and Campus Security Act

The common intention of the three major parts of this 1990 Act is to enhance the choice of the potential consumer, the post-secondary student, by reporting statistics about the “performance” of higher education institutions.

- Section 103 covers disclosures about the graduation or completion rate and other postsecondary outcomes of all students.
- Section 104 covers disclosures about the comparative academic “success” of students who receive financial assistance contingent upon participation in intercollegiate sports and Section 105 concerns institutional revenues and expenditures for intercollegiate athletic activities.
- Sections 203 and 204 concern disclosures, reports, and publications about campus security policies and crime statistics.

Compliance with all of the Act’s disclosure provisions becomes an additional criterion for institutional eligibility to participate in federal student aid programs.

Office of the Vice Chancellor of Student Affairs

The Vice Chancellor of Student Affairs is the person responsible for planning, coordinating, developing, and maintaining the system of services, which the institution offers its student body. These services respond to the academic, vocational, social and human resource needs of students and are offered by well-prepared, responsible, and committed professionals. The following offices provide student services:

Admissions and Marketing	Sports Program
Registrar	Quality of Life and Students’ Wellness
Social and Cultural Activities	Student Associations Program
Guidance and Counseling	Bursar
Student Support Services Program	Financial Aid
Health Services	

The Office of the Registrar answers to the Office of the Vice Chancellor for Academic Affairs. The remaining offices, Bursar and Financial Aid respond to the Vice President for Financial Affairs. However, since these offices provide major services to the student population, they are presented here.

The organizational structure of the Office of the Vice Chancellor of Student Affairs allows for the provision of specialized student services for all students under the direct supervision of the Associate Vice Chancellor for Quality of Life and Students Well Being.

Human resources have been assigned to the Office of the Vice Chancellor for Quality of Life and Students Well Being in order to provide counseling and orientation, social/psychological services, tutoring, and an academic advising/mentor program.

A complete program is designed to aid the student in his personal, academic, and career development areas. The following programs are coordinated: Academic Advising/Mentor Program, Counseling and Orientation, Psychology, Social Work, and Tutoring. All of these services have proven effective in student retention and the provision of a better quality of student life.

The program gives continuing assessment and support by consolidating institutional and community resources. The following services are provided:

- Personal, academic, vocational and occupational counseling.
- Workshops and seminars according to the student needs.
- Academic advising - a faculty member is assigned to a group of students to assist in their academic progress. The professor will assist the students during the academic year.
- Learning support services - these services are offered on basic areas such as: mathematics and English through the teacher assistance program and tutorial services.
- Career center - coordinate workshops and activities related with career life planning. Students can explore careers develop goals and identify employment opportunities.
- Placement services - refer students who are seeking part-time job so they can have career related work experience and supplement their economic needs.
- First year student association - provides the freshman student the opportunity to develop leadership by coordinating activities that facilitates students' integration to the Institution.

Professional Guidance and Counseling Programs

The dramatic changes of the dynamic society are also reflected in our students' population. The needs of the younger students, the adult student who is coming back to the university and the special populations, are continuously assessed in order to offer them relevant services.

The Guidance and Counseling Program focuses its services and projects on the new paradigms in Counseling: integral human development, prevention and pro-active educational strategies to develop special skills for life and career.

The main objectives of the program are geared to enhance the student self-esteem, help them achieve self-knowledge, help them learn and develop skills for decision making and conflict resolution, to develop leaderships skills and to assume responsibility with themselves and their community.

Special projects are established according to students' assessment and in coordination with the university community resources; to promote healthy lifestyles as well as to prevent academic failures or withdrawals, and personal risky behaviors.

The program emphasizes outreach and pro-active stance in the delivery of services. The services include: individual and group personal counseling, crises management, consultation, personalization and humanization of campus environment searching for the quality of students life, establishment of self helps groups, enhancement of leadership skills, follow up, referrals and others. Professional counselors offer all services.

Advising and Retention Program

The Academic Advisement services promote continuous interaction between the students, faculty members, the academic counselor and other administrators of the Office of the Vice Chancellor.

Helping the students with their academic problems is a major aspect of advising. Because it requires curricular knowledge and expertise, academic advising is an academic concern.

Freshmen student are assigned to a mentor, a faculty member who belongs to the student study program, who is responsible for discussing with students information concerning course selection, nature of educational programs, courses which are relevant to their interests, course content, academic requirements, regulations and procedures, and more.

The mentor (faculty member) works in cooperation with the Student Support Services Staff to coordinate services required by the student who has special needs.

Mentoring Program

This program is geared towards helping first year students adapt to college life. As part of an integrated advising team, a professor is assigned to each participating student to counsel him on academic and personal matters.

Tutorial Services

In close cooperation between the Offices of the Vice Chancellor of Student Affairs and the Vice Chancellor, a free of charge Tutorial Program is offered to every student who requests this service in areas such as Mathematics, English, Spanish, Biology, Chemistry, Statistics, Accounting and others.

Student Support Services Program

The Student Support Services Program at Universidad del Este provides an integrated gamma of academic and counseling services to over 400 UNE students a year that meet the eligibility criteria established by federal law for participation in this program.

The United States Department of Education Grant Award permits the Program to offer personal, academic and career counseling; and academic support such as tutoring in all subject areas, special tutoring for disabled students and socio-cultural and career oriented off-campus activities; concerts, and conferences.

To qualify as a program participant, a student must be an American citizen or resident alien, have obtained final admission to the school, be the first generation of his family to graduate with a baccalaureate degree, be of low income and/or have a documented disability. Certain documentation may request of those students interested in becoming program participants.

Health Services*

First aid and medical services are offered at the Health Services Office of the Institution. In the event of an emergency or illness, the student should report to the Health Services Office to receive first-aid.

The Health Services Office offers preventive medicine and medical materials, free of charge, for all students. The nurse and or doctor provide information on a variety of health related topics which includes medical clinic sessions as well as personal health care education

In case of an emergency, an ambulance from the metropolitan area will be called and the student will be taken to a local hospital. This same procedure will be followed in the Off-campus sites.

*A doctor and/or nurse will be available to serve the student population at the Carolina Campus. The Off-campus sites do not have nurses, therefore, the services of an ambulance are provided to them in case of an emergency free of charge.

Social and Cultural Activities

The Social and Cultural Activities Program gives the students, the faculty and the community an opportunity to watch films and theatrical performances, attend concerts, shows, lectures, workshops and seminars.

Participation in these activities is open to all interested persons and it aims at developing attitudes, values, sensibility towards art and good citizenship.

Participation in student associations fosters leadership by developing mutual understanding and respect for social and human values.

Sports Program

The Athletic program is geared to the promotion and active participation of students in all sports activities. It is a fundamental component of the students' life in our Institution, which aims at contributing to the physical and mental growth and well-being of its students.

The athletes in the Program participate in internal and inter-university competitions. Universidad del Este is a member of the inter-university sports organization.

To strengthen the Program and increase the number of participants, the Director and coaches of the Program visit the sports programs of high schools. During these visits they present the Program and identify prospective candidates. The Program has a Procedures Manual and a guide for granting athletic scholarships.

Bookstore

The Universidad del Este has a bookstore where textbooks, reading materials requested by the faculty, school and office supplies, and other personal supplies are available.

Veterans and their Beneficiaries Services

The Veteran's Services, located at the Registrar's Office, is primarily directed toward the motivation of veterans and their dependents in order that they may effectively exercise their rights to an education.

They are helped in the completion and processing of required documents for the purpose of establishing eligibility, certification of service, and academic progress.

Veterans and their beneficiaries must complete their program of studies within the time established by their curriculum **(100%)**. Students who extend their studies **beyond the time (150%)** established by the program cannot continue to receive Veteran's benefits. Therefore, **Academic Progress Norms** do not apply to veterans and their beneficiaries, who need to maintain a retention index of 2.00 when the 100% of the program is completed. The veterans and their beneficiaries should follow the program sequence which is distributed by academic year. The following examples show time/length of various programs: Certificate program of 36 credits is 1 and half years; Associate degree program of 73 credits is 2 and half years; Bachelor degree program of 121 credits is 4 years. If the student is a recipient of the Pell Grant, he may resort to the 150% additional time, established by the standard for Satisfactory Academic Progress of the Institution. Veterans should be evaluated utilizing both Veteran's Benefits and Pell Grant criteria, if they are beneficiaries of these.

Student Activities

Universidad del Este offers students the opportunity for social, cultural and athletic programs in order to develop leadership, responsibility and initiative.

All students are urged to join the clubs and organizations that most correspond to their needs and interests.

Each group or club has a faculty adviser who counsels its members and helps to promote the activities of the group.

Student Associations

All student organizations must be recognized and approved by the Office of the Vice Chancellor of Student Affairs. Any group consisting of ten or more regular students may organize and apply for official recognition of its organization.

Interested students should request an application from the Office of the Vice Chancellor for Students Affairs. The purpose of the organization and the name of the advisor should be stated.

Through students' participation in organizations, they have the opportunity to collaborate in the Institution plans and development. Also, the students develop their own leadership skills and help enhance the students' quality of life in the Institutional setting.

The Office of the Vice Chancellor of Student Affairs has recognized the following organizations.

Carolina Campus

Alpha Chi, National Honor Society for Students in Bachelor Degree
Microbiology Students Association
Association of Christian Students
Early Childhood Education Students Association
International School of Hospitality and Culinary Arts
Management Students Association
International Students Association
Management Association Student Staff
Office Systems Students Association
Paralegal Studies Students Association
Phi Theta Kappa, National Honor Society for Students in Associate Degree
PRHonor Students Association
Professionals and Sonography Students Association
Radiologic Technology Students Association
Social Work Students Association
Student Support Services Participants Association
Theater Students Association
Tutors Association

Off Campus Sites (each is an independent association)

Social Work Students Association – Cabo Rojo, Barceloneta, Utuado, and Yauco
Christian Youth University Students Association – Cabo Rojo
Association of Ebenezer Christian Students - Barceloneta
Criminology Association Student Staff - Barceloneta
Pro Health and Physical Fitness Students Association – Barceloneta
Education Students Association - Yauco
Office Systems Students Association - Yauco
Pro Student's Quality of Life Association - Yauco
Peer Counselors Association - Yauco
Management Students Association - Yauco

Student Council

There is a Student Council which meets monthly and has, among others, the following functions: to represent the student body, make recommendations to the Vice Chancellor of Student Affairs, participate in various committees, serve as liaison between students, professors and the administration, and to promote the general well-being of the Institution.

There is a Student Government Assembly that guarantees student participation in the life of the Institution. Delegates to this organization are student body representatives and must be elected responsibly.

Delegates must be regular students. They must attend and participate in meetings of campus delegates and must establish relationships among faculty, administration and students of their corresponding sections. The Chancellor and the Vice Chancellor of Student Affairs supervise campus delegate meetings. Delegates must provide for the discussion of those matters pertaining to their particular campus and must acquaint themselves with administrative standards and procedures that are related to the needs and problems that affect students' welfare.

An Alternate delegate is also elected to act in case of the absence of the delegate in charge.

Academic Dean's List

The list of all honor students is published at the beginning of the second semester. It has the names of all students who have approved more than 24 credits hours with a grade point average of 3.80 or higher.

In the official transcript, the inscription "On the Academic Dean's List" appears. This list is also posted on all bulletin boards of the main Carolina Campus and Off-campus sites and all students listed may apply to become members of the honor students' organization, Phi Theta Kappa.

Important Note:

All students' activities and student organizations mentioned above must be governed by the student regulations and other institution's standards. Failure to comply with existing rules and regulations will incur disciplinary measures and/or penalties, accordingly.

Disciplinary Regulations

Universidad del Este's Student Council representative has approved disciplinary rules and regulations that were ratified by the Ana G. Mendez University System Board of Directors.

The students at Universidad del Este are expected to honor, obey and respect these rules and regulations in all their ramifications. These principles, rules and regulations are clearly stated in the Institutions by-laws, the Student Handbook, and in the other regular or periodic publications of the Administration.

Important Note:

Due to the importance of the Disciplinary Regulations each student is required to obtain a copy of the Student's Handbook from the Office of the Vice Chancellor of Student Affairs, and commit himself to read and become familiar with the Student's Handbook contents, Student's Regulations, and Academic Norms and Administrative Procedures Handbook. These requirements cannot be waved or omitted under any circumstances. These documents are available at the institutions web site: www.suagm.edu/une under the heading student services.

Student Financial Aid

The mission of the Student Financial Aid Program is to provide the student with scarce economic resources equal educational opportunities to obtain an academic preparation that will facilitate his integration to society.

Our Student Financial Aid Program operates under the basic principle that the primary responsibility of financing higher education is of the family. Therefore, the majority of the funds are offered under the economic criterion of need. The objectives of providing a fair distribution of the financial resources are in agreement with the state, federal and institutional dispositions.

The Program is made up of three components, such as: scholarships that are given and thus do not have to be repaid. Student money loans made available at a low interest with reasonable conditions of repayment. The work and study program permits the student to acquire experience of a job related to his program of studies and at the same time receives compensation for the work being done, thus helping with his costs of education.

The student can be eligible to receive aid of all three components, as long as these available funds will permit.

Grant-Scholarship Programs

Federal Pell Grant

This grant helps undergraduate students to pay for their postsecondary education and students must be enrolled at least on three credits to receive the benefit. For the academic year 2012-2013 the maximum annual award is \$5,550 and the student must meet the eligibility requirements of the program.

Federal Supplemental Educational Opportunity Grant (SEOG)

This grant helps undergraduate students with exceptional financial need. The amount of the awards is contingent to availability of funds.

Educational Opportunity Program

The Commonwealth of Puerto Rico provides yearly funds for grants and scholarships to qualifying students. The grant is awarded on the financial need basis and the scholarships on the academic performance basis.

State Student Incentive Grant (SSIG)

The Council of Education of Puerto Rico (CEPR) manages this program. The institution participating in this program must submit the candidates to the CEPR and after the qualifying is made, the institution receives the fund for those students.

Loan Programs

Federal Direct Loan

Federal Direct-Ford Loans are offered at a variable interest rate, with a cap of 8.25%. For "Subsidized-Direct" the government pays the interest while you are in school; for "Unsubsidized Direct" you are responsible for paying the interest while you are in school. If you choose not to pay the interest, it will accrue and be capitalized (added on the principle).

Federal Direct Parent Loan for Undergraduate Students (FDPLUS)

"PLUS" loans are borrowed by parents for dependent students. The interest rate is variable, with a cap of 9%. Repayment begins 60 days after the First Disbursement.

Work and Study Program

Federal Work-Study Program (FWSP)

A program, that requires the student work a maximum of 40 hours per week. The student is paid a competitive wage and is able to gain experience in his area of study.

Institutional Scholarships Programs

Athletic Scholarship

This program is available to students who have athletic performance. The Athletic Scholarship Committee studies the candidates recommended by the coaches and determine the student benefit.

PR Honor

This institutional scholarship program is designed to provide to talented high school students the opportunity of pursuing their college education at UNE.

Its objectives are:

- Identify those academically talented students motivated into pursuing an Associate or Bachelor's degree, and who show economic need.
- Facilitate academically talented youngsters who show economic need, access to a high quality university education.
- Propitiate the necessary conditions to help these students develop their talents and capabilities to their full potential.
- Provide students with a high quality academic program that meets their expectations and attend to their goals.

How to Apply for Financial Aid

Financial Aid is awarded annually. The student must apply each year. The Financial Aid Application will be available after January.

The student must submit the Free Application for Federal Student Financial Aid (FAFSA) or Renewal FAFSA to the U.S. Department of Education. The application must be completed online at the following web site: www.fafsa.ed.gov. The amount of financial aid may vary each year according to your need, the type of aid you are eligible, your academic performance and available funding.

Eligibility Requirements

In order to meet the eligibility requirements, students must:

- have financial need
- have a high school diploma or a General Education Development (GED) certificate.
- be working toward a degree or certificate.
- be a U.S. citizen or eligible no citizen.
- have a valid Social Security Number.
- not owe a refund on a Federal Grant or be in default on a Federal Educational loan.
- be making Satisfactory Academic Progress.
- be registered with Selective Service (if required).
- be enrolled at least half-time except for the Federal Pell Grant, which allows less-than-half-time enrollment.
- not receive a Bachelor's Degree for Pell and FSEOG.
- provide documentation of any information requested by the Office of Admission and Financial Aid.

Important Note:

The Institution complies fully with the privacy Rights of Parents and Students Act of 1974 (Title IV of the U.S. Public law 90-247), as amended, which specifically governs access to records maintained by institutions to which funds are made available under any Federal program for which the U.S. Commission of Education has administrative responsibility, and the release of such records,

provided that such institutions must furnish parents of students access to official records directly related to the students and an opportunity for a hearing to challenge such records on the ground that they are inaccurate, misleading or otherwise inappropriate; that institutions must obtain the written consent of parents before releasing personally identified data from student records to other than a specified list of exceptions; that parents and students must be notified of these rights; that these rights transfer to students at certain points; and that an office adjudicate complaints and violations of this law.

Refunds and Adjustments for Active and New Students

Refund Policy

A. New Admission Student-Pro Rate Refund

New admission or transfer students enrolled in their first semester at UNE who completely withdraw from their classes during the first 10 weeks starting the first day of class of each semester, and during the first 10 days, since the first day of class during the summer session, will be refunded part of the tuition costs. This norm will apply only to those students enrolled in their first semester for the first time. In subsequent semesters, the active student refund policy will apply.

Ten weeks into the semester and ten days in the summer session equal 60% of the corresponding academic term. Therefore, after this period, the System will charge 100% of the tuition costs.

The amount of tuition to be refunded will be pro-rated in accordance with the date of withdrawal as decreed in the following table:

Semester Week	Amount of Refund
First and Second	88 Percent
Third and Fourth	76 Percent
Fifth and Sixth	64 Percent
Seventh and Eight	52 Percent
Ninth and Tenth	40 Percent

B. Active Student-Federal Refund

Students, previously enrolled at UNE, who completely withdraw before the end of 50% of the academic period, semester or summer session, will be refunded part of the tuition costs according:

- 100% if the student withdraws on or before the first day of class
- 90% after the first day and up to 10 percent of the academic period
- 50% the first day after the 10 percent period and up to 25 percent of the academic period
- 25% the first day after the 25 percent period and up to 50 percent of the academic period

After 50 percent of the academic period, the System will charge 100% of the tuition costs. The semester is composed of 15 weeks, where six days (Monday through Saturday) are considered.

The amount of tuition to be refunded is based on the date of withdrawal as decreed on the following table:

SEMESTER ATTENDANCE							
WEEK	PERCENT		WEEKS	DAYS	REFUND		
15	x	0	=	0	=	0	100%
15	x	10	=	1.50	=	9	90%
15	x	25	=	3.75	=	22	50%
15	x	50	=	7.50	=	45	25%

In accordance with the Title IV Student Financial Assistance Programs regulations, when calculating the amount to be refunded, tuition costs not paid by the student will be subtracted before determining the amount of funds applied to the costs. The principle behind this rule is that the student and his/her parents are primarily responsible for tuition expense.

Financial aid from federal programs, state and institutional, accredited to the student's account will be refunded to the original program. The amount paid by the student will be refunded to him/her, and it will depend on the withdrawal date.

C. Partial Withdrawal

Students who partially withdraw during the first two (2) weeks starting the first day of classes of each semester, and within the first two days of classes during the summer session, will be refunded 88% of tuition costs. After this period, the System will charge 100% tuition costs.

D. Non - Attendance

Students who do not attend their registered courses will be marked NA by the professors, given an administrative withdrawal, and refunded 88% the cost of the course. The student will be held responsible for 12% of the cost, as financial aid programs do not cover it.

Adjustments and Refunds

Adjustment and refunds will be made in the event of total withdrawal. A student who made a total withdrawal during the first ten (10) days of classes during the regular semester and the first two (2) days of the summer session will receive a credit of two thirds (2/3) of the total cost per credit withdrawn.

During the period of reallocation of students due to eliminated sections, all the students who can make adjustments have the authorization of the Treasurer's Office.

Cash refunds will be made if payment was made in cash. Tuition paid for with financial aid is not eligible for a cash refund.

Tuition, Fees, and Related Information*

Every year the Office of the Vice President for Financial Affairs publishes a circular with information about tuition cost for all academic programs and other fees for all institutional services. This circular is available at the Bursar's Office.

Tuition fees are made by credit or contact hour as follow:

- Regular Programs \$ 181.00
- Special Programs \$ 186.00
- Certificate Programs \$ 161.00

In addition, for each academic term the institution has a general fee of \$425.00 per student. Costs are subject to change from one academic year to the next. The distribution of the general fees is as follows:

- Construction \$275.00
- Technology \$ 75.00
- Services \$ 45.00
- Parking \$ 20.00
- Library \$ 7.00
- Insurance \$ 3.00

Please note that in attending any Institution, you will need to allow for other expenses, such as; books and supplies, transportation, meals and other personal needs. A variety of financial aid packages are available. Tuition, fees and service charges must be paid in full during registration or at the time the student requests services. Payments can be made in cash, or by certified or manager's checks, money orders, or credit cards such as American Express, Visa or Master Card. Receipts for all transactions must be requested and retained, and presented with any claim or adjustment requested. The Bursar's Office will not accept claims without receipts. ****All tuition, general fees and service charges are subject to change during the life-term of this catalog (2013- 2014).***

Tuition Option Payment Plan (TOPP)

The Institution has a convenient method for paying educational expenses through scheduled payments over the period of enrollment.

The TOPP grants 50% tuition and fees deferred payment to students who do not satisfy cost or receive financial aid at the registration time. Contact the Bursar's Office for more information about the TOPP.

Clear Statement

Students with an outstanding debt balance will not be allowed to take final examinations until such balance is paid in full.

Upon receipt of payment, the Bursar's Office will issue a "clear" statement, which must be presented by the student at each examination. Students who do not comply with this requirement will receive a qualification of Incomplete (I) and will be required to pay \$20 fee in order to remove the qualification from the academic record.

Invoices

The Bursar's Office will mail four invoices during the regular semester and two during the summer session. The approximate dates for the mailing of such invoices are: September 15, October 15, November 15, December 10, February 15, March 15, April 15, May 10, June 14 and July 22.

If the invoice is not received in the mail, it is the student's responsibility to request it personally from the Bursar's Office.

Office of the Vice Chancellor of Information Resources and Telecommunications

Vision

In harmony with the mission of the Institution, the vision of the Office of the Vice Chancellor of Information Resources and Telecommunications endeavors to become a recognized leader in the process of learning, teaching, research, and service.

Mission

The Office of the Vice Chancellor of Information Resources and Telecommunications will contribute to the integral development of its students. As an administrative and academic center, we pretend to promote in our students, the social and cultural values of our people, offering effective quality service through information resources that are inherent to the academic development of our Institution environment. We pledge to complement the Institution's commitment to research, creativity and innovation through the use of new technologies.

Description of the unit

The Office of the Vice Chancellor of Information Resources and Telecommunications is the administrative unit that integrates the Library, Distance Education, Information and Telecommunication, Exhibit area, Piñero Collection, Educational Technology, and the Community Technological Center. Through a structured and systemic approach the units provide the necessary services to support the Institution's academic programs. It provides educational services and materials to serve the diverse learning and instructional needs of students and faculty members, thus becoming an integral part of the teaching-learning process of the Institution. The units of the Vice Chancellor of Information Resources and Telecommunications houses a wide variety of printed, audiovisual, and electronic materials selected in accordance with the academic programs and adequately organized to foster their usage.

Library

The Library has a complete automated system that provides access to the materials available in all of the three libraries of the Sistema Universitario Ana G. Méndez. UNE's five Off-campus sites are also part of this automated system and have the use of inter-library loans of materials available to all the students of SUAGM. A Virtual Library is also available for students through an electronic web page: <http://www.suagm.edu/une> **Portal de Biblioteca**

Materials include a variety of formats: books, dictionaries, journals, magazines and newspapers, microfilms, Multimedia CDROMS, DVD's, E-books, as well as on line resources. These resources include the following sections: Ask the librarian, Information skills, Tutorials, Links, Special collections, Data bases, Audio Visual Equipment loans, and Norms, Regulations and Procedures for topics in; copyright, plagiarism, etc.

The library provides seating areas for individual study, facilities for small study groups and computers for students' independent use with wireless access as well as for students that are physically challenge.

The Bibliographic Instruction Program in the library provides the necessary skills for the effective use, services, and academic resources, Internet.

Sala Florencio Pagán Cruz

The Reference and Reserve unit are located in this area. The Reference collection has the basic resources needed to do research and investigation projects such as: general and specialized dictionaries, annuals, atlas, directories, reference books, indices in electronic and printed formats,

access to Internet and the data base specialized in legal resources. We have invested in the research-based search engine Voyager System, which greatly facilitates the identification and access to a vast quantity of research literature, journals, textbooks, and other relevant documentation. The total collection of magazines, books, e-books, journals, and audiovisual resources exceed the requirements in titles and volumes for all the levels of the academic programs offered in the Institution.

Circulation and Reserve Area

This area facilitates the loan of books out of the library to authorized users. The Magazine Collection provides more than 5,000 titles combined in printed materials and online resources, local as well as international newspapers.

Inter-Library Loans

The inter-library loan is the opportunity given to the academic community of obtaining, as a loan, the use of resources of other libraries in, as well as outside of Puerto Rico. At the same time, the Library at the Carolina campus participates actively in lending its resources to the other libraries of the Sistema Universitario Ana G. Méndez and to the five Libraries in the Off Campus sites.

Exhibit Area

The art works exhibition area is located strategically in the entrance to the Information Resources Center. The atrium was designed with all the necessary specifications to offer to the public the opportunity of enjoying exhibitions while visiting us. The interior garden, situated to the end of this atrium is a sculpture of our founder, Dr. Ana G. Méndez.

Collection Developments and New Acquisitions

The Center at the Carolina Campus provides all the printed and non-printed resources necessary to facilitate the teaching learning process and to enrich the Institution educational programs. To facilitate collection access, the material is catalogued using Spanish and English subject heading and classified according to the Subject Headings from the Library of Congress. Some of the resources identified are Bibliographical file, Internet, etc.

Educational Technology

This unit advises on the appropriate use of technological resources in the classroom. This unit also administers and distributes electronic materials and equipment requested by the faculty and students. The faculty and students can coordinate the loan services of educational materials and audiovisual equipment to be used in the [e@classroom](#).

Distance Education

The mission of this unit is to expand the cultural and educational offerings utilizing the modality of distance education. Distance education as an educational strategy is part of the academic task of the Institution. The Institution participates in various academic projects such as: offering of courses through ITS, the broadcasting of conferences from various parts of the world, as well as providing training to faculty regarding distance education strategies and methodologies thus certifying faculty in the use of this media. The Blackboard platform is used.

Computerized Information Technology and Telecommunications

Its mission is to integrate the computerized information technology and the telecommunications to the administrative and academic processes. The design is following a plan that has considered the necessary details to bring up to date and to expand the equipment and the

software of the student's computer laboratories, the faculty and administrative personal training laboratory, and the access to Internet in all the computers located in the libraries.

Hours of Operation

The Library offers its services in the following schedule for the Carolina campus and the five Off-Campus sites located in Yauco, Cabo Rojo, Santa Isabel, Utuado, and Barceloneta.

Monday - Thursday	7:00 a.m. – 10:00 p.m.
Friday	7:00 a.m. – 10:00 p.m.
Saturday	8:00 a.m. – 5:00 p.m.
Sunday / Holidays	12:00 p.m. – 5:00 p.m.(Carolina Campus)

Staff

The Center has a staff of professional librarians, educational technologists, assistant librarians, technicians, and clerks whose main goal is to provide the collegiate community with efficient services. They offer students and faculty direct assistance in locating information that will best satisfy their particular interests and needs. Orientation in the proper use of the Center facilities is one of the main features of the daily work.

Office of the Director of the Evening and Weekend Programs

Mission

Its mission is to provide academic and administrative services needed to students enrolled in the evening and weekend classes at UNE. Design and provide support services to this segment of the student population geared towards improving retention and graduation. Coordinate in consortia with the Schools the enrollment process, evaluation process of faculty, dissemination of information related to the academic offerings, and assist in designing and promoting student activities to improve evening and weekend university life.

Its mission is to serve the learning needs of adults and organizations as well as to provide leadership in developing adult education programs through the attainment of external funds.

Description of the unit

The office is headed by the Associate Vice Chancellor, a secretary and a Coordinator in charge of providing direct services to students and faculty. These services entail coordinating services needed by evening and weekend students with the Registrar's Office, Financial Aid, Treasure's Office, Professional Counseling, Academic Advising, and the Schools.

The Programs features the regular academic degree programs. These are offered during evenings from 5:00 to 10:30 p.m. and Saturdays from 7:00 a.m. to 4:00 p.m. Some programs offer courses on Sundays from 8:00a.m. to 12:00 noon.

Off Campus Sites (University Centers)

The Off Campus sites programs respond to the needs of the communities in the various geographical areas throughout Puerto Rico. The University Centers are located in the towns of Utuado, Barceloneta, Yauco, Cabo Rojo and Santa Isabel.

The academic programs offered are certificate, associate and bachelor degrees in Business Administration, Criminal Justice, Social Work, Education, Health Sciences, and Office Systems in all of the Centers. Some Centers have more program offerings than others do to their physical facilities.

The same educational support services that are available on campus are also available at the Centers. These services are: the Offices of the Guidance Counselor, Registrar, Financial Aid, Bursar's, Admissions, and Library. The faculty is from the surrounding community with master's degree and some with doctorates, all recommended for their excellent educational background and experience.

Off Campus Locations

Academic Offerings

The five Off-Campus sites offer the following academic programs:

Yauco Off-Campus

Santo Domingo Street #29

Yauco, Puerto Rico 00698

Associate degrees in:

- Executive Secretary with Word Processing
- Medical Secretary with Medical Billing
- Criminal Justice with emphasis in:
 - Security and Protection
 - Correctional Security

Bachelor's degrees in:

- Management
- Marketing
- Computerized Information Systems
- Administrative Secretary
- Social Work
- Criminal Justice
- Early Childhood and Primary Education

Cabo Rojo Off-Campus

Carretera Núm. 100 K.4.8,

Intersección Carretera 311

Barrio Miradero, Sector Conde Ävila

Cabo Rojo, Puerto Rico 00623

Associate degrees in:

- Executive Secretary with Word Processing
- Medical Secretary with Medical Billing
- Criminal Justice with emphasis in:
 - Security and Protection

Bachelor's degrees in:

- Management
- Marketing
- Computerized Information System
- Administrative Secretary
- Social Work
- Criminal Justice
- Early Childhood and Primary Education
- Public Affairs (Municipal Government)

Santa Isabel Off-Campus
Carretera Núm 153, Barrio Felicia 2, Sector Jauca
Santa Isabel, Puerto Rico

Associate degrees in:

- Executive Secretary with Word Processing
- Medical Secretary with Medical Billing
- Criminal Justice with emphasis in:
 - Security and Protection

Bachelor's degrees in:

- Management
- Marketing
- Computerized Information Systems
- Social Work
- Criminal Justice
- Early Childhood and Primary Education
- Administrative Secretary

Utua Off-Campus
Ave. Fernando Ribas Dominici
Carr. 111 Km. 1.8,
Utua, Puerto Rico 00641

Associate degrees in:

- Executive Secretary with Word Processing
- Medical Secretary with Medical Billing
- Criminal Justice with emphasis in:
 - Security and Protection

Bachelor's degrees in:

- Management
- Marketing
- Computerized Information Systems
- Social Work
- Criminal Justice
- Early Childhood and Primary Education
- Administrative Secretary

Barceloneta Off-Campus
Carr. P.R. # 2 KM. 59.0 Barrio Florida Afuera
Barceloneta, Puerto Rico 00617

Associate degrees in:

- Executive Secretary with Word Processing
- Medical Secretary with Medical Billing
- Criminal Justice with emphasis in:
 - Security and Protection

Bachelor's degrees in:

- Marketing

- Accounting
- Management
- Computerized Information Systems
- Social Work
- Criminal Justice
- Early Childhood and Primary Education
- Administrative Secretary
- Public Affairs (Municipal Government)

Academic Programs offered at the Carolina Campus

Certificates in International Hospitality and Culinary Arts in:

- Culinary Arts

Associate of Science in International Hospitality Management (AS)

- Hotel Operations
- Culinary Arts

Associate in Sciences and Technology (AS)

- Natural Sciences
- Engineering Technology in: Networking
- Engineering Technology in: Electronics
- Radiologic Technology
- Pharmacy Technician
- Medical Sonography
- Nursing

Associate in Business Administration (ABA)

- Computerized Information Systems in: Programming
- Computerized Information Systems in: Graphic Design
- Computerized Information Systems in: Support Technician

Associate in Office Systems (AOS)

- Executive Secretary with Word Processing
- Medical Secretary with Medical Billing

Bachelor in Public Affairs/Social Sciences/Social Work

- Public Affairs
 - Municipal Government
- Criminal Justice
- Paralegal Studies
- Psychology
- Social Work

Bachelor of Arts in Education (BAEd)

- Early Childhood and Primary Education
- Special Education
- Physical Education at the Elementary and Secondary Level
- Teaching English as a Second language at the Elementary Level
- Teaching English as a Second Language at the Secondary Level

Bachelor in Science (BS)

- Microbiology
- Biology
- Biotechnology

- Nursing
- Radiology-Digital Angiography with Mammography
- Radiology-Computerized Tomography with Magnetic Resonance
- Medical Sonography-Vascular and Echocardiography Technology
- Health Services Management

Bachelor in Business Administration (BBA)

- Management
- Accounting
- Computerized Information Systems
- Marketing
- Insurance

Bachelor in Office Systems (BOS)

- Administrative Secretary

Bachelor of Science in International Hospitality Management (BS)

- Hotel Management
- Events and Convention Planning
- Culinary Arts

Post Graduate Certificate program

- Medical Sonography (X)
- Radiation Therapy Technology (X)

Professional Certificates in:

- Events and Convention Planning
- Infants and Pre-school
- School Violence Deviation
- School Social Work

Note: (X) means associate, bachelors or a professional degree is required to be admitted to one of these certificates.

Non-Degree Programs

The Universidad del Este has several non-degree programs to serve both the interests and special needs of students within the Institution as well as the surrounding community. These are:

Resource Center for Educational Excellence - this is a service program initiated in 2003 as the center for diagnostic and placement of students in developmental courses in Spanish, English, and Mathematics for all degree programs. It also serves the students of these courses, as well as students in other level courses as a tutorial program especially in the English, Spanish, and Mathematic courses. A replica of this service program can also be found at the five off-campus sites.

Complementary Educational Services Program- this is a federally funded program whose goal is to provide academic and counseling services to eligible students of the Institution in order to facilitate their academic success and personal growth. These services in the areas of Spanish, English and Mathematics are delivered through tutoring, mini-courses, individual counseling and career activities.

Special Programs

Army Reserve and Air Force Officers Training Corps (Army ROTC) and (Air Force ROTC)

A formal cross-enrollment agreement was established in 1996 between Universidad del Este and the Air Force ROTC. The Army established a similar agreement in 2007 with the Sistema Universitario Ana G. Méndez.

Students from Universidad del Este are authorized to enroll and attend classes in the ROTC Program that are offered in the Carolina Campus. Those courses will be considered as Universidad del Este resident courses. Credit will be granted and entered on the official academic record.

Students will not be charged for courses taken in the ROTC Program. The Air Force and Army will provide ROTC textbooks, military type equipment, uniforms and military training. Students will have equal opportunity to compete for two and three year scholarships on a nationally competitive basis.

Students must be approved by the Vice Chancellor of Student Affairs prior to participating in the ROTC cross enrollment. The course offerings and programming schedule of the Air Force ROTC and the Army ROTC are available at the offices of both the Army and Air Force Coordinators located at the Employment Center building.

Army ROTC Courses

ROTC 3011	Introduction to Military Sciences	2 credits
ROTC 3012	Basic Military Skills	2 credits
ROTC 3021	Fundamentals of Military Tactics I	2 credits
ROTC 3022	Fundamentals of Military Tactics II	2 credits
ROTC 3041	Basic English for Today's Army I	1 credit
ROTC 3042	Basic English for Today's Army II	1 credit
ROTC 3043	Intermediate English for Today's Army I	1 credit
ROTC 3044	Intermediate English for Today's Army II	1 credit
ROTC 3051	Military Briefing I	2 credits
ROTC 3052	Military Briefing II	2 credits
ROTC 4011	Communication and Psychology of Military Leadership	4 credits
ROTC 4012	Fundamentals of Military Strategy	4 credits
ROTC 4021	Military History, Leadership and Military Administration	4 credits
ROTC 4022	Seminar: Leadership and Military Administration	4 credits
ROTC 4041	Military Writing I	2 credits
ROTC 4042	Military Writing II	2 credits

Air Force Courses

Basic Courses

ESAE 3001 – 3002	Foundations of USAF	4 credits
ESAE 3011 – 3012	Evolution of USAF Aerospace Power	4 credits

Advanced Courses

ESAE 4001 – 4002	AF Leadership Studies	8 credits
ESAE 4011 – 4012	National Security Affairs & Preparation for Active Duty	8 credits

Academic Components of the Programs - General Education, Core- Professional, and Major

The Universidad del Este offers a wide variety of academic programs that satisfy the students' interests in the social sciences, sciences, arts, and technical fields. Through these programs, the Institution develops students' competence in some special field of learning. It will also provide a general body of knowledge that will enable them to develop interest and respect for learning, the ability to think clearly and act independently, and a proper understanding of our cultural heritage and its importance in the solution of contemporary problems. All programs are structured with at least three of the following components:

- General Education
- Core Curriculum /Professional Component
- Major
- Electives
- Practicum

The General Education component was revised in 2004, at the bachelor level 33 credits are needed from six areas which are: **Society and Culture, Communications and Information, Natural World and Logical Reasoning, Quality of Life, History: Humanistic Perspectives and Esthetics, and Globalization and Diversity**. At the associate level 15-18 credits are general education courses.

The profile of the graduate of the General Education Component is based on those curricular principles that are essential to achieve integral human development. The profile intends to train the professional for the new century with those competencies, skills and attitudes, which permit optimum functioning in the workplace. These principles involve cognitive, affective and psychomotor dimensions as foundational elements of human and professional development.

In its cognitive dimension, the profile covers such aspects as the development of scientific-philosophical thought, mastery of the vernacular, effective use of technology, and development of research skills. Regarding affective aspects, the profile seeks the development of the human being with social, cultural, and environmental consciousness, capable of developing personal relationships, an agent of change who values diversity and shows social and ethical commitment. Finally, from the psychomotor dimension, the profile describes the student as one who effectively manages technology, works in teams, and uses diverse resources to communicate effectively.

The development of the profile objectives is based on linguistic and conceptual parameters from Amnesty International, which promotes inclusive and non-violent language.

The Core/Professional and Major components introduce the student to subjects within his chosen profession and a special subject area. By interweaving general knowledge with competence in some field of study, students who select courses wisely will be prepared for the occupation of their choice immediately upon graduation. The programs of study or degrees hereby described will be offered according to students' demands, and may be cancelled or eliminated by the decision of the Institution if there is a lack of demand or funding for them.

Assessment Model at UNE

The assessment model at UNE adopts the assessment features outlined by the Sistema Universitario Ana G. Méndez (SUAGM, 1992). The model is based on the concept of "Talent Development" as defined by Alexander Astin. From this perspective, resources, reputation, do not define our excellence nor by whom we admit to our Institution, but on what we do for the students once they reach us. Thus, excellence is observed starting with institutional effectiveness in the development of talent in the students, and how much value is added in the development process once they are admitted.

The model gathers information about the educational process of the students in three stages: before, during, and after:

Before: Information is gathered regarding the set of knowledge, skills and attitudes of the student before beginning the educational process. A diversity of instruments are used (educational and socio-demographic information, tests, interviews, and others) to know the environmental circumstances and the strengths and limitations of the learner regarding determined competencies considered as necessary and important.

During: It refers to the educational experiences that the university provides for the student through academia, teaching support services, and administrative services. During the educational process the institution creates the necessary conditions in the areas so that students can progressively achieve their educational goal. Information from different areas is gathered to follow the formative process of the students: curriculum, teaching, learning, educational materials, technology, support services, orientation, and others.

After: The main attention of this stage is to know the products achieved by the students after having passed through a planned assessment process. Once the students finish their formative process, we can reach the conclusion of whether or not they have attained their educational objective. With this information, we identify the changes that occurred in student achievement.

Calibrating the student's talent development allows us to understand the links between before, during and after aimed at promoting experiences that develop their capacities to the maximum. According to Astin (1991), learning involves a change of learning; therefore it is necessary to measure the change in that process. Also, we start with the supposition that learning increases when students are aware of what they must learn, know the means and criteria to attain their educational objectives, and receive corrective follow-up or maintenance to improve learning. In this sense the purpose of assessment is to gather diverse information to improve the students' learning product. Therefore, the term "outcomes assessment" is closely related to the curriculum (understood as teaching-learning).

Universidad del Este's Anthem (Institutional Song)

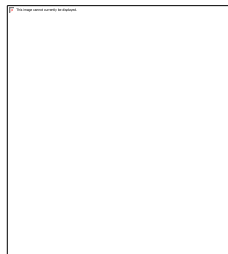
Nuestro es el porvenir,
la promesa de un nuevo amanecer
horizontes de luz,
nuestra es la juventud.

Nuestra es la libertad,
la verdad, la justicia y el honor
esperanza en flor
para la humanidad...

Nuestro es el sol y el mar
nuestros sueños podemos alcanzar
nuestro es el saber,
y el saber es la libertad....

Lyrics and Music by Alberto Carrión

UNIVERSIDAD DEL ESTE
THE BUSINESS SCHOOL FOR
INNOVATION AND ENTREPRENEURSHIP
IEN BUSINESS SCHOOL



UNDERGRADUATE CATALOG
2013-2014

IEN BUSINESS SCHOOL

The Business School for Innovation and Entrepreneurship (IEN Business School) provides its students, through the development of entrepreneurial skills, with the necessary tools to obtain a complete and up-to-date professional preparation with a commitment for innovation in the different disciplines within business administration. The School offers associate degrees in Business Administration in; Computerized Information Systems in Graphic Design, Programming, Computer Support Technician, and Web Design. It also offers two associate degrees in Office Systems in; Executive Secretary with Word Processing, and Medical Secretary with Medical Billing. The bachelor degrees in Business Administration in the areas of: Accounting, Management, Marketing, Computerized Information Systems, Insurance, and a bachelor degree in Office System with a major in Administrative Secretary. The IEN Business School is accredited by the Accreditation Council of Business Schools and Programs.

MISSION

The mission of the Business School for Innovation & Entrepreneurship (IEN Business School) is to prepare ethical professionals, innovative and entrepreneurial leaders with a commitment for sustainable businesses. This professional will be inspired by the pursuit of knowledge and the use of technology in order to join a global and multicultural environment.

GOALS

Our goal is to develop in our students the ability to:

1. Identify the different areas of the business and their origins and evolution.
2. Develop a global vision on the different business fields and how organizations function in the social, political, economic, and technological environment.
3. Understand the role of social responsibility in the business context.
4. Analyze the concept of marketing and market mix, as well as their components.
5. Apply the basic accounting cycle.
6. Solve statistical problems with the use of descriptive statistics concepts applied to business fields.
7. Apply critical thinking and logical reasoning to interpret and use data for problem solving.
8. Understand the importance of micro and macro economy, as well as the monetary policy for the economic systems.
9. Identify the basis, purposes, structure, and organization of business law.
10. Distinguish between the different legal business structures and their components.
11. Use information sources for the development of innovative ideas.
12. Analyze financial data in order to maximize profits or capitalize assets.
13. Value business development opportunities.
14. Handle information and communication technologies.
15. Use media or devices for data input and output.
16. Develop organizational behavior skills that result in effective human relations, leadership and ethical behavior.
17. Value the importance of teamwork as a means to achieve organizational goals.
18. Develop sensitivity to human diversity in both local and global contexts.

FACULTY

Aponte Vega, Jorge, Associate Professor
DBA, Management Information Systems, Universidad del Turabo, Gurabo
MS, Computer Science, Jackson State University, Mississippi Campus

Arvelo López, Israel, Associate Professor
MBA, Marketing, Interamerican University, Metropolitan Campus

Berrios Lugo, José E., Associate Professor
DBA, Management, Universidad del Turabo, Gurabo
MBA, Marketing & Finance, Interamerican University, Metropolitan Campus

Camacho García, Margarita, Full Professor
MA, Teachers of Business Subject in Higher Education, New York University, New York
MBA, Accounting and E- Business, University of Phoenix, Puerto Rico Campus

Candal Vicente, Isabel, Associate Professor
Ph.D., Business Administration, CEU Universidad San Pablo, Madrid
MS, Computer Science, Jackson State University, Mississippi Campus

Cotto Vargas, José, Instructor, CPA
MBA, Palm Beach University, Florida Campus

Diaz Colón, Mildred, Assistant Professor
Ph.D., Entrepreneurial Management Development: International Business, Interamerican University,
San Germán Campus

Escobar Ortiz, Angelita, Full Professor
MA, Teachers of Business Subject in Higher Education, New York University, New York

Espina Romero, Maritza I., Full Professor
Ph.D., Management, Rensselaer Polytechnic Institute, Troy, New York
M.Eng., Operations Research and Statistics, Rensselaer Polytechnic Institute, Troy, New York

Figueroa Papaleo, Ana de L., Full Professor
MA, Teachers of Business Subject in Higher Education, New York University, New York

Franceschi Torres, Gino, Assistant Professor
DBA, International Business, Argosy University, Sarasota Campus
MBA, Marketing, Interamerican University, San Germán Campus

González Contreras, Carmen, Associate Professor
MBA, Management, Universidad del Turabo, Gurabo

Lebrón González, Edwin, Assistant Professor
MBA, Accounting, Interamerican University, Metropolitan Campus

Lloréns Gómez, Antonio L., Assistant Professor
DBA, Management Information Systems, Universidad del Turabo, Gurabo

Medina Rivera, Zulma, Assistant Professor
Ph.D., Organizational Industrial Psychology, Interamerican University, Metropolitan Campus
MA, Labor Relations, Interamerican University, Metropolitan Campus

Meléndez Morales, Lourdes, Instructor
MBA, Marketing, Interamerican University, Metropolitan Campus

Ramos González, Juanita, Instructor
MBA, Human Resources, Interamerican University, Metropolitan Campus

Ríos Figueroa, Carmen, Assistant Professor, CPA
Ph.D. BA, International Business, University of Puerto Rico, Rio Piedras Campus
MBA, Accounting, University of Puerto Rico, Rio Piedras Campus

Santiago Blas, Edward, Assistant Professor
DBA, Management Information Systems, Universidad del Turabo, Gurabo
MBA, Technology Management, University of Phoenix, Puerto Rico Campus

Torres González, José, Associate Professor
DBA, Business Administration, Pontificia Universidad Católica de Puerto Rico, Ponce Campus
MBA, Management, Universidad del Turabo, Gurabo

Vázquez Meléndez, Oscar, Associate Professor
Ed.D, Computing and Information Technology, Nova Southeastern University, Florida

Viader Ortiz, Ana, Assistant Professor
DBA, Management, Universidad del Turabo, Gurabo
MBA, Management, Universidad Metropolitana, Río Piedras Campus

ADMINISTRATIVE STAFF

Espina Romero, Maritza I., Dean
Ph.D., Management, Rensselaer Polytechnic Institute, Troy, New York Campus
M.Eng., Operations Research and Statistics, Rensselaer Polytechnic Institute, Troy, New York

Franceschi Torres, Gino, Associate Dean
DBA, International Business, Argosy University, Sarasota Campus
MBA, Marketing, Interamerican University, San Germán Campus

Díaz Rodríguez, Joanny, Administrative Director
MPA, Public Policy, Universidad del Este, Carolina
BBA, Management, Universidad del Este, Carolina

Suárez Rivera, Yaritza A., Student Affairs Director
MAEd, Educational Technology & Instructional System, Sacred Heart University

Morales García, Elizabeth, Students Affairs Coordinator
BOS, Administrative Secretary, Universidad del Este, Carolina

Sánchez Hernández, Aracelia, Administrative Assistant
BOA, Office Administration, Universidad del Turabo

Vázquez Feliciano, Ana I., Administrative Assistant
BOS, Administrative Secretary, Universidad del Este, Carolina

Meléndez Carrión, Raquel, Receptionist
BOS, Administrative Secretary, Universidad del Este, Carolina

PROGRAMS DESCRIPTIONS

Accounting

The accounting bachelor degree, prepare the students to analyze all the business accounting and financial processes. The students will be able to develop the necessary skills to prepare and analyze accounting statements and financial statements. This program helps the future accountant to study the problems related to control, valuation, presentation, recording cash, account receivable and inventory. It also includes accounting of fixed assets, investments, funds and debts, leasing, income tax and payroll.

Computerized Information Systems

This program comprises two specialties, software and hardware. The software area is focused on how to solve modern business problems with a computer programming solution. This portion is heavily dependent on mathematical skills since business depends on numbers to operate. As a result the students will learn to provide solutions utilizing modern high level programming languages.

Our other area focuses on the hardware portion of an information system in which students will acquire real hands on training in business scenarios. Students in this program will learn to analyze, plan, and implement sound computer networks. In addition students will be taught about computer safety, information security, disaster recovery, and project planning.

Depending on the students specialization it will have the necessary skills to lead and manage any IT Department and/or IT Project.

Insurance

The professional in this area will use the insurance profession tools to establish differences between the diverse types of insurance and to plan an insurance risk management program, designed to meet the needs of its clients. The alumni from this major will develop mechanisms of control and evaluation for the application of standards, policies and laws, related to the insurance industry.

Management

The Management program prepares the student to be an innovative and entrepreneurial leader within the organization. The students will be able to analyze all the aspects of the managerial processes. It includes the administration of human resources, the application of behavioral sciences, the broad principles of marketing, business law, finance, organization and administration. The graduate of this program will be able to see the organization and its roles and functions as a whole. This will allow them to be effective in the organization's decision-making process.

Marketing

The program focuses on creating values for a firm's customers. Therefore a company's marketing efforts impact the strategic position of the entire organization. The marketing professional will be able to assist clients in how to define their business, understand the reasons why the customers

should want to buy the company's product or use its services, and discover how the company positions its products or services.

Office Systems

The Office Systems curriculum prepares students for positions in administrative support careers. It develops office professionals to respond to the demands of a dynamic computerized workplace. The courses are designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on both the technical and non –technical skills.

MINORS

The IEN Business School offers the following minors that the student can enroll in at the same time he/she is pursuing a major degree program. The student, who wants to include in his/her official transcription this minor, must declare it at the school before he applies for graduation.

- General Business Administration
- Management
- Marketing
- Accounting
- Secretarial
- Medical Billing
- Insurance
- Computerized Information Systems
- Graphic design
- Computerized Systems Support Technician
- Entrepreneurship

ADMISSIONS REQUIREMENTS TO BUSINESS ADMINISTRATION AND OFFICE SYSTEMS PROGRAMS

The following requirements are in addition to UNE's general admissions policy:

- High School grade point average of 2.0 or above for Associate and Bachelor programs in:
 - Accounting
 - Computerized Information Systems
 - Graphic Design
 - Programming
 - Computer Support Technician
 - Web Design
 - Insurance
 - Marketing
 - Management
 - Office Systems
 - Administrative Secretary

- Executive Secretary with Information Processing
- Medical Secretary with Medical Billing

GRADUATION REQUIREMENTS FOR ALL PROGRAMS

The graduation requirement for the associate degree programs is a general grade point average of 2.0 and for the major component is 2.3.

The graduation requirement for the bachelor degree programs is a general grade point average of 2.0 and for the major component is 2.5.

Associate Degrees

Associate in Business Administration in Computerized Information Systems: Programming

54 Credits	Credits
General Education	15
Professional Educational Component	15
Major Courses	24

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3

Professional Educational Component		15
ACCO 110	Quantitative Aspects of Accounting	3
COIS 111	Software Applications for Business Administration	3
COMP 110	Introduction to Computer & Software	3
BUSI 101	Introduction to Business	3
MARK 133	Fundamentals of Marketing	3

Major Courses		24
COIS 115	Programming Logic	3
COIS 206	Programming in Basic	3
COIS 207	Visual Basic II	3
COIS 270	C++ Programming	3
COIS 303	Database	3
COIS 394	Java Programming	3
COIS 405	Programming in Emerging Technologies	3
CSST 103	PC Troubleshooting and Maintenance	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.

**Associate in Business Administration
in Computerized Information Systems: Computer Support Technician**

54 Credits	Credits
General Education	15
Professional Educational Component	15
Major Courses	24

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3

Professional Educational Component		15
ACCO 110	Quantitative Aspects of Accounting	3
COIS 111	Software Applications for Business Administration	3
COMP 110	Introduction to Computer & Software	3
BUSI 101	Introduction to Business	3
MARK 133	Fundamentals of Marketing	3

Major Courses		24
COIS 115	Programming Logic	3
COIS 393	Operating Systems	3
COIS 405	Programming in Emerging Technologies	3
CSST 103	PC Troubleshooting and Maintenance	3
CSST 104	Introduction to Networks	3
CSST 200	Network Hardware Installations and Maintenance	3
CSST 201	LAN Administration	3
CSST 205	Disaster Recovery	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.

Associate in Business Administration in Computerized Information Systems: Graphic Design

54 Credits	Credits
General Education	15
Professional Educational Component	15
Major Courses	24

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3

Professional Educational Component		15
ACCO 110	Quantitative Aspects of Accounting	3
COIS 111	Software Applications for Business Administration	3
COMP 110	Introduction to Computer & Software	3
BUSI 101	Introduction to Business	3
MARK 133	Fundamentals of Marketing	3

Major Courses		24
CSGD 100	Photography & Computer Components	3
CSGD 101	Introduction to Graphic Design	3
CSGD 103	Image Design	3
CSGD 201	Publishing Design I (ADOBE INDESIGN)	3
CSGD 202	Publishing Design II (ADOBE INDESIGN)	3
CSGD 210	Advanced Graphic Design	3
CSGD 220	Portfolio	3
WEBD 201	Web Programming Tools	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.

Associate in Business Administration
In Computerized Information Systems: Design of Web Pages

54 Credits	Credits
General Education	15
Professional Educational Component	15
Major Courses	24

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3

Professional Educational Component		15
ACCO 110	Quantitative Aspects of Accounting	3
COIS 111	Software Applications for Business Administration	3
COMP 110	Introduction to Computer & Software	3
BUSI 101	Introduction to Business	3
MARK 133	Fundamentals of Marketing	3

Major Courses		24
COIS 115	Programming Logic	3
COIS 303	Database	3
COIS 350	System Analysis and Design	3
COIS 394	Programming in Java	3
CSGD 101	Introduction to Graphic Design	3
WEBD 101	Html	3
WEBD 201	Web Programming	3
WEBD 203	Web Graphics	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.

Associate in Office Systems in Executive Secretary with Word Processing

55 Credits	Credits
General Education	15
Professional Educational Component	21
Major Courses	19

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
HIST 255	Analysis of Historic Processes	3
ACCO 110	Quantitative Aspects of Accounting	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3

Professional Educational Component		21
ACCO 111	Elementary Accounting I	3
OFAS 121	Basic Keyboarding I	3
OFAS 122	Basic Keyboarding II	3
OFAS 221	Advanced Word Processing I	3
OFAS 290	Records Management	3
OFAS 291	Modern Office Procedures	3

Major Courses		19
OFAS 104	Speedwriting	3
OFAS 204	Speedwriting Transcription	4
OFAS 303	Documents Production	3
OFAS 306	Software Applications in Desktop Publishing and Presentations	3
OFAS 323	Spreadsheet and Database	3
OFAS 392	Office Practice	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.
OFAS 121, 122, 221 must be approved with a minimum grade of "C", OFAS 392 must be approved with
a minimum grade of "B".

**Minimum of one hundred and sixty eight (168) working hours in an Internship during a semester.

Associate in Office Systems in Medical Secretary with Medical Billing

56 Credits	Credits
General Education	15
Professional Educational Component	21
Major Courses	20

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
HIST 255	Analysis of Historic Processes	3
ACCO 110	Quantitative Aspects of Accounting	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3

Professional Educational Component		21
ACCO 111	Elementary Accounting I	3
OFAS 121	Basic Keyboarding I	3
OFAS 122	Basic Keyboarding II	3
OFAS 221	Advanced Word Processing I	3
OFAS 290	Records Management	3
OFAS 291	Modern Office Procedures	3

Major Courses		20
MSEC 107	Medical Transcription	3
MSEC 114	Medical Terminology and Coding	4
MSEC 200	Medical Plan Billing	4
MSEC 315	Health, Safety and Medical/Legal Aspects	3
OFAS 323	Spreadsheet and Database Applications	3
OFAS 392	Office Practice	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.
OFAS 121, 122, 221 must be approved with a minimum grade of "C", OFAS 392 must be approved with
a minimum grade of "B".

**Minimum of one hundred and sixty eight (168) working hours in an Internship during a semester.

Bachelor Degrees

Bachelor in Office Systems Major in Administrative Secretary

118 Credits	Credits
General Education	33
Professional Educational Component	39
Major Courses	40
Office Practice	3
Electives	3

General Education Component		33
ACCO 110	Quantitative Aspects of Accounting	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
ENGL 246	Conversational English	3
HIST 255	Analysis of Historic Processes	3
INBU 322	International Business	3
LEAD 215	Leadership and Organizational Innovation	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3
SPAN 275	Advance Spanish Writing	3
STAT 104	Introduction to Basic Statistics	3

Professional Educational Component		39
ACCO 111	Elementary Accounting I	3
BUSI 204	Legal Environment in Business	3
ECON 202	Managerial Economics	3
ENTR 200	Introduction to Entrepreneurship	3
OFAS 121	Basic Keyboarding I	4
OFAS 122	Basic Keyboarding II	4
OFAS 221	Advanced Word Processing I	4
OFAS 290	Records Management	3
OFAS 291	Modern Office Procedures	3
OFAS 306	Software Applications in Desktop Publishing and Presentations	3
OFAS 323	Spreadsheet and Database	3
PEPE 226	Protocol and Etiquette in Professional Environments	3

Major Courses		40
COMM 301	Introduction to the telecommunications	3
LEAD 324	Development and Planning Professional Trainings	3
OFAS 104	Speedwriting	3
OFAS 204	Speedwriting Transcription	4
OFAS 208	Managements Applications in Office Automation	3
OFAS 222	Advanced Word Processing II	4
OFAS 230	Machine Transcription	4
OFAS 300	Documents Creation	3
OFAS 303	Document Production	3
OFAS 326	Software Integration	4
OFAS 405	Processing Specialized and International Documents	3
OFAS 491	Administrative Office Procedures	3

Office Practice		3
OFAS 392	Office Practice	3

Electives		3
Free Elective		3

** The English, Spanish and Math courses will be offered according to student's proficiency level. OFAS 121,122,221and 222 must be approved with a minimum grade of "C". OFAS 392 must be approved with a minimum grade of "B".*

***Minimum of one hundred and sixty eight (168) working hours in an Internship during a semester.*

Bachelor in Business Administration
Major in Management

117 Credits	Credits
General Education	33
Professional Educational Component	45
Major Courses	30
Action Research	3
Practicum	3
Electives	3

General Education Component		33
INBU 322	International Business	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advanced English II	3
HIST 255	Analysis of Historic Processes	3
LEAD 215	Leadership and Organizational Innovation	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading & Writing II Reading, Writing & Oral Communication II Language, Reading & Writing II	3

Professional Educational Component		45
ACCO 110	Quantitative Aspects of Accounting	3
ACCO 111	Elementary Accounting I	3
ACCO 112	Elementary Accounting II	3
BUSI 101	Introduction to Business	3
BUSI 204	Legal Environment in Business	3
BUSI 225	Business Ethics	3
COIS 111	Software Applied to Business Management	3
COMM 205	Effective Oral Presentations	3
COMM 275	Business Communication and Writing	3
COMP 110	Introduction to Computer & Software	3

ECON 202	Managerial Economics	3
ENTR 200	Introduction to Entrepreneurship	3
FINA 202	Business Finance	3
MARK 133	Fundamental of Marketing	3
STAT 201	Business Statistics	3

Major Courses		30
ENTR 201	New Venture Creation	3
MANA 210	Management Theory	3
MANA 213	Personnel Administration	3
MANA 230	Organizational Behavior	3
MANA 316	Small Business	3
MANA 321	Personnel Supervision	3
MANA 340	Operations and Productions Management	3
MANA 401	Business Policy	3
MANA 404	Labor Relations	3
MANA 405	International Management	3

Action Research		3
BUSI 499	Business Simulation	3

Practicum		3
MANA 482	Practicum	3

Electives		3
ENGL 246	Conversational English	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.
MANA 282 and BAOS 499 must be approved with a minimum grade of "B".

**Prerequisite for the Practicum: 25 credits approved in the major.

Bachelor in Business Administration
Major in Accounting

117 Credits	Credits
General Education	33
Professional Educational Component	45
Major Courses	30
Action Research	3
Practicum	3
Electives	3

General Education Component		33
INBU 322	International Business	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advanced English II	3
HIST 255	Analysis of Historic Processes	3
LEAD 215	Leadership and Organizational Innovation	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading & Writing II Reading, Writing & Oral Communication II Language, Reading & Writing II	3

Professional Educational Component		45
ACCO 110	Quantitative Aspects of Accounting	3
ACCO 111	Elementary Accounting I	3
ACCO 112	Elementary Accounting II	3
BUSI 101	Introduction to Business	3
BUSI 204	Legal Environment in Business	3
BUSI 225	Business Ethics	3
COIS 111	Software Applied to Business Management	3
COMM 205	Effective Oral Presentations	3
COMM 275	Business Communication and Writing	3
COMP 110	Introduction to Computer & Software	3

ECON 202	Managerial Economics	3
ENTR 200	Introduction to Entrepreneurship	3
FINA 202	Business Finance	3
MARK 133	Fundamental of Marketing	3
STAT 201	Business Statistics	3

Major Courses		30
ACCO 201	Intermediate Accounting I	3
ACCO 202	Intermediate Accounting II	3
ACCO 203	Cost Accounting	3
ACCO 205	Puerto Rico Income Tax	3
ACCO 250	Computerized Accounting Systems	3
ACCO 295	Managerial Accounting	3
ACCO 297	Funds Accounting	3
ACCO 304	Auditing	3
ACCO 405	Financial and International Accounting	3
ACCO 450	Advanced Accounting	3

Action Research		3
BUSI 499	Business Simulation	3

Practicum		3
MANA 482	Practicum	3

Electives		3
ENGL 246	Conversational English	3

** The English, Spanish and Math courses will be offered according to student's proficiency level.
MANA 282 and BAOS 499 must be approved with a minimum grade of "B".*

****Prerequisite for the Practicum: 24 credits approved in the major.**

Bachelor in Business Administration
Major in Computerized Information Systems

117 Credits	Credits
General Education	33
Professional Educational Component	45
Major Courses	30
Action Research	3
Practicum	3
Electives	3

General Education Component		33
INBU 322	International Business	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advanced English II	3
HIST 255	Analysis of Historic Processes	3
LEAD 215	Leadership and Organizational Innovation	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading & Writing II Reading, Writing & Oral Communication II Language, Reading & Writing II	3

Professional Educational Component		45
ACCO 110	Quantitative Aspects of Accounting	3
ACCO 111	Elementary Accounting I	3
ACCO 112	Elementary Accounting II	3
BUSI 101	Introduction to Business	3
BUSI 204	Legal Environment in Business	3
BUSI 225	Business Ethics	3
COIS 111	Software Applied to Business Management	3
COMM 205	Effective Oral Presentations	3
COMM 275	Business Communication and Writing	3
COMP 110	Introduction to Computer & Software	3

ECON 202	Managerial Economics	3
ENTR 200	Introduction to Entrepreneurship	3
FINA 202	Business Finance	3
MARK 133	Fundamental of Marketing	3
STAT 201	Business Statistics	3

Major Courses		30
COIS 115	Programming Logic	3
COIS 206	Programming in Basic	3
COIS 207	Visual Basic II	3
COIS 270	C++ Programming	3
COIS 303	Database	3
COIS 350	Systems Analysis and Design	3
COIS 394	Java Programming	3
COIS 405	Programming in Emerging Technologies	3
CSST 103	PC Troubleshooting and Maintenance	3
WEBD 101	HTML	3

Final Project		3
CAPP 400	Final Project	3

Action Research		3
BUSI 499	Business Simulation	3

Electives		3
ENGL 246	Conversational English	3

** The English, Spanish and Math courses will be offered according to student's proficiency level.
CAPP 400 must be approved with a minimum grade of "B".*

****Prerequisite for the Practicum: 24 credits approved in the major.**

Bachelor in Business Administration
Major in Marketing

117 Credits	Credits
General Education	33
Professional Educational Component	45
Major Courses	30
Action Research	3
Practicum	3
Electives	3

General Education Component		33
INBU 322	International Business	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advanced English II	3
HIST 255	Analysis of Historic Processes	3
LEAD 215	Leadership and Organizational Innovation	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading & Writing II Reading, Writing & Oral Communication II Language, Reading & Writing II	3

Professional Educational Component		45
ACCO 110	Quantitative Aspects of Accounting	3
ACCO 111	Elementary Accounting I	3
ACCO 112	Elementary Accounting II	3
BUSI 101	Introduction to Business	3
BUSI 204	Legal Environment in Business	3
BUSI 225	Business Ethics	3
COIS 111	Software Applied to Business Management	3
COMM 205	Effective Oral Presentations	3
COMM 275	Business Communication and Writing	3

COMP 110	Introduction to Computer & Software	3
ECON 202	Managerial Economics	3
ENTR 200	Introduction to Entrepreneurship	3
FINA 202	Business Finance	3
MARK 133	Fundamental of Marketing	3
STAT 201	Business Statistics	3

Major Courses		30
ENGL 246	Conversational English	3
ENTR 201	New Venture Creation	3
MARK 350	Marketing in Digital Media	3
MARK 204	International Marketing	3
MARK 205	Creative Selling	3
MARK 206	Consumer Behavior	3
MARK 251	Advertising and Promotion	3
MARK 302	Service Marketing	3
MARK 320	Marketing Research	3
MARK 401	Strategic Marketing	3

Action Research		3
BUSI 499	Business Simulation	3

Practicum		3
MANA 482	Practicum	3

Electives		3
ENGL 246	Conversational English	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.
MANA 282 and BAOS 499 must be approved with a minimum grade of "B".

**Prerequisite for the Practicum: 24 credits approved in the major.

Bachelor in Business Administration
Major in Insurance

116 Credits	Credits
General Education	33
Professional Educational Component	45
Major Courses	29
Action Research	3
Practicum	3
Electives	3

General Education Component		33
INBU 322	International Business	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advanced English II	3
HIST 255	Analysis of Historic Processes	3
LEAD 215	Leadership and Organizational Innovation	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SOCI 215	Culture and Folklore of Puerto Rico	3
SPAN 111 or SPAN 115 or SPAN 125	Reading & Writing I Reading, Writing & Oral Communication I Language, Reading & Writing I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading & Writing II Reading, Writing & Oral Communication II Language, Reading & Writing II	3

Professional Educational Component		45
ACCO 110	Quantitative Aspects of Accounting	3
ACCO 111	Elementary Accounting I	3
ACCO 112	Elementary Accounting II	3
BUSI 101	Introduction to Business	3
BUSI 204	Legal Environment in Business	3
BUSI 225	Business Ethics	3
COIS 111	Software Applied to Business Management	3
COMM 205	Effective Oral Presentations	3
COMM 275	Business Communication and Writing	3
COMP 110	Introduction to Computer & Software	3

ECON 202	Managerial Economics	3
ENTR 200	Introduction to Entrepreneurship	3
FINA 202	Business Finance	3
MARK 133	Fundamental of Marketing	3
STAT 201	Business Statistics	3

Major Courses		29
INSU 101	Introduction to Insurance	3
INSU 201	Life Insurance and Disability Insurance	3
INSU 202	Property and Miscellaneous Insurance	3
INSU 203	Accident Insurance and Bonding	3
INSU 301	Microeconomics in Insurance: Corporation, Insurer, and Agency	3
INSU 302	Reinsurance	3
INSU 303	Legal Environment	3
INSU 401	Seminar: Obtaining Certification	4
INSU 402	Advanced Solutions in Insurance	4

Action Research		3
BUSI 499	Business Simulation	3

Practicum		3
MANA 482	Practicum	3

Electives		3
ENGL 246	Conversational English	3

* The English, Spanish and Math courses will be offered according to student's proficiency level.
MANA 282 and BAOS 499 must be approved with a minimum grade of "B".

**Prerequisite for the Practicum: 24 credits approved in the major.

MINORS

General Business Administration

A minimum of 15 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
BUSI 101	Introduction to Business	3	
BUSI 204	Elements of Business Law	3	BUSI 101
MARK 133	Fundamentals of Marketing	3	BUSI 101
MANA 230	Organizational Behavior	3	BUSI 101
STAT 201	Business Statistics	3	MATH 111
FINA 202	Business Finance	3	ACCO 111
ACCO 111	Elementary Accounting I	3	
ACCO 112	Elementary Accounting II	3	ACCO 111

Management

A minimum of 12 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
BUSI 101	Introduction to Business	3	
MANA 213	Personnel Administration	3	BUSI 101
MANA 210	Management Theory	3	BUSI 101
MANA 404	Labor Relations	3	BUSI 101
MANA 230	Organizational Behavior	3	BUSI 101
MANA 401	Business Policies	3	BUSI 101
MANA 405	International Management	3	

Marketing

A minimum of 12 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
MARK 133	Fundamentals of Marketing	3	
MARK 205	Creative Selling	3	MARK 133
MARK 206	Consumer Behavior	3	MARK 133
MARK 204	International Marketing	3	MARK 133
MARK 251	Advertising and Promotion	3	MARK 133
MARK 302	Service Marketing	3	MARK 133
MARK 320	Marketing Research	3	MARK 133

Accounting

A minimum of 18 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
ACCO 111	Elementary Accounting I	3	
ACCO 112	Elementary Accounting II	3	
ACCO 201	Intermediate Accounting I	3	ACCO 112
ACCO 203	Cost Accounting	3	ACCO 112
ACCO 297	Funds Accounting	3	ACCO 112
ACCO 205	Puerto Rico Income Tax	3	ACCO 112
ACCO 304	Auditing	3	ACCO 450
ACCO 450	Advanced Accounting	3	ACCO 201

Secretarial

A total of 17 credits for the minor

Course Code	Course Title	Credits	Pre-requirements
OFAS 121	Basic Keyboarding I	4	
OFAS 122	Basic Keyboarding II	4	OFAS 121
OFAS 306	Software Applications in Word Processing: Graphic Presentation and Editing	3	OFAS 122
OFAS 323	Spreadsheet and Database Applications	3	OFAS 122
OFAS 290	Record Management	3	

Medical Billing

A total of 14 credits for the minor

Course Code	Course Title	Credits	Pre-requirements
MSEC 114	Medical Terminology& Coding	4	
MSEC107	Medical Transcription	3	
MSEC 200	Codification and Medical Plan Billing	4	
MSEC 314	Health, Safety and Medical /Legal Aspects	3	

Insurance

A minimum of 15 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
INSU 101	Introduction to Insurance	3	
INSU 201	Life Insurance and Disability Insurance	3	INSU 101
INSU 202	Property and Miscellaneous Insurance	3	INSU 101
INSU 203	Accident Insurance and Bonding	3	INSU 101
INSU 302	Reinsurance	3	INSU 101
INSU 303	Legal Environment	3	INSU 101

Computerized Information Systems

A minimum of 15 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
COIS 115	Programming Logic	3	
CSST 103	PC Troubleshooting and Maintenance	3	
COIS 206	Programming in Basic	3	COIS 115
COIS 207	Visual Basic II	3	COIS 206
COIS 270	C++ Programming	3	COIS 115
COIS 303	Database	3	COIS 270
COIS 350	Systems Analysis and Design	3	COIS 270
COIS 394	JAVA Programming	3	COIS 115
WEBD 101	HTML	3	

Graphic Design

A minimum of 15 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
CSGD 100	Photography and Computer Components	3	
CSGD 101	Introduction to Graphic Design	3	
CSGD 103	Image Design	3	CSGD 101
CSGD 201	Publishing Design I	3	CSGD 101
CSGD 202	Publishing Design II	3	CSGD 201
CSGD 210	Advanced Graphic Design	3	CSGD 201
CSGD 220	Portfolio	3	CSGD 210
WEBD 201 or WEBD 101	WEB Programming Tools or HTML	3	
WEBD 203	WEB Animations	3	WEBD 201 or WEBD 101

Computerized Systems Support Technician

A minimum of 15 credits selected from the following courses:

Course Code	Course Title	Credits	Pre-requirements
COIS 111	Software Applications for Business Administration	3	COMP 110
CSST 103	PC Troubleshooting and Maintenance	3	
CSST 104	Introduction to Networks	3	CSST 103
CSST 200	Network Hardware Installation and Maintenance	3	CSST 104
CSST 201	LAN Administration	3	CSST 200
CSST 205	Disaster Recoveries	3	CSST 200
COIS 393	Operating Systems	3	CSST 200

Entrepreneurship

A total of 15 credits for the minor

Course Code	Course Title	Credits	Pre-requirements
ENTR 200	Introduction to Entrepreneurship	3	
ENTR 201	New Venture Creation	3	ENTR 200
ENTR 230	Legal, tax and Environmental Responsibility	3	ENTR 200
ENTR 240	Marketing and Sales for the Entrepreneur	3	ENTR 200, ENTR 201
ENTR 250	Management of New Ventures	3	ENTR 200, ENTR 201

COURSE DESCRIPTIONS

Accounting

ACCO 110 Quantitative Aspects of Accounting

3 Credits

This course includes the use of the electronic calculator for the student to work in business applications of the following concepts: use of percent in business, commercial discounts, cash discounts, commissions, profit margin, simple interest, compound interest, present value, discounting commercial loans, payroll deductions, inventory and depreciation.

ACCO 111 Elementary Accounting I

3 Credits

The course of accounting fundamentals includes theory of debit and credit and its effects in the financial statements. Practice in account management. Principles and analysis of preparing a worksheet and financial statements. Includes inventory accounting and accounts receivable, voucher systems, concepts and principles of bank statement reconciliation. Include Laboratory.

ACCO 112 Elementary Accounting II

3 Credits

The course includes the basic concepts in registering fixed assets and equipment. Methods of depreciation and payroll accounting. Also includes the accounting principles for the regulation of societies and corporations and the preparation of statements of cash flow. The course encourages analytical thinking and problem solving. Prerequisite: ACCO 111, include laboratory.

ACCO 201 Intermediate Accounting I

3 Credits

Analysis of generally accepted accounting principles and their application in preparing financial statements. Study of the problems related to the control, valuation, presentation, recording cash, accounts receivable and inventory. Prerequisite: ACCO 112

ACCO 202 Intermediate Accounting II

3 Credits

This course includes the analysis of the different ways to obtain financing. Ways of entering the emission of debts and stocks. Also, it includes accounting of fixed assets, investments, funds and debts, leasing, income tax and payroll. It also analyzes cash flow. Prerequisite: ACCO 202

ACCO 203 Cost Accounting

3 Credits

This course covers fundamental principles of cost accounting; methods of determining the basis and classification of costs in a manufacturing, distribution or service organization; solutions to cost problems; preparation of cost reports; use of forms and records; and overhead and wage systems in industry. Prerequisite: ACCO 112

ACCO 205 Puerto Rico Income Tax

3 Credits

The course presents the history and objectives of income taxation. Also included are tax statutes covering taxable income, inclusions, exclusions, allowable deductions; and computation of surtax and normal income tax of individuals, partnerships and corporations as applied to Puerto Rico.

Prerequisite: ACCO 112

ACCO 250 Computerized Accounting Systems

3 Credits

This course presents to the student the commonly used computerized accounting systems and also provides practice in the use of these systems. The approach of the course is to apply accounting concepts through the use of already available software. One hour of laboratory practice is required.

Elective course Prerequisites: ACCO 112 and COIS 111

ACCO 295 Managerial Accounting

3 Credits

This course reviews the accounting process and financial statements. Analysis of financial information and accounting reports as a managerial tool such as sources of funds, analysis ratios, working capital and forecasting. It also prepares the student within the analytical skills of planning, organization and control of the business activities within the organization. Prerequisite: ACCO 112

ACCO 297 Funds Accounting

3 Credits

This course studies the types and characteristics of non-profit organizations, applications of principles, concepts and accounting procedures. Includes organizational structure, budget, systems, financial statements, and municipal accounting systems in Puerto Rico. Prerequisite: ACCO 112

ACCO 304 Auditing

3 Credits

Study of generally accepted auditing standards. Emphasizes the evaluation of the integral control structure. Includes the discussion of auditing procedures, professional codes of ethics, statistical sampling and the use of computers in the auditing processes in order to issue the auditor's report.

Prerequisite: ACCO 202

ACCO 320 Federal Income Tax

3 Credits

Study of the Internal Revenue Code of the United States. Includes the knowledge and preparation of the different Federal Income Tax forms and returns. In addition, cases will be examined as well as judicial decisions. Prerequisite: ACCO 112

ACCO 405 Financial and International Accounting

3 Credits

Provides a broad discussion on multinational companies including a detailed comparison of the financial reporting issues in different countries. The course examines the theories and international accounting practices to provide students with the skills to interpret and analyze financial statements presented by multinational corporations. Prerequisite: ACCO 202

ACCO 450**Advanced Accounting****3 Credits**

The advanced accounting course consists of the study and discussion of the generally accepted accounting principles that regulate the analysis, registration and preparation of the reports related to mergers and consolidates financial statements. Includes other topics related to accounting of branches and liquidations of partnerships and corporations. Prerequisite: ACCO 202

Business**BUSI 101****Introduction to Business****3 Credits**

The course presents a study of business, its nature, its environment and opportunities. It introduces students to the broad principles of business in the fields of marketing, finance, organization and administration, and teaches the application of behavioral science by management. It also applies case studies to encourage analytical thinking. This course is a prerequisite for all other business courses.

BUSI 204**Legal Environment in Business****3 Credits**

Studies the legal aspects of business transactions with particular emphasis on legislation in Puerto Rico. Special attention is given to contracts, sales, negotiable instruments, personal property, insurance, conveyance, mortgage deeds, and the relationship of government to business.

BUSI 225**Business Ethics****3 Credits**

This course is concerned mainly with fundamental problems of ethics and all kinds of human activities, social and economic, related moral values. Moral aspects of human behavior are studied within the whole social system and within particular groups in which the individual operates. It includes the study of ethical problems of management with social, political and labor relation.

BUSI 499**Business Simulation****3 Credits**

This course is designed to apply fundamental marketing, distribution, operations, finance and accounting skills and knowledge to establish and develop a simulated virtual business. The student and teammates will be in constant analysis of the situations presented in the simulation to develop and implement strategies for the business success. Prerequisites: 24 credits approved in the major courses

Prerequisites for Management, Accounting and Marketing:

MATH 120 or MATH 130

MANA 482 or concurrently

Communication**COMM 205****Effective Oral Presentations****3 Credits**

Analysis and application of the basics components for an effective presentation. Emphasis will be given in graphic design, adequate content, enunciation, and confidence image projection to realize an

excellent presentation to the audience. The course will be developing through research, reflections, cooperative work and application project applying the latest technology with responsibility.

COMM 275 Business Communications and Writing

3 Credits

This course on business communication in Spanish will emphasize on the organization, style and strategy of language to inform, direct and persuade. It develops corporate communication skills; drafting, editing, and revising competencies for business memos, letters, reports, and proposals.

COMM 301 Introduction to the Telecommunications

3 Credits

An introduction to theory and practical concepts of telecommunications in the office. Emphasis is given to technology, equipment and services that transfer distance information and that are essentials in the electronic office. The course utilized as the means to develop skills application, searching exercises, searching in Internet, cooperative work, case analysis, discussion, among others. Prerequisite: OFAS 221 approved or concurrently

Computerized Information Systems

COMP 110 Introduction to Computer & Software

3 Credits

Study the application and handling of basic computer concepts, and productivity tools. Include the analysis and evaluation of different application software. Emphasize on the creation and editing of documents and effective presentation of programs such as: search engine, internet, electronic mail, word processor and presentations. Includes laboratory experiences and practice in the use of the internet.

COIS 111 Software Applications for Business Administration

3 Credits

Integration of application programs such as: word processor, spreadsheet, in an advanced atmosphere; basic principles of database and graphic organizers for the productivity of the businesses. It includes the development and extensive presentation of solutions to the businesses. The course is developed by means of discussions of readings, supported critics, investigations and oral presentations in the technology. Prerequisite: COMP 110

COIS 115 Programming Logic

3 Credits

Introduction to the development of algorithms and computer programming, including problem solving and programming concepts; the mathematical concepts required to solve problems using the computer; and the tools that are used to develop solutions, such as: IPO Charts, pseudo-code, and flow charts. Study of the basic elements of programming, such as basic data types, control structures and routines. The concepts of structured programming are also covered. It includes experience in laboratory.

COIS 206 Programming in Basic
3 Credits

Study on the Basic programming language through VISUAL BASIC. Analysis and evaluation of the syntax and details of the Visual Basic programming language. The use of language is mainly directed to the implementation of business systems. The student will study the concepts of objects, classes, messages, instances, types of variables, encapsulation, inheritance, methods and everything related to the OOP for building and running applications. Programming techniques for the creation, modification and maintenance of programs will be presented. Analysis and interpretation of projects and cases, relating to information systems in the Visual Basic object-oriented environment. The course is developed through discussions of readings, reflections, reviews, research, oral presentations supported by technology. It includes experience in laboratories. Prerequisite: COIS 115

COIS 207 Visual Basic II
3 Credits

Study on the advanced concepts and strategies of Visual BASIC. Development diagnosis and solution of problems using the most novel concepts of Microsoft Visual BASIC. The course will be mainly developed by means of demonstration and application. The course will be mainly developed by means of demonstration and application of the use of the advanced tools of Microsoft Visual BASIC. In addition, the cooperative work will be emphasized. It includes experience in laboratory. Prerequisite: COIS 206: (Minimum grade: B)

COIS 270 C++ Programming
3 Credits

Introduction to the development of algorithms, flow diagrams and computers programs using the Visual C++ programming language. Study of the basic elements of the Visual C++ language, such as basic data types, control structures, and routines. The concepts are covered with structured programming. It includes experience in the laboratory. Pre-requisite: COIS 115

COIS 303 Database
3 Credits

This course consists of the study of the various database models: hierarchical, networks and relational. It discusses the physical and logical structures database. It also includes the design and application of database concepts, report generation and files management. The course requires laboratory. Prerequisite: COIS 115

COIS 350 Systems Analysis and Design
3 Credits

This course presents a logical discipline in the analysis and design of new information systems, improvement of existing systems, data base applications, manual procedures and others. The objective of this course is to explore and develop practical methods to improve the effectiveness of the processes applied to systems' analysis. Prerequisite: COIS 303

COIS 393 Operating Systems
3 Credits

The purpose of this course is for the student to learn and apply functions and commands of the operating system. It emphasizes basic concepts such as: disc initiation, programming language, handling of archives, "backup" and operating systems such as Linux, DOS, Windows, MacOS and others.

COIS 394**JAVA Programming****3 Credits**

Introductory course based on the basic concepts of JAVA programming. Analysis and application of the structure, syntax, codification, classes, objects and methods of the JAVA programming language. It includes the use of objects of the JAVA libraries. The student will learn how to use the JAVA programming language to produce APPLET and "stand-alone" applications. The course will be developed by means of presentations of verbal problems, analysis of cases, analysis and creation of programs and cooperative work.

Prerequisite: COIS 115

COIS 405**Programming in Emerging Technologies****3 Credits**

An examination of emerging technologies that looks at how they evolve, how to identify them, and the effect international, political, social, economic and cultural forces have on them. This course will develop the student's capabilities to analyze particular emerging technologies for programming and problem solving. It also studies technology monitoring, forecasting, and assessment, with introduction of data mining tools and exploration of emerging technologies. The course focuses on the ability to generate an innovation project. Pre-requisite: COIS 115

CAPP 400**Project: Information System Design****3 Credits**

Supervised computer project to assist student in the development of work skills related directly to their field of study. It serves as evidence of learning assessment. Students must present the project as a requirement for the degree. Three hours weekly in a computer laboratory.

Pre-requisite: 24 credits approved in the major.

Computerized Systems Support Technician**CSST 103****PC Troubleshooting and Maintenance****3 Credits**

This introductory course teaches how to set up, operate, and maintain a personal computer. Students will gain practical hands-on experience in the following areas: installing software packages, preventive maintenance, diagnostic testing, and peripheral interfacing. The course is offered in a laboratory.

CSST 104**Introduction to Networks****3 Credits**

This course is an introduction to the fundamentals, basic concepts, and terminology of networks. Topics include access and use of the Internet, intranet and networking hardware and software. The course is offered in a laboratory. Prerequisite: CSST 103

CSST 200**Network Hardware Installations and Maintenance****3 Credits**

This course covers the assembly of the components of a network. Students will apply their knowledge in the installation, configuration and troubleshooting in a network. They will learn how to connect buildings using microwave antennae and all the wiring to be used. They will learn about the use of tools for measuring the behavior of a network to identify problems.

Prerequisite: CSST 104

CSST 201
3 Credits

LAN Administrations

This course teaches the students how to install and configure Windows 2000 Advanced Server in an Active Directory. Prerequisite: CSST 200

CSST 205
3 Credits

Disaster Recoveries

This course presents methods to identify vulnerabilities and how to take appropriate countermeasures to prevent and mitigate failure risks for an organization. Also presents the students the principles of disaster recovery, including the preparation of a disaster recovery plan, assessment of risks in the enterprise, development of policies and procedures, understanding the roles and relationships of various members of an organization, testing and rehearsal of the plan, implementation of the plan, and actually recovering from a disaster. Prerequisite: CSST 200

Economics

ECON 202
3 Credits

Managerial Economics

This course analyzes the managerial processes of the economy since the implementation of microeconomic theory toward the outlet of managerial decisions. Emphasize optimal policies of price and quantity of production solutions to maximize the profits of the firm, as well as game theory and industrial organization.

Entrepreneurship

ENTR 200
3 Credits

Introduction to Entrepreneurship

This course is designed to provide the student with a broad vision of an entrepreneurial career. It covers the principles and procedures of creative thinking and leadership. Creative Problem Solving research and application will be used to develop creative leadership. By internalizing creativity principles and procedures students will develop a mindset and skills essential to leadership and entrepreneurship.

ENTR 201
3 Credits

New Venture Creation

This course is about the translation of ideas into innovation, and ultimately into a product or service that may be commercialized through a new venture, either in an existing firm or in a startup company. A better understanding of the creative thinking processes behind innovation and entrepreneurship are developed during the course through exercises, readings, discussions, lectures, and guest speakers. A common thread throughout this class is a focus on strategic applications of innovations to the entrepreneurship processes. Prerequisite ENTR 200

ENTR 230
3 Credits

Legal, tax and Environmental Responsibility

Legal, tax and environmental perspectives that rule entrepreneurial activities. The students will learn about the ethics, social and economic implications of municipal, state and federal regulations to businesses. Prerequisite ENTR 200

Marketing and Sales for the Entrepreneur

Market Creation, which refers to s

nd ENTR 201

Management of New Ventures

tematic approach on how to m

Business Finance

ndamental principles involved in

Personal Financial Planning

cepts and planning processes.

Photography and Computer Components

basic elements and principles of p

3 Credits

CSGD 103 Image Design

3 Credits

CSGD 201 Publishing Design I (ADOBE INDESIGN)

3 Credits

CSGD 202 Publishing Design II (ADOBE INDESIGN)

3 Credits

Prerequisites: CSGD 100, CSGD 101, CSGD 103, CSGD 201

CSGD 210 Advanced Graphics Design

3 Credits

Prerequisites: CSGD 103, CSGD 201, CSGD 202, MARK 133, MARK 251

CSGD 220 Portfolio

3 Credits

This course prepares the students for presenting their work to the professional graphic design industry by working with existing assets they have created during their graphic design program as they develop a professional portfolio in order to succeed when being interviewed for a position in the industry.
Prerequisite: **CSGD 210**

Insurance

INSU 101 Introduction to Insurance

3 Credits

The course studies the scientific, technical and professional principles of the discipline. It identifies participants in industry and the fundamental aspects of the prevalent regulatory environment. It analyzes particular cases of social security and bonding insurance. After studying the insurance contract, the defining areas of the industry are studied separately: life insurance and disability insurance and miscellaneous and liability insurance.

INSU 201 Life Insurance and Disability Insurance

3 Credits

The course begins with a review of the basic concepts of insurance, emphasizing those most relevant to life insurance. The historic development of life insurance is studied. We will identify the types and uses of life and health insurance. The course also studies the aspects of the analysis of the contract, mathematical principles and risk selection. Prerequisite: INSU 101

INSU 202 Property and Miscellaneous Insurance

3 Credits

The course begins with a review of the basic concepts of insurance. We will study the historic development of miscellaneous insurance products. We will identify the types of miscellaneous insurance and the determining factors for their premium. The course studies reinsurance and its modalities. It then studies property, maritime, agriculture, vehicle, and title and mortgage insurance. Prerequisite: INSU 101

INSU 203 Accident Insurance and Bonding

3 Credits

The course identifies the particular aspects of the type of insurance for bonding as compared to other types of insurance. It studies multiple applications, emphasizing those that facilitate business negotiations and minimize risks. It also studies accident insurance, integrated to property policies as well as those that are not integrated. Individual and institutional liability risks are studied, along with their impact and the existing mechanisms to handle them. Prerequisite: INSU 101

INSU 301 Microeconomics in Insurance: Corporation, Insurer, and Agency

3 Credits

The purpose of this course is to examine managerial aspects from 3 relevant perspectives in the insurance industry: the part granting the risks, the assuming part, and the facilitating and producing part. From point of view of the corporate part, the course identifies the managerial decisions necessary to manage risks. From the point of view of the insurer, the managerial processes to maximize efficiency are studied, within an acceptable relation with the regulator. From the perspective of the facilitating agency, the decisions necessary to be consistent with its mission and objectives are also identified. Prerequisite: INSU 201, 202 or 203

INSU 302 Reinsurance

3 Credits

The course identifies the purposes, modalities and tendencies of contemporary reinsurance. From this perspective the participants in the reinsurance market are also identified. From an operational point of view, strategies are defined and prepared to meet the objectives of the insurance business

using reinsurance as a tool. Finally, the course develops tasks of an administrative nature that reinsurance requires. Prerequisite: INSU 201, 202 or 203

INSU 303 Legal Environments

3 Credits

In this course, the focal points of regulations of the participating entities in the insurance industry in Puerto Rico are identified and examined. It also examines the impact of the dispositions of the law on planning and operation for insurers. Finally, recent developments in the area of integration of financial services are studied. The development of the analysis of the situation from a legal perspective is used as a learning tool. Prerequisite: INSU 201, 202 or 203

INSU 401 Seminar: Obtaining Certification

4 Credits

The purpose of this course is to facilitate the student's integration to the industry, promoting their accreditation as professionals. The mechanism of designation developed by the industry to distinguish its professionals is used. The course will expose the students to the existing alternatives and will motivate them to choose their preferred one. The course will guide the students at the beginning of their studies and will assist them through tutoring and monitoring. Prerequisite: INSU 301, 302 or 303

INSU 402 Advanced Solutions in Insurance

4 Credits

The course objective is to discuss and reflect those concepts, insurance products or risk management strategies that have been proposed as solutions to highly complex or impacting problems in the insurance industry. The performers of these solutions are the institutional insured in some cases and the insuring entities in others. Some of the topics included on this list of solutions are the finite risk plans, integrated risk plans, self-insurance, retroactive tariff plans, financial reinsurance and retroactive reinsurance. The course provides the students with the opportunity to develop a topic of their choice. It also demands the responsibility to support their proposals with research, in addition to transferring that knowledge to their colleagues.

Prerequisite: 301, 302 or 303

International Business

INBU 322 International Business

3 Credits

This course analyzes international business from a spirit of innovation, presenting knowledge conceptually based on the reality of the business. It considers national economic and cultural differences; in the international trade policies and institutions and the international monetary system. It also covers the current international business trends, developments and foreign direct investments.

Leadership

LEAD 215 Leadership and Organizational Innovation

3 Credits

The course will study the social and organizational context of leadership, including the discussion of skills, processes and responsibilities of effective leaders as promoter of organizational innovation and

positive action. It will stimulate the development of critical thinking and analytical skills applied to procedures of change in an organization, with the use of management tools for the design, execution, implementation, monitoring and evaluation of business innovation projects in their respective areas of knowledge.

LEAD 324 Development and Planning Professional Trainings

3 Credits

Introduces the students in the planning and implementation of workshops within an office setting. The course includes planning activities for a simple orientation of new employees, develop of workshops for employees in the use of new technologies, and develop administrative systems for the office as well as the workplace. Prerequisite: OFAS 306

Management

MANA 210 Management Theories

3 Credits

This course examines the principles and functions of the managerial process systematically. Analyze the role and behavior of human resources in an enterprise and its interrelations. Study the application of functional planning, organization, direction and control of managerial case studies. Prerequisite: BUSI 101

MANA 213 Personnel Administration

3 Credits

Study the basic functions in personnel administration: recruiting, selecting, training and personnel evaluation. In addition, this course will place emphasis on the importance of the personnel office and also of the supervisor and his / her relation with the employer. Prerequisite: BUSI 101

MANA 215 Human Behaviors in the Workplace

3 Credits

Analysis of theories related with human behavior in work environment. Discussion of the ethical aspects and organizational justice that underlies behavior and that facilitate healthy human relations and productivity in work environments. Examination of topics such as: attitudes, conflict management, stress, motivation and problem solving. The course integrates technology, exposition of topics, labor case study, semantic maps, collaborative group, and up-to-date work environment topics oral presentations. The responsible use of technology will be promoted.

MANA 230 Organizational Behaviors

3 Credits

Provide an overview of the individual's personal characteristics, focusing upon the organizational setting. In order to understand people's behavior in organizations, students will thoroughly cover the following topics: organizational theory and practices, individual characteristics and social processes, understanding group behavior and organizational objectives, organizational effectiveness and performance. Prerequisite: BUSI 101, MANA 210

MANA 316 Small Businesses

3 Credits

This course considers all the documentation needed to establish a business operation. The development of a business plan is discussed. Also, inventory planning and handling are considered as

well as the accounting system, financial analysis quality control and the evaluation of the methods for establishing the efficiency and productivity of employees, among others. The marketing of the business as well as of its products and services are fundamental aspects of this course.

MANA 321 Personnel Supervision

3 Credits

The Personnel Supervision course consists of the study and analysis of the personnel supervision functions, techniques and the necessary tools for an effective development and performance. The most outstanding subjects of this course will be planning, group communication, recruitment, training, personnel evaluations, employee discipline and counseling.

Prerequisite: MANA 213 and MANA 230

MANA 340 Operations and Productions Management

3 Credits

Principles of production management and importance of a successful strategic plan. Study techniques and tools to solve problems such as production design, objectives, policies, work methods, standards, plan location, layout, scheduling maintenance, inventory and quality control. Prerequisites: MANA 210, STAT 201

MANA 401 Business Policies

3 Credits

This course integrates knowledge acquired in marketing, finance, economy, accounting, production and human relations through the study of problems, cases and situations. The decision making process is emphasized. Include a study of business in all its stages and its social and environmental impact. Prerequisite: MANA 340

MANA 404 Labor Relations

3 Credits

This course is an introduction, analysis and evaluation of labor relations theory and practices. It takes into consideration both the global and local aspects of labor relations and evaluates the development and functions of organizations and unions. It emphasizes the principles and general practices of collective bargaining, its stages, strategies, interpretation and execution. The course compares processes and solutions of complaints, grievances, and mediations.

Prerequisite: BUSI 204,

MANA 405 International Management

3 Credits

This course studies the different management process structured from an international perspective. The managerial roles and functions are also discussed. The selection, recruitment, training, evaluation and promotion of employees are some of the issues analyzed in this course. One semester, 3 hours weekly. Prerequisite: MANA 210, 230, ECON 123

Marketing

MARK 133 Fundamentals of Marketing

3 Credits

This course studies marketing as a business function and social process, including problems and policies of manufacturers, wholesalers and retailers in the marketing of goods and services. Studies

channels of distribution, unfair competition, functions of sales departments, market research and analysis applied to economic conditions in Puerto Rico.

MARK 204 International Marketing

3 Credits

Analysis of the characteristics of international marketing and the factors influencing the marketing program. Includes international policies that determine decisions about products, channels of distribution and promotion strategies and legal and financial aspects of international markets.

Prerequisite: MARK 133

MARK 205 Creative Selling

3 Credits

The purpose of this course is to introduce the student to the development of sales strategies. The principles and sales techniques and their applications in business are analyzed thoroughly. The course emphasizes those elements, which the salesman should use to convince the customers to buy his products, and the presentation of the characteristics, advantages and uses of the product.

Prerequisite: MARK 133

MARK 206 Consumer Behavior

3 Credits

This course presents insights into consumer behavior and how it developed from other disciplines. Areas relevant to the field, such as: social and cultural influences to consumer behavior, individual influences and choice, the consumer decision processes, consumer's environment and consumerism are discussed. Offers practical applications of these concepts to marketing situations.

Prerequisite: MARK 133

MARK 251 Advertising and Promotion

3 Credits

This course introduces the student to the exciting world of advertising and promotion. In it the student will study the advertising process in detail, the advertising systems and methods of the past decades and the present one. Emphasis will be placed on the technical aspects of the media and the strategies to be developed. Prerequisite: MARK 133

MARK 302 Service Marketing

3 Credits

The purpose of this course is to analyze the basic principles of service management. It will focus on the services marketing mix and its peculiar characteristic. It includes special services such as: health, professional, bank, financial, sports, tourism, telecommunication and information systems services.

Prerequisite: MARK 133

MARK 320 Marketing Research

3 Credits

The purpose of this course is to examine the principles of marketing research as an essential tool to effective problem solving. This course provides the necessary tools to develop a complete marketing research. The student is exposed to the role, planning implementation and control of research, as a basis to the fulfillment of the marketing concept. Prerequisite: MARK 133 y STAT 201

MARK 350 Marketing in Digital Media**3 Credits**

This course will cover marketing, advertising and communication strategies in the new media landscape where traditional media (television, print) and the online social media co-exist. The focus of this course will be on understanding social media and social media marketing strategies, website promotion, e-mail and search marketing, search engine optimization, paid search, blogging, wikis, interactive TV, mobile marketing, QR codes, how to track their effectiveness, integrating digital marketing and mobile campaigns with traditional marketing within the global marketing mix. Legislation's, regulations and codes of practice and ethics are also examined. Students will be expected to have knowledge about the fundamentals of traditional advertising methods and strategies. Pre-requisites: MARK 133

MARK 401 Strategic Marketing**3 Credits**

The course focuses on decision making and problem solving techniques and skills through practice. The students will solve real life problems and will develop a final marketing plan, which will provide students the opportunity to apply concepts, tools and problem solving techniques.

Prerequisites: MARK 133

Medical Secretary with Medical Billing**MSEC 107 Medical Transcription****3 Credits**

The course develops skills for legal transcription of documents, and handled dictation from a computer. Includes legal terminology. Emphasis is placed on the production of legal documents using up to date technology. Prerequisites: OFAS 221 and SMED 114

MSEC 114 Medical Terminology and Coding**3 Credits**

This course covers the study of technical vocabulary including prefixes, suffixes, roots of medical terms as well as definitions and the most common diseases, its etiology signs and symptoms, diagnostic and evaluation, procedures and treatment. Also the student learns to assign numeric or alphanumeric codes to identify medical diagnoses and procedures on patient records. Emphasis is given to the application of coding techniques and medical billing.

MSEC 200 Medical Plan Billing**4 Credits**

This course will provide the skills necessary in completing HCEA forms and mastering the insurance claim form cycle. Practical information will be given on the features that are common to all insurance carriers and the features specific to Medicare, Medicaid, blue cross and others. It includes coding practices in prospective payment and current procedural coding, using Current Procedural Terminology (CPT).

Prerequisite SMED 114

MSEC 315 Health, Safety and Medical/Legal Aspects**3 Credits**

This course study one of the many uses of medical records: its use as legal protection to the patient and to the institution that provides the health care services. It covers the use of requirements and

legal principals of medical records in relation to its retention, security controls, and maintenance and divulges the confidential information regarding treatments, within the institution as well as outside. Emphasizes is given in the application of professional ethics and legal medical aspects in the health information system. It also studies personal safety procedures and students will apply concepts of protection and health promotion and disease prevention. It includes training in cardiopulmonary resuscitation techniques.

Office Systems

OFAS 104 Speedwriting **3 Credits**

Designed to develop skills in the speedwriting system through practice in reading, writing and dictation. Students will transcribe form abbreviated material. The student is expected to acquire speedwriting skills of 30 words per minute. The course emphasizes the use of grammar rules.

OFAS 121 Basic Keyboarding I **4 Credits**

Designed for the beginning students in Office Systems. Its major objectives are to develop touch control of the keyboard and proper techniques, to build speed and accuracy, and to provide practice in applying those basic skills to the formatting of basic parts of e-mails and business letter in block style. This course introduces students in the use of computer and word processing skills.

OFAS 122 Basic Keyboarding II **4 Credits**

This course continues developing basic skills and proper techniques to build speed and accuracy in the keyboard. Provide practice in applying those basic skills to the formatting of business correspondence, such as business letters, envelopes, reports, memos, email with attachments, and tables. The course is developed from exercises of application, research, cooperative work, use of technology and reflection. An introduction to Power Point will be applied. The course also develops good team working habits; improve good work habits and good interpersonal relationships. Prerequisite: OFAS 121

OFAS 204 Speedwriting Transcription **4 Credits**

The course is an in-depth review of the theory of the speedwriting system, where the student develops speedwriting skills of 40 words per minute. Skills are developed through practice in reading, writing and dictation. Transcription skills are integrated with correct language usage and typewriting skills to produce different types of business documents. Prerequisites: OFAS 104 approved, OFAS 221 approved or concurrently.

OFAS 208 Management Applications in the Office Automation **3 Credits**

Students will analyze the principles and goals of the automated office system from the point of view of an administrator. It studies the administrative point of view in establishing and implementing a plan for an automated office system. The course emphasizes the analysis of situations and decision making.

OFAS 221 Advanced Word Processing I**4 Credits**

The course emphasizes the development of advanced skills and knowledge to produce information using a microcomputer with a word processing program. The course continues developing of basic skills and emphasizes the formatting of various kinds of business correspondence, reports, tables, electronic forms, and desktop publishing projects from arranged, unarranged, and rough-draft sources. Speed and accuracy will be increased in rough-draft copy, statistical script and handwriting copy. Emphasis is given to proofreading, good habits, organization of work and good interpersonal skills.

Prerequisite: OFAS 122

OFAS 222 Advanced Word Processing II**4 Credits**

The course continues developing advanced skills and knowledge to produce information integrating Word, Excel, Power Point, and Internet. The student use their knowledge and skills in producing and solving problems in different offices such as, Word Processing Centers, Public Relations and Marketing Department, Human Resources Department, Accounting, Legal and Medical Departments. Students provide solutions to problems within a minimum period of time without direct supervision. Proofreading, good work habits and good interpersonal relations are emphasized. Prerequisites: OFAS 221 and OFAS 291

OFAS 230 Machine Transcription**4 Credits**

Designed to develop the student's proficiency in the use of transcribing equipment. Emphasis is on application of Spanish language skills through transcription of business correspondence. Proofreading and accuracy in transcription will be emphasized.

Prerequisite: OFAS 221 approved or concurrently.

OFAS 290 Record Management**3 Credits**

Application of the systematic analysis and control of business records from their creation up to their final disposition. Includes the planning, organization and control of documents in different systems as well as the following applications: database filing, microfilm, magnetic registers, etc. It also includes the discussion, the application of procedures and policies, the discussions of readings, supported critics, investigations and oral presentations applying technology, problem solving and interactive activities.

OFAS 291 Modern Office Procedures**3 Credits**

Develops the essential office skills for effective performance in the business world. Emphasizes the need for develop good working habits, decision making and work organization. The course emphasizes the development of business vocabulary and the application of office procedures.

Prerequisite: OFAS 122

OFAS 300 Document Generation**3 Credits**

The course examines the varied and different methods utilized to create and produce documents (correspondence) by administrative personnel. Emphasis is placed in the development of different

types of documents utilizing common means of creation, such as machine dictation, handwritten and rough drafts and computer keyboarding composition. Prerequisite: OFAS 221 approved or concurrently.

OFAS 303 Document Production

3 Credits

The course develops keyboarding skills in the production of business documents at its highest level. It includes the preparation of complex rough drafts documents such as: business letters with two or more pages, circular letters, memorandums, reports, administrative communications, business forms and tables. In-basket exercises will be used as the means to develop skills in the decision-making process and skills in how to establish priorities. Prerequisite: OFAS 221

OFAS 306 Software Applications in Desktop Publishing and Presentations

3 Credits

The course provides the students with the skills and techniques to create pages with all kinds of design elements, such as formatted text, lines, photographs and pictures using the desktop publishing program. Also, the students can create print publications, such as newsletters, brochures, activities programs, invitations, postcards, professional identification cards, and calendars. Using the tools and features of the Presentation Program the students will create effective presentations integrating texts, photographs, tables, graphic and sound. Prerequisite: OFAS 122

OFAS 323 Spreadsheet and Database Applications

3 Credits

This course is designed to introduce the students to basic and intermediate concepts and applications of spreadsheets and databases. The students will learn to use various electronic spreadsheet applications as well as create and manage database programs, data files, and produce documents and reports. Emphasis is given to good working habits, organization of work, use of technology and good working interpersonal skills. Prerequisite: OFAS 122

OFAS 326 Applications Integration

4 Credits

Application of advanced functions for the Microsoft Office programs integration for the creation of documents. Includes word processing, data sheet and database, presentations as well as e-mail skills. The course is developed by means of cooperative work, supported critics, investigations and oral presentations. Prerequisites: OFAS 221, 306 and 323

OFAS 405 Specialized and International Documents

3 Credits

Student will apply computer skills and knowledge to produce international office formats documents and in legal and medical fields. The course is developed through work simulation as an Administrative Assistant for businesses located in Canada, Mexico, France, Germany and Japan. Also includes specialized documents for the medical and legal offices. Emphasis is given to good interpersonal relationships. Includes application exercises, information search on the Internet and other sources, cooperative work, technology management, adapt to different offices workplace and reflection.

OFAS 491 Administrative Office Procedures
3 Credits

The course studies the process of administration, organization and communication. It emphasizes the following areas of office administration: personnel selection, professional development, supervision, motivation, performance-assessment, analysis of positions, job evaluation, salaries, measuring work performed and employee productivity. The course is to develop through the analysis of situations, case evaluations and decision-making. Prerequisite: OFAS 221 approved or concurrently

PEPE 226 Protocols and Etiquette in Professional Environments
3 Credits

This protocol and etiquette course covers professional behavior, networking and nonverbal communication topics. It emphasizes business etiquette as a cornerstone of effective communication, healthy human relations and motivation in work environments. This practical and interactive course prepares the student to provide excellent service and represent their organization professionally.

Practicum

MANA 482 Business Work Experience Practicum
3 Credits

This course is designed for students working toward the Bachelor's Degree in Business Administration. Requires a minimum of 15 hours per week of supervised work in government, banking, business offices, or in a public or private organization. The practice is supplemented with readings, reports and group discussions. One semester, one hour lecture weekly. Prerequisite: For Bachelor's Degree, a minimum of 24 credits in the major courses.

OFAS 392 Office Practicum
3 Credits

Application of concepts and skills related to the Office System career through supervised work within a community office. It requires a minimum of 168 hours in office internship during the semester. Emphasis is given in developing initiative and assuming responsibility. Includes seminar course to reinforce interpersonal skills such as; cooperative work, good manners, soft skills, create oral presentations and effective Internet skills. Prerequisites: OFAS 221, OFAS 290, OFAS 291 and 13 credits in the major courses.

Statistics

STAT 201 Business Statistics
3 Credits

Introduction to Business Statistics. This course is basic descriptive statistics: frequency distribution, measure of dispersion, time-series, index numbers, probability theory and measures of central value. Prerequisite: MATH 120 or MATH 130

Web Design

WEBD 101 HTML

3 Credits

This course introduces students to building a Web page and teaches the basic HTML tags needed, to add color and graphics, or add links to other Web pages. Prerequisite: COMP 110

WEBD 201 WEB Programming Tools

3 Credits

This course introduces the student to the various tools used to develop today's web pages. It also covers basic web site administration. This course is taught in a laboratory and includes tools such as Dreamweaver, and other programs that help the development of web sites and site administration.

Pre-requisites: 6 credits in the major courses.

WEBD 203 WEB Animations

3 Credits

This course includes the use of advanced computerized programs (Adobe Flash) for the creation of animated and interactive web sites. It covers techniques to create professional Flash animations, animated GIF, interactive documents, advertisements, web page components and full animated and interactive web sites. Pre-requisite: WEBD 201.

UNIVERSIDAD DEL ESTE
SCHOOL OF EDUCATION



UNDERGRADUATE CATALOG
2013-2014

SCHOOL OF EDUCATION

The School of Education is home to the UNE graduate and undergraduate academic programs that prepare teachers, educational leaders and other professionals in education. Also, it is responsible for the fundamental and professional courses for obtaining the corresponding State Teaching Certification (Professional Pedagogical Component).

The School guides and collaborates with those initiatives that are inherent to its body of knowledge, including the graduate programs in Education. In addition, it promotes the integration of purposes between different units that offer programs and projects in education, at the main campus, at the off-campus centers, as well as in the School of Professional Studies (AHORA). The School's goal is to use continuous assessment as an effective means of objective and true decision-making. According to the Institutional Mission, the learning paradigm, along with the constructivist educational approach, and the cognitive-humanistic theoretical framework, are the core of the pedagogical operation of the School of Education.

The development of the School's theoretical framework is supported in the study of foundations of education inherent to the educational effort. The philosophical, sociological and psychological foundations of the School are based on support for the learning paradigm under which several focal points have been developed. Among those used and modeled by the School in its educational actions are:

- (1) the cognitive – humanistic theories;
- (2) the constructivist paradigm, and
- (3) the new focus of studies on learning based on the brain, multiple intelligence, emotional intelligence, moral values and education, among others.

Also, the School has developed by integrating the foundations of education (theoretical and applied) that are inherent and essential to its effort, which is to educate. Each of the foundations of education is projected in some manner in the organization of the School, especially in its curriculum and educational activities. The foundations allow flexible development and the agility required by a curriculum in education.

VISION

Beliefs and Values

The School of Education is by nature an organic academic – administrative unit; that is, where life is given and a system of common values, goals and objectives are shared in an interrelated and co-existing manner. The values are attributes or elements to specific modes of behavior or states of existence, personal or social, individual or in groups (Goldstein, Nolan & Pfeiffer, 1992). Using this premise, the School shares, develops its culture, gives meaning to its existence, facilitates its processes and aligns with the principles that guide the UNE in its new Mission. These principles, **wisdom, justice, honor and freedom**, are the pillars of the conduct and the general development of the School.

The School believes in the individual and collective capacities of all of its constituents, who are, the faculty, the students, the administrators, the support professionals and the community in general. In its inherent educational endeavor, it places emphasis on students as the center of all the processes, academic and administrative.

MISSION

“...To promote formal educational preparation, the personal and professional development and learning for all their lives of future teachers and professionals in education”. This is attained by means of transformative learning based on the building of knowledge and the development of critical - creative thinking. The academic programs respond to the study about the needs in the reality of Puerto Rican education. Pedagogical theory, early internships, formal teaching practice, community service and research are integrated throughout the curriculum as a means of active and applied learning. Integrating into the professional community, both in the government and private sectors, as well as into the general community by developing collaborative learning communities, is a priority interest for the School. Assessment and access to information through different sources are the principal means that support academic, administrative, and service activities aimed at the student teachers.

GOALS

To achieve its Mission, the School is dedicated to developing an educational environment favorable for achieving the following strategic goals:

1. Develop a culture of achievements appropriate for the university academia...

...Based on common values, beliefs and customs, that allow the integration of all the components, collaborative discussion, measured and decisive dialogue about affairs relevant to the teaching endeavor, that shows new venues to celebrate the achievements and learn from the opportunities, and that the administrative and budget processes be based on the discussion of its constituents according to the work plan.

2. Provide to the students an academically transformative environment so they can achieve their full and whole development...

...So they can be prepared for life as Puerto Rican and global citizens, to exercise leadership and face a technologically changing and dynamic occupational world.

3. Develop in the students the pedagogical – professional knowledge and skills necessary in the fundamentals of education, emphasizing writing and reading, as well as in the specialties, through a flexible and updated curriculum...

...That will emphasize teaching, obtaining their Professional Certification, learning assessment processes, inquiring, team work experiences derived from cooperative learning and from manipulative and field experiences, among others; and that incorporates elements of access, evaluation and application of information to lead them to the solution of problems, personal as well as professional and communitarian.

4. Develop, implement and evaluate undergraduate academic offerings to contribute to the development plan of the School...

...In tune with the occupational trends and identified needs, strengths and opportunities, to achieve academic competitiveness necessary for the sustained development towards quality and excellence.

5. Obtain the specialized accreditations in the corresponding academic offerings...

...To allow an updated curricular development, to be in tune with the professional changes and trends, to allow occupational mobility for our alumni, to position us as an institution of prestige and participate in the development of professions related to education.

6. Maintain an active and dynamic faculty that develops a variety of pedagogical activities, including research, publishing and writing fundraising proposals...

...For its personal and professional development; to integrate into the organizational development by means of implementing and evaluating a plan for continuous training and professional development for the constituents, so as to achieve innovation and efficiency in the teaching and administrative processes.

7. Maintain and continue developing strategic alliances and collaborative agreements...

...That allow to contribute to the development of universal values and socioeconomic of the Island, to promote strengthening of the academic programs and the creation of advisory boards, in addition to integrating efforts of mutual collaboration.

8. Develop community service...

...As a means of contributing to a better quality of life in the surrounding communities and serve the public and private schools from pre-school and elementary, through high school.

FACULTY

Aponte Medina, Vanessa, Instructor

MA Ed., Curriculum and Teaching in Early Childhood Education, Universidad del Este, Carolina Campus

Arribas Rivera, María del Carmen, Associate Professor

Ed. D., Curriculum and Teaching in Spanish, University of Puerto Rico, Rio Piedras Campus

Bayuelo Flórez, Ezequiel de J., Associate Professor

Ed. D., Curriculum and Teaching in Science, University of Puerto Rico, Rio Piedras Campus

Cintrón Cabrera, José R., Associate Professor

Ed. D., Education Administration, Inter American University, Metro Campus

Figueroa Camacho, Julio, Instructor

MA Ed., Physical Education, Universidad Metropolitana, Cupey Campus

Figueroa Rosario, Amarilis, Assistant Professor

Ed. D., Administration and Supervision, University of Puerto Rico, Rio Piedras Campus

Huertas Solá, Mildred, Full Professor

Ed. D., Curriculum and Teaching in Science, University of Puerto Rico, Rio Piedras Campus

Martínez Plana, Mayra, Associate Professor

Ph. D., Psychology, University of Puerto Rico, Rio Piedras Campus

Reeves García, Luis R., Instructor

MA Ed., Physical Education, Inter American University, Metro Campus

Ruiz Limardo, Noemí, Associate Professor

Ed. D., Curriculum and Teaching in Mathematics, University of Puerto Rico, Rio Piedras Campus

ADMINISTRATIVE STAFF AND SUPPORT PERSONNEL

Arribas Rivera, María del Carmen, Dean

Ed. D., Curriculum and Teaching in Spanish, University of Puerto Rico, Rio Piedras Campus

Ruiz Limardo, Noemí, Associate Dean

Ed. D., Curriculum and Teaching in Mathematics, University of Puerto Rico, Rio Piedras Campus

MA Ed., Administration and Supervision, University of Phoenix, Puerto Rico Campus

Rodríguez García, Marybell, Director of Preschool Center

MA Ed., Early Childhood Education, University of Puerto Rico, Rio Piedras Campus

Urbina Fuentes, Carmen A., PCMAS Effectiveness Program Director

MS, Administrative Education Postsecondary Level, Universidad del Este, Carolina Campus

Meléndez Robles, Aurora, Practice and Internships Coordinator

MA Ed, Administration and Supervision, University of Puerto Rico, Rio Piedras Campus

Meléndez Bayala, Denisse, Academic Coordinator

MBA, Management, Universidad del Turabo, Gurabo Campus

Carmona Torres, Lorraine, CEDEMI Technician

BA Ed., Early Childhood Education, Universidad del Este, Carolina Campus

Álamo Tavárez, Wanda I., Administrative Assistant

MA, Office Systems, Inter American University, Metro Campus

Dávila Villanueva, Ineris, Administrative Assistant

BBA, Administrative Secretary, Universidad del Este, Carolina Campus

Figuerola Cruz, Mariela, Receptionist

BOS, Office Systems, University of Puerto Rico, Bayamón Campus

PROGRAMS DESCRIPTIONS

Bachelor in Arts in Education

Preschool and Primary Education (0 thru Third grade)

The alumni of the Bachelor of Arts in Education with a major in Preschool and Primary Education may have several employment opportunities working with children from 0 to kinder level (Preschool) and Kinder to third grade (Primary). Graduates may work directly with children in public and private centers and schools. Those that work as teachers for the Department of Education will work at the following levels: pre-school and primary. They will also have employment opportunities with programs such as: Early Head Start, Head Start, early preschools and public and private preschool centers. Alumni will also develop knowledge and experience in order to be qualified to establish their own preschool center.

Bachelor in Sciences in Education

Physical Education (K-12)

The Physical Education Program of the School of Education offers a diverse curriculum aimed at the integral development of future teachers. This bachelor degree is aimed at developing professionals capable of working in physical education K-12 integrating modern scientific concepts of exercises, movement, group sports, individual and team sports, as well as other manifestations of human movement. The Program's alumni will be qualified as excellent educators that perform effectively in educational related areas, such as: public and private schools, health services organizations, institutions related to sports, as well as the general community.

This model allows in the future physical education teachers the professional skills with a scientific base, broad curricular schemes and a wide repertory of experiences of teaching and learning. The model will include knowledge of the scientific base that will allow the physical educator a broad understanding of the processes of growth and development from birth to adolescence. The broad knowledge of curricular schemes from early childhood to secondary levels will allow physical educators to detect the needs of their students, be they physical, cognitive, or affective and motor, in addition to enriching the formal curriculum with its movement activities.

Bachelor in Arts in Education

Teaching English as a Second Language Elementary level

The student who graduates from this program will be an academically well-prepared professional that will perform with success and will contribute favorably to the development of ESL teaching in the nation's elementary level. The student's profile is based on legislation and the public policy documents that correspond to the program along with the NCLB regulations for Highly Qualified Teachers. In order to be considered highly qualified, teachers must have a bachelor's degree, full state certification or licensure, and prove that they know each subject they teach. To demonstrate competency, teachers must prove that they know the subject they teach by having a major in the subject they teach, credit equivalent to a major in the subject, passage of a state developed test, an advanced certification, or a graduate degree. Before certification, each candidate must take and pass an English Language Proficiency test administered by the Puerto Rico Department of Education. High, Objective, Uniform State Standard of Evaluation (HOUSSE) is an additional way that teachers have to demonstrate subject matter competency. This proof may consist of a combination of teaching experience, professional development, and knowledge in the subject achieved over time in the profession.

Bachelor in Arts in Education**Teaching English as a Second Language Secondary level**

The student who graduates from this program (either level) will be an academically well-prepared professional that will perform with success and will contribute favorably to the development of ESL teaching in the nation's secondary level. The student's profile is based on legislation and the public policy documents that correspond to the program along with the NCLB regulations for Highly Qualified Teachers. In order to be considered highly qualified, teachers must have a bachelor's degree, full state certification or licensure, and prove that they know each subject they teach. To demonstrate competency, teachers must prove that they know the subject they teach by having a major in the subject they teach, credit equivalent to a major in the subject, passage of a state developed test, an advanced certification, or a graduate degree. Before certification, each candidate must take and pass an English Language Proficiency test administered by the Puerto Rico Department of Education. High, Objective, Uniform State Standard of Evaluation (HOUSSE) is an additional way that teachers have to demonstrate subject matter competency. This proof may consist of a combination of teaching experience, professional development, and knowledge in the subject achieved over time in the profession.

Bachelor in Arts in Education**Special Education (K-12)**

The student who graduates from this program will be academically well prepared to work as a special education teacher in elementary and secondary level. This program will form a citizen with a base on knowledge about the behavior and development of the human being, especially on exceptional children and adolescents. The student who pursuit this major, develops the necessary skills, competencies, knowledge and values to manage the professional demands of this field according to the sensibility, law and legislations that protect this population. Through this program, it is expected that the educator contributes to improve the quality of life of the exceptional population, to develop effective communication skills and identify solutions for social problems. Also, it is expected that the educator develops a comprehensive and tolerance attitude towards the cultural diversity and respect to the human being.

MINORS/SPECIAL CERTIFICATIONS:

Teaching of Infant and Toddlers (0-3 years)

Universidad del Este is the only post-secondary education institution in Puerto Rico that offers the certification of Teaching of Infant and Toddlers for those teachers, in-service and pre-service, who wants to develop additional competencies in this field. The twenty one credits (**21 credits**) clusters of courses recommended by the School of Education are offered in the eight weeks part of term modality. A student who wants to pursue this cluster obtains a minor in this field.

Teaching Primary Education (K-3)

Universidad del Este offers twenty one credits (**21 credits**) of courses for those teachers, in service and pre service, who wants to develop additional competencies in grades kinder through third grade (K-3). The courses recommended by the School of Education are offered in the semester or eight weeks part of term modality. A student who wants to pursue this cluster obtains a minor in this field.

School Social Work

Universidad del Este offers the necessary education courses for Social Workers to be certified as School Social Worker. The cluster of five courses (**15 credits**) recommended by the School of Education is offered regularly each semester. A student who wants to pursue this cluster obtains a minor in this field.

Special Education (K-12)

Universidad del Este offers the clusters of twenty one credits (**21 credits**) in special education for those teachers, in-service and pre-service, who wants to develop additional competencies in this field. The twenty one credits clusters of courses recommended by the School of Education are offered in the eight weeks part of term modality. A student who wants to pursue this cluster obtains a minor in this field. The competencies, skills and attitudes developed in this minor, complements the academic areas in the integral development of K-12 students. These knowledge support the attention needed of other populations in different social contexts.

Teaching English as a Second Language at Elementary Level

Universidad del Este offers the clusters of eighteen credits (**18 credits**) in the teaching of English as a second language for those teachers, in-service and pre-service, who wants to develop additional competencies in this field and level. The eighteen credits clusters of courses recommended by the School of Education are offered in the eight weeks part of term modality. A student who wants to pursue this cluster obtains a minor in this field. The competencies, skills and attitudes developed in this minor, complements the academic areas in the integral development of K-6 students. These knowledge support the attention needed of other populations in different social contexts.

Teaching English as a Second Language at Secondary Level

Universidad del Este offers the clusters of eighteen credits (**18 credits**) in the teaching of English as a second language for those teachers, in-service and pre-service, who wants to develop additional competencies in this field and level. The eighteen credits clusters of courses recommended by the School of Education are offered in the eight weeks part of term modality. A student who wants to pursue this cluster obtains a minor in this field. The competencies, skills and attitudes developed in

this minor, complements the academic areas in the integral development of 7-12 students. These knowledge support the attention needed of other populations in different social contexts.

These are in addition to the general admissions requirement to enter at UNE.

-High School grade point average (GPA) of 2.90.

Teaching English as a Second Language majors have an additional requirements:

-A score of 575 or more in the English Component of the College Board Entrance Examination.

-Middle or Senior level in the ELLIS Placement Test administered by the Resource Center for Educational Excellence (CREE, Spanish acronym).

All the Admissions requirements are subject to change from one academic year to the next in accordance to state mandatory regulations. The Institution must meet and comply with these regulations in order to offer the academic programs in education.

TEACHER PREPARATION PROGRAM REQUIREMENTS

Special rules and remarks for all candidates, applicants and students enrolled in any major of the teacher preparation program at the undergraduate level at Universidad del Este

1. Due to constant new requirements and accountability initiatives from the US Department of Education, the PR Department of Education, the PR Council of Education and other agencies, School's curricula, rules and regulations, and requirements could experience changes in many instances during any given period or cycle of the academic year. Any changes that take place affecting the students teaching and learning processes will be communicated immediately by the School officials.
2. Students are responsible to meet any new requirement and share it with future teachers colleagues (Please, see Student's Rules and Regulations Manual). Please, visit our Office or ask Program's officials or faculty for any doubt.
3. According to the Puerto Rican legislation and in compliance with the Puerto Rico's Department of Education 2012 Regulation for Teacher Certification Bulletin, to obtain a permanent teaching credential/license every candidate must pass the teacher certification examination board titled *Pruebas para la Certificación de Maestros de Puerto Rico* (PCMAS by their Spanish Acronym), (*Puerto Rico Teacher Examination Certification*) administered by The College Board for Puerto Rico and Latin America.

The Department of Education of the Commonwealth of Puerto Rico establishes that the future teacher candidate must possess a 3.00 Graduation Index to apply for a teaching position in the public educational system.

4. All courses in each academic program must be approved with a minimum of "B".
5. All students in each academic program must approve a Pre-Practicum course before the application for Practicum.

6. All Practicum and Seminar courses shall be taken concurrently. School's officials and faculty staff would assign practicum centers and schools.
7. All Education students who are going to take (*Puerto Rico Teacher Examination Certification- Prueba para la Certificación de Maestros – PCMAS*) given in March of each year, must take and approve two capstones courses: EDUC 435-Interdisciplinary Seminar and EDUC 436-Pedagogical Integration Seminar in order to enroll in the Practicum course.
8. The School of Education is not responsible for students taking the Teaching license certification (*Pruebas para la Certificación de Maestros PCMA'S*) without the necessary prerequisites and authorization by the Dean.

GRADUATION REQUIREMENTS OF ALL TEACHER EDUCATION PROGRAMS

The students must have satisfactorily completed the prescribed number of credits with a grade point average (GPA) of 3.00 (B) or higher. All graduation requirements are subject to change from one academic year to the next in accordance to state mandatory regulations. The Institution must meet and comply with these regulations in order to graduate the student from the education degree program he/she is studying.

BACHELOR'S DEGREES

Bachelor in Arts in Education

Major in Preschool and Primary Education (0 through Third grade)

121 Credits	Credits
General Education	33
Complementary General Educational Component	12
Professional Educational Component	36
Major Courses	40

General Education Component		33
HUMA 230	Appreciation of the Arts and Music	3
SOSC 242	Political and Socio-Economic Principles of Globalization	3
SPAN 115+	Reading, Writing and Oral Communication in Spanish I	
SPAN 275	Advance Writing in Spanish	3
ENGL 115	College Reading, and Writing I	3
ENGL 116	College Reading, and Writing II	3
MATH 103	Basic Mathematic I	3
MATH 104	Basic Mathematic II	3
SOSC 113	Analysis of Cultural and Historical Processes	3
HUMA 224	Contributions of The Great Civilizations To The World: Ancient, Medieval, And Modern	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Complementary General Educational Component		12
UNRE 101	Concepts And Principles of Research	3
HIST 255	Analysis of Historical Processes of Puerto Rico	3
HIST 274	History of The United States	3
BIOL 252	Life on Planet Earth: Origins, Characteristics, And Conditions	3

Professional Educational Component		36
EDUC 171	Human Growth and Development I	3
EDUC 172	Human Growth and Development II	3
EDUC 202	Integration of Technology In Education	3
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 205	Introduction to Assistive Technology	3

EDUC 300	Psychological Foundation of Education	3
EDUC 305	Sociological Foundation of Education	3
EDUC 403	Curriculum Design	3
EDUC 409	Planning and Evaluation of Teaching/Learning Process	3
EDUC 420	Philosophical Foundations of Education	3
EDUC 435	Interdisciplinary Seminar	3
EDUC 436	Pedagogical Integration Seminar	3

Major Courses		40
ECED 173	Introduction to the Early Childhood Education (0-8 years)	3
ECED 200	Game and the Arts in the Infant Development as Educational Strategy (0-8 years)	3
ECED 201	The Family as Principal Axis of a Community of Learning (0-8 years)	3
ECED 308	Management of the Early Childhood Education Environment (0-8 years)	3
ECED 310	Perceptual-Motor Development, Learning and the Brain	3
ECED 311	Cognitive and Logic – Mathematical Development (0-8 years)	3
EDUC 410	Teaching of Mathematics at Primary level (K-3)	3
EDUC 411	Teaching of Science at Primary level (K-3)	3
EDUC 412	Teaching of Social Studies at Primary level (K-3)	3
EDUC 413	Teaching of English as a Second Language at Primary level (K-3)	3
EDUC 414	The Arts of Language in Primary Level (K-3)	3
ECED 441	Pre-Practicum in Early Childhood and Primary Education	3
ECED 442	Seminar in Teaching Practice	1
*ECED 443 or ECED 444	Practicum in Early Childhood Education (0-5 years) or Practicum in Primary Level Education (K-3)	3

Important Notes:

1. + Course with Laboratory
2. Sophomore, junior and senior students must obtain an academic evaluation from academic coordinator before the enrollment or registration process.
3. Transferred students must meet the UNE's residence norm.
4. * Teaching Practicum, according to student interest level: ECED 443: Preschool, ECED 444: Primary (K-3).
5. All the Professional Educational Component and major courses must be approved with a **minimum of B**. The minimum graduation **GPA is 3.00**.
6. Students interested in an additional Infant and Toddlers minor must take: ECED 309, 330, 331, 332 y 333.

Bachelor in Arts in Education
Major in Special Education (K-12)

118 Credits	Credits
General Education	33
Complementary General Educational Component	12
Professional Educational Component	36
Major Courses	37

General Education Component		33
HUMA 230	Appreciation of the Arts and Music	3
SOSC 242	Political and Socio-Economic Principles of Globalization	3
SPAN 115+	Reading, Writing and Oral Communication in Spanish I	3
SPAN 275	Advance Writing in Spanish	3
ENGL 115	College Reading, and Writing I	3
ENGL 116	College Reading, and Writing II	3
MATH 103	Basic Mathematic I	3
MATH 104	Basic Mathematic II	3
SOSC 113	Analysis of Cultural and Historical Processes	3
HUMA 224	Contributions of The Great Civilizations To The World: Ancient, Medieval, And Modern	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Complementary General Educational Component		12
UNRE 101	Concepts and Principles of Research	3
HIST 255	Analysis of Historical Processes of Puerto Rico	3
HIST 274	History of The United States	3
BIOL 252	Life on Planet Earth: Origins, Characteristics, And Conditions	3

Professional Educational Component		36
EDUC 171	Human Growth and Development I	3
EDUC 172	Human Growth and Development II	3
EDUC 202	Integration of Technology In Education	3
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 205	Introduction to Assistive Technology	3
EDUC 300	Psychological Foundation of Education	3
EDUC 305	Sociological Foundation of Education	3
EDUC 403	Curriculum Design	3
EDUC 409	Planning and Evaluation of Teaching/Learning Process	3

EDUC 420	Philosophical Foundations of Education	3
EDUC 435	Interdisciplinary Seminar	3
EDUC 436	Pedagogical Integration Seminar	3

Major Courses		37
SPED 101	Teacher Preparation in Special Education	3
SPED 103	Learning Disabilities	3
SPED 203	Nature, Needs and Behavior Modification in the Special Education Student With Attention Disorder Deficit	3
SPED 204	Nature, Needs and Behavior Modification of the Gifted Student	3
SPED 205	Integration of the Fine Arts in Special Education	3
SPED 208	Methodology, Adaptations and Adjustment in the Teaching of Mathematics	3
SPED 210	Methodology, Adaptations and Adjustment in the Teaching of Reading and Writing Elementary Level (K-6)	3
SPED 211	Methodology, Adaptations and Adjustment in the Teaching of Reading and Writing Secondary Level (7-12)	3
SPED 295	Evaluation and Assessment in Students with Special Needs	3
SPED 300	Neuroscience of Learning	3
SPED 404	Teaching Pre-Practicum in Special Education	3
SPED 405	Teaching Practicum in Special Education	3
SPED 406	Seminar on Teaching Practicum in Special Education	1

Important Notes:

1. + Course with Laboratory
2. Sophomore, junior and senior students must obtain an academic evaluation from academic coordinator before the enrollment or registration process.
3. Transferred students must meet the UNE's residence norm.
4. All the Professional Educational Component and major courses must be approved with a **minimum of B**.
The minimum graduation **GPA is 3.00**.

Bachelor in Science in Education
Major in Physical Education (K-12)

121 Credits	Credits
General Education	33
Complementary General Educational Component	12
Professional Educational Component	36
Major Courses	40

General Education Component		33
HUMA 230	Appreciation of the Arts and Music	3
SOSC 242	Political and Socio-Economic Principles of Globalization	3
SPAN 115+	Reading, Writing and Oral Communication in Spanish I	
SPAN 275	Advance Writing in Spanish	3
ENGL 115	College Reading, and Writing I	3
ENGL 116	College Reading, and Writing II	3
MATH 103	Basic Mathematic I	3
MATH 104	Basic Mathematic II	3
SOSC 113	Analysis of Cultural and Historical Processes	3
HUMA 224	Contributions of the Great Civilizations to the World: Ancient, Medieval, And Modern	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Complementary General Educational Component		12
UNRE 101	Concepts and Principles of Research	3
HIST 255	Analysis of Historical Processes of Puerto Rico	3
HIST 274	History of The United States	3
BIOL 252	Life on Planet Earth: Origins, Characteristics, and Conditions	3

Professional Educational Component		36
EDUC 171	Human Growth and Development I	3
EDUC 172	Human Growth and Development II	3
EDUC 202	Integration of Technology In Education	3
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 205	Introduction to Assistive Technology	3
EDUC 300	Psychological Foundation of Education	3
EDUC 305	Sociological Foundation of Education	3
EDUC 403	Curriculum Design	3
EDUC 409	Planning and Evaluation of Teaching/Learning Process	3
EDUC 420	Philosophical Foundations of Education	3
EDUC 435	Interdisciplinary Seminar	3

EDUC 436	Pedagogical Integration Seminar	3
----------	---------------------------------	---

Major Courses		40
PHED 100	History and Philosophy of Physical Education	3
PHED 211	Theory, Skills and Teaching of Individual Sports	3
PHED 213	Foundations of Kinesiology and Physical Education	3
PHED 217	Physical Education for Special Populations	3
PHED 221	Theory, Skills and Teaching of Group Sports	3
PHED 240	Health, Safety and Wellness of Physical Education	3
PHED 301	Anatomy and Physiology of Physical Education	3
PHED 311	Curriculum and Methodology of Physical Education (K-6)	3
PHED 321	Curriculum and Methodology of Physical Education (7-12)	3
PHED 331	Evaluation and Measurement in Physical Education	3
PHED 340	Management and Supervision of Physical Education Program	3
PHED 406	Pre-Practicum In Physical Education	3
PHED 409	Seminar of Teaching Practice In Physical Education	1
*PHED 410 o PHED 411	Elementary Physical Education Practicum Secondary Physical Education Practicum	3

Important Notes:

1. + Course with Laboratory
2. Sophomore, junior and senior students must obtain an academic evaluation from **academic** coordinator before the enrollment or registration process.
3. Transferred students must meet the UNE's residence norm.
4. * Teaching Practicum, according to student interest level: PHED 410: Elementary, PHED 411: Secondary.
5. All the Professional Educational Component and major courses must be approved with a **minimum of B**.
The minimum graduation **GPA is 3.00**.

Bachelor in Arts in Education
Major in Teaching English as a Second Language Elementary level

118 Credits	Credits
General Education	33
Complementary General Educational Component	12
Professional Educational Component	36
Major Courses	34
Electives	3

General Education Component		33
HUMA 230	Appreciation of the Arts and Music	3
SOSC 242	Political and Socio-Economic Principles of Globalization	3
SPAN 115+	Reading, Writing and Oral Communication in Spanish I	3
SPAN 275	Advance Writing in Spanish	3
ENGL 125*	Advanced English I	3
ENGL 126	Advanced English II	3
MATH 103	Basic Mathematic I	3
MATH 104	Basic Mathematic II	3
SOSC 113	Analysis of Cultural and Historical Processes	3
HUMA 224	Contributions of The Great Civilizations To The World: Ancient, Medieval, And Modern	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Complementary General Education Component		12
UNRE 101	Concepts And Principles of Research	3
HIST 255	Analysis Of Historical Processes Of Puerto Rico	3
HIST 274	History Of The United States	3
BIOL 252	Life On Planet Earth: Origins, Characteristics, And Conditions	3

Professional Educational Component		36
EDUC 171	Human Growth and Development I	3
EDUC 172	Human Growth and Development II	3
EDUC 202	Integration Of Technology In Education	3
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 205	Introduction To Assistive Technology	3
EDUC 300	Psychological Foundation Of Education	3
EDUC 305	Sociological Foundation Of Education	3
EDUC 403	Curriculum Design	3
EDUC 409	Planning And Evaluation Of The Teaching Learning Process	3

EDUC 420	Philosophical Foundations Of Education	3
EDUC 435	Interdisciplinary Seminar	3
EDUC 436	Pedagogical Integration Seminar	3

Major Courses		34
ENED 105	Introduction To TESL	3
ENED 204	Children's Literature In The ESL Classroom	3
ENGL 225	Introduction to Linguistics	3
ENGL 226	Grammatical Structure Of English	3
ENGL 310	English Phonetics	3
ENED 320	Teaching Reading And Writing In A Second Language	3
ENED 322	English Curriculum And Teaching At The Elementary Level	3
ENED 401	Teaching Oral Communication In English Elementary Level	3
ENGL 360	Contrastive Analysis Of English And Spanish	3
ENED 429	Pre-Practicum In Elementary Level TESL	3
ENED 430	Elementary Level TESL Practicum Seminary	1
ENED 431	Elementary Level TESL Practicum	3

Electives		3
ENGLISH ELECTIVE	Selected Between These Alternative: ENGL 230, ENGL 410, ENED 205, ENED 402	3

Important Notes:

1. + Course with Laboratory
2. Sophomore, junior and senior students must obtain an academic evaluation from academic coordinator before the enrollment or registration process.
3. Transferred students must meet the UNE's residence norm.
4. All the Professional Educational Component and major courses must be approved with a **minimum of B**. The minimum graduation **GPA is 3.00**.
5. *Admission requisite: A score of 575 or more in the English Component of the College Entrance Examination (PEAU, Spanish acronym) or acquiring middle or senior level in the ELLIS Placement Test administered by the Resource Center for Educational Excellence (CREE, Spanish acronym).

Bachelor in Arts in Education
Major in Teaching English as a Second Language Secondary Level

118 Credits	Credits
General Education	33
Complementary General Educational Component	12
Professional Educational Component	36
Major Courses	34
Electives	3

General Education Component		33
HUMA 230	Appreciation of the Arts and Music	3
SOSC 242	Political and Socio-Economic Principles of Globalization	3
SPAN 115+	Reading, Writing and Oral Communication in Spanish I	3
SPAN 275	Advance Writing in Spanish	3
ENGL 125*	Advanced English I	3
ENGL 126	Advanced English II	3
MATH 103	Basic Mathematic I	3
MATH 104	Basic Mathematic II	3
SOSC 113	Analysis of Cultural and Historical Processes	3
HUMA 224	Contributions of the Great Civilizations to the World: Ancient, Medieval, And Modern	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Complementary General Education Component		12
UNRE 101	Concepts and Principles of Research	3
HIST 255	Analysis of Historical Processes of Puerto Rico	3
HIST 274	History of The United States	3
BIOL 252	Life on Planet Earth: Origins, Characteristics, And Conditions	3

Professional Educational Component		36
EDUC 171	Human Growth and Development I	3
EDUC 172	Human Growth and Development II	3
EDUC 202	Integration of Technology in Education	3
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 205	Introduction to Assistive Technology	3
EDUC 300	Psychological Foundation of Education	3
EDUC 305	Sociological Foundation of Education	3
EDUC 403	Curriculum Design	3

EDUC 409	Planning and Evaluation of Teaching/Learning Process	3
EDUC 420	Philosophical Foundations of Education	3
EDUC 435	Interdisciplinary Seminar	3
EDUC 436	Pedagogical Integration Seminar	3

Major Courses		34
ENED 105	Introduction to TESL	3
ENED 205	Adolescent's Literature in the ESL Classroom	3
ENGL 225	Introduction to Linguistics	3
ENGL 226	Grammatical Structure of English	3
ENGL 310	English Phonetics	3
ENED 320	Teaching Reading and Writing in a Second Language	3
ENED 323	English Curriculum and Teaching at the Secondary Level	3
ENED 402	Teaching Oral Communication in English Secondary Level	3
ENGL 360	Contrastive Analysis of English and Spanish	3
ENED 434	Pre-Practicum in Secondary Level TESL	3
ENED 435	Secondary Level TESL Practicum Seminary	1
ENED 436	Secondary Level TESL Practicum	3

Electives		3
ENGLISH ELECTIVE	Selected Between These Alternative: ENGL 230, ENGL 410, ENED 204, ENED 401	3

Important Notes:

1. + Course with Laboratory
2. Sophomore, junior and senior students must obtain an academic evaluation from academic coordinator before the enrollment or registration process.
3. Transferred students must meet the UNE's residence norm.
4. All the Professional Educational Component and major courses must be approved with a **minimum of B**. The minimum graduation **GPA is 3.00**.
5. *Admission requisite: A score of 575 or more in the English Component of the College Entrance Examination (PEAU, Spanish acronym) or acquiring middle or senior level in the ELLIS Placement Test administered by the Resource Center for Educational Excellence (CREE, Spanish acronym).

MINORS / SPECIAL CERTIFICATIONS

Teaching of Infant and Toddlers (21 credits)

		21
ECED 200	Game and the Arts in the Infant Development as Educational Strategy (0-8 years)	3
ECED 201	The Family as Principal Axis of a Community of Learning (0-8 years)	3
ECED 309	Infant and Toddler Curriculum	3
ECED 330	Design and Management of Physical and Socio-Emotional Environments in Infant and Toddlers	3
ECED 331	Integration and Participation of Family in Infants and Toddlers Care Centers	3
ECED 332	Development of Language and Early Literacy in Infant and Toddlers	3
ECED 333	Establishment and Management of Educational Centers for Infants, Toddlers and Preschoolers	3

Teaching Primary Education K-3 (21 credits)

		21
EDUC 410	Teaching of Mathematics at Primary level (K-3)	3
EDUC 411	Teaching of Science at Primary level (K-3)	3
EDUC 412	Teaching of Science at Primary level (K-3)	3
EDUC 413	Teaching of English as a Second Language at Primary level (K-3)	3
EDUC 414	The Arts of Language in Primary Level (K-3)	3
EDUC 403	Curriculum Design	3
EDUC 409	Planning and Evaluation of Teaching/Learning Process	3

School Social Work (15 credits)

		15
EDUC 202	Integration of Technology In Education	3
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 300	Psychological Foundations of Education	3
EDUC 305	Sociological Foundations of Education	3
EDUC 420	Philosophical Foundations of Education	3

Special Education (21 credits)

		21
EDUC 204	Nature and Needs of Exceptional Children And Inclusion	3
EDUC 205	Introduction to Assistive Technology	3
SPED 203	Nature, Needs and Behavior Modification in the Special Education Student With Attention Disorder Deficit	3
SPED 207	Methodology, Adaptations and Settlement for the Special Ed Student in Science	3
SPED 208	Methodology, Adaptations and Settlement for the Special Ed Student in Mathematics	3
SPED 210	Language Development and the Reading-Writing Process in Special Education	3
SPED 295	Evaluation and Assessment in Students with Special Needs	3

Teaching English as a Second Language at Elementary and Level (18 credits)

		18
ENED 204	Children's Literature in the ESL Classroom	3
ENED 401	Teaching Oral Communication in English Elementary Level	3
ENGL 225	Introduction to linguistics	3
ENGL 226	Grammatical Structures of English	3
ENGL 310	English Phonetics	3
ENGL 360	Contrastive Analyses of English and Spanish	3

Teaching English as a Second Language at Secondary Level (18 credits)

		18
ENED 205	Adolescent's Literature in the ESL Classroom	3
ENED 402	Teaching Oral Communication in English Secondary Level	3
ENGL 225	Introduction to linguistics	3
ENGL 226	Grammatical Structures of English	3
ENGL 310	English Phonetics	3
ENGL 360	Contrastive Analyses of English and Spanish	3

Physical Education (K-12) (21 credits)

		21
PHED 100	History and Philosophy of Physical Education	3
PHED 211	Theory, Skills and Teaching of Individual Sports	3
PHED 217	Physical Education for Special Populations	3
PHED 221	Theory, Skills and Teaching of Group Sports	3
PHED 311	Curriculum and Methodology of Physical Education (K-6)	3
PHED 321	Curriculum and Methodology of Physical Education (7-12)	3
PHED 331	Evaluation and Measurement in Physical Education	3

Professional Educational Component

3 Credits

EDUC 172 Human Growth and Development II

3 Credits

EDUC 202 Integration of Technology in Education

3 Credits

EDUC 204 Nature and Needs of Exceptional Children and Inclusion

3 Credits

EDUC 205 Introduction to Assistive Technology

3 credits

122

Psychological Foundations of Education

Study of psychology in the educational context. Analysis and evaluation of the implementation of the paradigms, theories and research in psychology related to: development, individual differences, learning, and assessment of intelligence, motivation and effective instructional strategies in the classroom. The course is developed through case analysis and observations in the school setting. Prerequisites: EDUC 171-172.

Sociological Foundations of Education

Analyzes sociological foundations and their relation to the educational process. Examines social problems that affect educational development. Interrelations between culture, education, social change, social groups, school and community. Prerequisites: SOSC 113

Curriculum Design

Evaluation and practice of methodologies, techniques and approaches to curriculum design in school level (K-12). Discussion of curriculum design models. Study and analysis of curriculum guides (by disciplines), standards of the educational curriculum (K-12). Reflection in critical-creative thinking, construction of knowledge (constructivism paradigm) and the competencies, skills and attitude domains.

Planning and Evaluation of Teaching-Learning Process

Instructional planning with emphasis in writing operational objectives and lesson planning. Deals with the principles and foundations of evaluation, measurement, and assessment of the learning process. Study of methods and techniques for quantitative, as well as, qualitative evaluation. Includes application, interpretation and analysis of results within the learning process.

Teaching of Mathematics at Primary Level (K-3)

Study of the philosophy, principles, foundations and methodology in teaching mathematics in the primary level (K-3). Analysis and discussion of the mathematics curriculum of the Puerto Rico Department of Education in K-3. Emphasis in the comprehension, interpretation, and domain of the mathematics' content at the primary level. Planning and integration of strategies, materials, technology and assessment in teaching and learning processes in mathematics. Pre-requisite: MATH 103-104

Teaching of Science at Primary Level (K-3)

Development of the basic concepts on the biological, physical, terrestrial and space sciences. Study and analysis of concepts about the nature of sciences developing different strategies, methods and techniques inherent to teaching at the primary level (K-3). Design and discussion of activities focused in the methods of: reflection, discovery and knowledge construction. Prerequisites: BIOL 252

EDUC 412**Teaching of Social Studies at the Primary Level (K-3)****3 Credits**

Analysis of the Social Studies in the primary level (K-3) like means of formation of an integral citizen within a democratic society. Reflection, skills of critical-creative thought and construction of knowledge within the context of the civic action and puertorrican culture. Study of curriculum guides, standards, texts and references, as well as other educational resources. Awareness, application and assessment of techniques, methodologies and approaches in the education of the social studies.

EDUC 413**Teaching English as a Second Language at the Primary Level (K-3)****3 Credits**

Study and analysis of the curricular framework and the standards of English as a second language in the primary level (K-3). The analysis and interactive presentations of diverse methodologies, approaches, techniques are emphasized for this course. Students will align the curriculum content and grade level expectations to design simulations and practical interventions for the K-3 level. Reflections of critical-creative skills and construction of knowledge from the linguistics skills domain are emphasized. Prerequisites: ENGL 115-116 or ENGL 125-126.

EDUC 414**Language Arts in Primary Level (K-3)****3 Credits**

Study and analysis of the curriculum guides and standards for the education of language arts at the primary level (K-3). Evaluation and praxis of the methodologies, techniques and approaches for the linguistics and literature in this level. Emphasis in grammar and oral practice, reading and writing skill for the primary levels. Reflection, skills of critical-creative thought and construction of knowledge from the domain of the Spanish linguistics skills. Awareness, application and assessment of techniques, methodologies and approaches in the education of the English like second language. Prerequisites: SPAN 115, SPAN 275.

EDUC 420**Philosophical Foundations of Education****3 Credits**

Interdisciplinary perspective of historical, philosophical, cultural and social foundations, taking as point of departure fundamental debates and problems in education, which have directed changes throughout time. It provides a reference (interpretative, normative, critical and creative) in order to link educational foundations to practice. Educational philosophies (traditional, modern and contemporary) are compared and analyzed. Implications and applicability of philosophical theories on problems and controversies of present education are viewed. Philosophical principles that guide the educational system in Puerto Rico, in terms of philosophy and policy are assessed. Prerequisites: HUMA 224

EDUC 435**Interdisciplinary Seminar****3 Credits**

Seminar blending socio-humanistic and scientific academic knowledge that students has developed during their teacher preparation courses. Discussion and analysis of trends, methods and innovations related to fundamental knowledge and communication competencies of the future teacher in his/her local and global context. Emphasis in case studies, problem solving, themes discussion and application of technology. Pre-requisites: School's authorization.

EDUC 436**Pedagogical Integration Seminar****3 Credits**

Seminar blending all professional and academic knowledge that students has developed during their teacher preparation courses. Involved discussion and analysis of trends, methods and innovations related to field of education. Pre-requisites: School's authorization.

EDUC 517**Supervision of Instruction in Student Teaching****3 Credits**

Study theories, models and trends of the instructional process and its practical applications. Importance of the evaluations and supervision processes in student teaching. For teachers who want to perform as cooperative, preceptor or tutor teacher. Pre-requisite: School's authorization.

EDUC 518**Recertification in Supervision of Instruction in Student Teaching****1 Credit**

Study theories, models and trends of the instructional process and its practical applications. Importance of the evaluations and supervision processes in student teaching. For teachers who want to receive a recertification as cooperative, preceptor or tutor teacher. Pre-requisite: School's authorization

Preschool and Primary**ECED 173****Introduction to Early Childhood Education (0-8 years)****3 Credits**

The course offers an overview of the field of early childhood education. Aspects such as: history, legislation, public policy, philosophy, curricula and the early childhood profession are analyzed. A proper understanding of the reasons, rationale, importance, and objectives of early childhood education in contemporary society and in the next decades is addressed. Discussion of the early childhood education professionals: characteristics of early childhood educators, alternative careers within the field, learning styles, ethic code and professionalism.

ECED 200**Game and Arts as Educational Strategies (0-8 years)****3 Credits**

Emphasis in game and arts in early childhood education and the relation with development and appropriated practices of 0-8 years. Explore and planning in how the content areas support the use of game and arts as educational strategy included the different theories. Importance of the teacher role as center for the teaching and learning process in early childhood (0-8 years). Use of manipulative and simulations as part of the assessment process.

ECED 201**Family and community learning (0-8 years)****3 Credits**

Reflections and analysis of diverse family's integration to the early childhood education. Emphasizes the importance of the active participation of the family in the education of children. Include the assessment of knowledge and cultural experiences that the family provides to the educational, socio emotional and linguistic development of the child.

3 Credits

ECED 309

3 Credits

ECED 310

3 Credits

ECED 311

3 Credits

ECED 330

3 Credits

ECED 331

3 Credits

ECED 332

3 Credits

126

ECED 333**Establishment and management of educational centers for infants, toddlers and preschoolers****3 Credits**

Planning, organization and evaluation of early childhood care centers and its development for infants, toddlers and preschoolers. Reflection analysis and praxis about the necessary processes and documentation for the center's operation. Preparation of a proposal for the establishment of an early childhood care center and its development for infants, toddlers and preschoolers.

ECED 441**Pre-practicum in Preschool and Primary Education****3 Credits**

The course offers a learning opportunity focusing in observation, reflection and integrating the theory to the practicum in preschool and primary education (0-8 years). It proposes to the student's diverse learning and teaching dimensions under the tutoring of an experience teacher. The course promotes that the students in a reflective way go through live scenery experimenting the teaching process along the newest strategies and methodologies regarding the curriculum, planning, evaluation, assessment, research and specialization fundamental areas. Required time is 100 hours distributed in: 55 hours in an educational center or school and 45 hours in seminar. Prerequisites: School's authorization.

ECED 442**Practice Seminar in Early Childhood and Primary Education****1 Credit**

Discussion, analysis and evaluation of the responsibilities and situations arising in Early Childhood Education and Primary levels student teaching practice. Designed to enrich and complement the day-to-day practicum experience. Pre-requisite: School's authorization. Concurrent with ECED 443 or ECED 444.

ECED 443**Practicum in Preschool Education****3 Credits**

This is the final phase of the professional preparation in a specialized field as a future preschool education (0-5 years) teacher candidate. It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student. The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with ECED 442.

ECED 444**Practicum in Primary Education****3 Credits**

This is the final phase of the professional preparation in a specialized field as a future primary education teacher candidate (K-3). It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student. The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with ECED 442.

Physical Education

PHED 100

History and Philosophy of Physical Education

3 Credits

The course deals with the analysis and evaluation of the diverse historical and philosophical backgrounds of physical education. It also includes the discussion of its origin and evolution. It emphasizes in the philosophical models of physical movement education and its trajectory to academic and sports competencies philosophical models. Some clinical visits are required.

PHED 211

Theory, Skills and Teaching of Individual Sports

3 Credits

Basic principles and execution techniques of the individual sports such as: track and field, tennis, swimming and gymnastics, among others, with bio-mechanical analysis of the skills in each sport. Discussion of the principles and basic concepts of individual sports and the design and implementation of teaching-learning experiences. Study of the recommended modifications for elementary level includes health and safety aspects.

PHED 213

Kinesiology and Physical Education Foundations

3 Credits

The course deals with the study of the human body throughout its systemic anatomy. It also concerns with joints movement, muscular skeleton actions and biomechanics with emphasis in the basic principles of the exercise physiology. The course requires some practical sessions.

PHED 217

Adapted Physical Education

3 Credits

The course is about teaching modification of physical education to rely on the specification of students with special needs. Emphasis in the programs designs for students with special needs. The course proposes the development and improvement of the physical condition of the human body throughout sensory-motor, psychomotor and perceptual-motors activities. It provides physical education laboratory experiences creating situations in different environments for almost every type of physical limitation.

PHED 221

Theories, Skills and Teaching of Group Sports

3 Credits

Basic principles and execution techniques of group sports such as: basketball, volleyball, soccer and baseball, among others. It relies on biomechanical analysis of the skills in these sports with discussion of the principles and basic concepts of collective sports and in the design and implementation of teaching-learning experiences. The study of the recommended modification for elementary level includes health and safety aspects.

PHED 240

Health, Safety and Well-Being in Physical Education

3 Credits

The course relies on the analysis of children and youth health and welfare models and the way to apply these models to the instructional design of physical education. It deals with the design and execution of the physical fitness aptitude for elementary and secondary students. It exhibits responsible personal and social behavior that respects self and others in physical activities, environment, stress management, drugs and alcohol use and abuse and exercise. The course

promotes the use of “American College of Sports Medicine” (ACSM), American Red Cross and “National Association of Athletic Trainers” (NATA) standards, among others.

Anatomy and Physiology for Physical Education

3 Credits

Study of the fundamental concepts of human anatomy and physiology for physical education teachers. It emphasizes the structure-function relationship of all systems in the human body with a clear understanding of how these systems integrate to achieve homeostasis. Pathological conditions, diagnosis, testing and treatment will also be discussed to enhance understanding of normal body functions. Basic principles of cellular biology and biochemistry as well as the following systems: integumentary, skeletal, muscular, and nervous (including special organs and senses), and endocrine. Notion of the basic systems: circulatory, respiratory, immune, digestive and reproduction.

Methodologies and Curriculum in Physical Education (K-6)

3 Credits

The intent of this course is to promote curricular content and design for grades K-6. Emphasis in the use of curricular guides and planning using appropriate practices. It emphasizes in annual and daily planning, motor skills, rubrics, using learning and teaching styles, conflict solving, discipline and group controls techniques. It requires practice sessions and field experiences.

Methodologies and Curriculum in Physical Education (7-12)

3 Credits

The intent of this course is to promote curricular content and design for grades 7-12. Emphasis in the use of curricular guides and planning using appropriate practices. It emphasizes in annual and daily planning, motor skills, rubrics, using learning and teaching styles, conflict solving, discipline and group controls techniques. It requires practice sessions and field experiences.

Evaluation and Measurement in Physical Education

3 Credits

The course relies in an analysis of qualitative and quantitative methods of evaluation and measurement in Physical Education. It considers diverse assessment in cognitive-motor and sporting movement's execution. It also deals with the introduction of basic test construction, data analysis and statistics procedures. In the course they have the opportunity to examine the latest investigation findings and their applications in the teaching of physical education.

Management and Supervision of the Physical Education

3 Credits

Analysis of the physical education models in management and supervision. Emphasis in budget, acquisition and equipment maintenance, recruitment and retention of the human resources, physical facilities analysis, and safety features using safety standards. Throughout the course they design programmatic activities, like casual day, intramural and interschool tournaments, and health fairs, among others.

Pre-practicum in Physical Education

3 Credits

The course offers a learning opportunity focusing in observation, reflection and integrating the theory to the practicum in physical education k-12. It proposes to the student's diverse learning and teaching dimensions under the tutoring of an experience teacher. The course promotes that the students in a

reflective way go through live scenery experimenting the teaching process along the newest strategies and methodologies regarding the curriculum, planning, evaluation, assessment, research and specialization fundamental areas. Required time is 100 hours distributed in: 55 hours in an educational center or school and 45 hours in seminar. Prerequisites: School's authorization.

PHED 409 Practice Seminar in Physical Education

1 Credit

Discussion, analysis and evaluation of the responsibilities and situations arising in physical education student teaching practice K-12. Designed to enrich and complement the practicum experience. Prerequisites: School's authorization. Concurrent with PHED 410 or PHED 411.

PHED 410 Physical Education Practicum in Elementary Level (K-6)

3 Credits

This is the final phase of the professional preparation in a specialized field as a future physical education teacher candidate (K-6). It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student. The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with PHED 409.

PHED 411 Physical Education Practicum in Secondary Level (7-12)

3 Credits

This is the final phase of the professional preparation in a specialized field as a future physical education teacher candidate (7-12). It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student. The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with PHED 409.

Special Education

SPED 101 Teacher Preparation in Special Education

3 Credits

History of the special education and its legal bases, the concept of inclusion and assistive technology, as well as the procedures to identify and to serve students with impairments. Critical discussion of the legislative, judicial, and present matters that belong to the special education process. Self-reflection of personal and necessary professionals attributes for the work with students with impairments. Evaluation of experiences designed to help in the learning of the students with impairments. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

SPED 103**Learning Disabilities****3 Credits**

Study of concepts, theories, discipline standards, characteristics and issues related to students who display specific learning disabilities. Analysis of foundation knowledge essential to understanding the nature and needs of individuals with learning disabilities and contextual influences, especially for pre- and in-service classroom teachers and related professionals. Reflection of recent developments and research findings, current issues, and the general structure of educational intervention programs. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

SPED 203**Nature, Needs and Behavior Modification of Student
with Attention Disorder Deficit****3 Credits**

Analysis of strengths and social, psychological, physiological, and emotional weaknesses that characterize a student with deficit of attention. Emphasis in the development of individualized educational programs appropriate educational practices in the special education classrooms and/or in the regular setting. Study of the interdisciplinary contribution required for the effective transition of the student to the school life and work. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

SPED 204**Nature, Needs and Behavior Modification of Gifted Student****3 Credits**

Study of the social, emotional, and cognitive characteristics of the gifted student. Analysis of the diverse programs and theories related to the education of this population. Emphasis in the development of projects for its education. Field observations experiences in schools specialized in the education of gifted students with talents. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

SPED 205**Integration of the Fine Arts in Special Education****3 Credits**

Application of music, theater, corporal movements, visual arts and other manifestations of the fine arts in the design of effective educational planning and strategies for special education students. Practice, case studies, curriculum development and field observation experiences. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

SPED 208**Methodology, Adaptations and Adjustment in the Teaching of Mathematics****3 Credits**

Methodology, adaptations and adjustment in the teaching of mathematics for the student of special education K-12. Emphasis in the application of instructional methods and techniques of teaching and learning. Development and design of curriculum in mathematics with attention to the individual differences. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

SPED 210**Methodology, Adaptations and Adjustment in the Teaching of Reading
and Writing in the Elementary Level (K-6)****3 Credits**

Methodology, adaptations and adjustment in the teaching of reading and writing for the student of special education in the elementary level (K-6). Emphasis in the application of instructional methods and techniques of teaching and learning, including whole language approach. Development and

design of curriculum in Spanish with attention to the individual differences. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

**SPED 211 Methodology, Adaptations and Adjustment in the Teaching of Reading
3 Credits and Writing in the Secondary Level (7-12)**

Methodology, adaptations and adjustment in the teaching of reading and writing for the student of special education in the secondary level (7-12). Emphasis in the application of instructional methods and techniques of teaching and learning, including comprehension and analysis skills. Development and design of curriculum in Spanish with attention to the individual differences. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

**SPED 295 Evaluation and Assessment in Students with Special Needs
3 Credits**

Study of the evaluation methods of the student with special needs. Analysis and evaluation protocols of the exceptional student for the development of assessment process at the initial and during the school year. Study of the relation of the processes of evaluation and assessment, the federal and state laws of academic achievement and the development of the Individualized Educational Program (PEI). Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology.

**SPED 300 Brain and Learning
3 Credits**

Introduction to the study of the neuro-scientific learning phenomena. Analysis of the close links between brain function and learning of the exceptional student with an emphasis on executive functions. The course is based on case, research and recent literature reviews on how the brain is organized for learning.

**SPED 404 Pre-practicum in Special Education
3 Credits**

The course offers a learning opportunity focusing in observation, reflection and integrating the theory to the practicum in special education (K-12). It proposes to the student's diverse learning and teaching dimensions under the tutoring of an experience teacher. The course promotes that the students in a reflective way go through live scenery experimenting the teaching process along the newest strategies and methodologies regarding the curriculum, planning, evaluation, assessment, research and specialization fundamental areas. Required time is 100 hours distributed in: 55 hours in an educational center or school and 45 hours in seminar. Prerequisites: School's authorization.

**SPED 405 Teaching Practicum in Special Education
3 Credits**

This is the final phase of the professional preparation in a specialized field as a future special education teacher candidate (K-12). It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student.

The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with SPED 406.

SPED 406 Seminar on Teaching Practicum in Special Ed

1 Credit

Discussion, analysis and evaluation of the responsibilities and situations arising in the student teaching practice. Designed to enrich and complement the practicum experience. Application, observations, analysis and development of assessment instruments and planning lessons; also, responsible use of technology. One semester, two hours biweekly. Prerequisites: School's authorization. Concurrent with SPED 405.

English Education: Teaching English as a Second Language

ENED 105 Introduction to Teaching English as a Second Language

3 Credits

This course is introductory to the teaching of English to English Language Learners (ELLs). It provides basic teaching elements for professionals to be successful in the teaching of English as a Second Language. It includes the history of methodologies used to teach English as a Second Language; contemporary approaches to teaching and assessing reading, writing, listening, and speaking; and the design of instructional units and lesson plans. Research projects will be developed through the responsible use of technology.

ENED 204 Children's Literature in the ESL Classroom

3 Credits

The study and analysis of different genres for children from ancient folklore to modern works. Methods, strategies and techniques for the teaching of reading in English as a Second Language. Criteria used to select readings for teaching English as a Second Language. Emphasis is given to children's literature to teach and assess reading with the balanced literacy approach. Research projects will be developed through the responsible use of technology. Intensive reading and discussion course.

ENED 205 Adolescent Literature in the ESL Classroom

3 Credits

Study and analysis of literature directed to adolescent readers. Criteria used to select readings to teach English as a Second Language. Methods, strategies, and assessment techniques for the using appropriate age related readings in English. Emphasis on the balanced literacy method. Research projects will be developed through the responsible use of technology. Intensive reading and discussion course.

ENED 320 Teaching Reading and Writing in a Second Language

3 Credits

This course emphasizes methods for teaching reading and writing in a second language (English). The whole language, phonics, and balanced literacy approaches, as well as, new emerging techniques are studied and used. Assessment strategies for reading and writing are discussed in detail. Group discussions, simulations and case studies will be emphasized. (Not an Independent Study course)

ENED 322**English Curriculum and Teaching at the Elementary Level****3 Credits**

This course includes the application of teaching-learning theories and instructional models in the process of planning and developing educational activities in the ESL classroom at the elementary level. Students will work with the formulation of objectives, selection of content and planning teaching units in the elementary level based on student's needs along with the elaboration of grade appropriate materials. The relation of academic testing and language skills is emphasized with special focus on the on-going assessments of the development of language skills. Research projects will be developed through the responsible use of technology. (Not an Independent Study course.)

ENED 323**English Curriculum and Teaching at the Secondary Level****3 Credits**

This course includes the application of teaching-learning theories and instructional models in the process of planning and developing educational activities in the ESL classroom at the secondary level. Students will work with the formulation of objectives, selection of content and planning teaching units in the elementary level based on student's needs along with the elaboration of grade appropriate materials. The relation of academic testing and language skills is emphasized with special focus on the on-going assessments of the development of language skills. Research projects will be developed through the responsible use of technology. (Not an Independent Study course.)

ENED 360**Methods, Materials, and Assessment in the ESL Classroom****3 Credits**

This course includes a review of methodologies and instructional material available, and the instruction of techniques of development and/or adaptation of existing or supplementary materials. The relation of academic testing and language skills is emphasized with special focus on the on-going assessments of the development of language skills.

ENED 401**Teaching Oral Communication in English Elementary Level****3 Credits**

Oral communication strategies for English language learners at the elementary level with emphasis on the development of authentic language use. Study available oral skills assessments and techniques to increase oral proficiency. Teaching strategies will include assessing, diagnosing and the use of "real" communication situations. As part of the course, students will be asked to visit a classroom and listen to oral interactions among students as well as the study of student's pieces and simulation activities. Research projects will be developed through the responsible use of technology.

ENED 402**Teaching Oral Communication in English Secondary Level****3 Credits**

Oral communication strategies for English language learners at the secondary level with emphasis on the development of authentic language use. Study available oral skills assessments and techniques to increase oral proficiency. Teaching strategies will include assessing, diagnosing and the use of "real" communication situations. As part of the course, students will be asked to visit a classroom and listen to oral interactions among students as well as the study of student's pieces and simulation activities. Research projects will be developed through the responsible use of technology.

ENED 429**Pre-practicum in English Elementary Level****3 Credits**

The course offers a learning opportunity focusing in observation, reflection and integrating the theory to the practicum in the teaching of English as a second language at the elementary level. It proposes to the student's diverse learning and teaching dimensions under the tutoring of an experience teacher. The course promotes that the students in a reflective way go through live scenery experimenting the teaching process along the newest strategies and methodologies regarding the curriculum, planning, evaluation, assessment, research and specialization fundamental areas. Required time is 100 hours distributed in: 55 hours in an educational center or school and 45 hours in seminar. Prerequisites: School's authorization.

ENED 430**Practice Seminar in the Elementary Level****1 Credit**

Discussion, analysis, and evaluation of the responsibilities and situations arising in the English classroom in the elementary level. Research projects will be developed through the responsible use of technology. Designed to enrich and complement the practicum experience. Prerequisites: School's authorization. Concurrent with ENED 431.

ENED 431**Practicum in TESL in the Elementary Level****3 Credits**

This is the final phase of the professional preparation in a specialized field as a future English as a second language education teacher candidate at the elementary level. It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student. The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with ENED 430.

ENED 434**Pre-practicum in English Secondary Level****3 Credits**

The course offers a learning opportunity focusing in observation, reflection and integrating the theory to the practicum in the teaching of English as a second language at the secondary level. It proposes to the student's diverse learning and teaching dimensions under the tutoring of an experience teacher. The course promotes that the students in a reflective way go through live scenery experimenting the teaching process along the newest strategies and methodologies regarding the curriculum, planning, evaluation, assessment, research and specialization fundamental areas. Required time is 100 hours distributed in: 55 hours in an educational center or school and 45 hours in seminar. Prerequisites: School's authorization.

ENED 435**Practice Seminar for the Secondary Level****1 Credit**

Discussion, analysis, and evaluation of the responsibilities and situations arising in the English classroom in the secondary level. Research projects will be developed through the responsible use of technology. Designed to enrich and complement the practicum experience. Prerequisites: School's authorization. Concurrent with ENED 436.

ENED 436**Practicum in TESL in the Secondary School****3 Credits**

This is the final phase of the professional preparation in a specialized field as a future English as a second language education teacher candidate at the secondary level. It's the field experiences where the teacher candidates assume the responsibilities to take charge of the tasks performed by the teacher in a real school environment. It constitutes the means to apply the different dimensions of teaching and learning. During the practicum the future teacher are presented with sceneries in which they can rehearsals the educative experiences promoting the physical, social, emotional and intellectual development of the student. The required time is of 250 hours in an educational center or school. Prerequisites: School's authorization. Concurrent with ENED 435.

English Major Courses offered by School of Social and Human Sciences**ENGL 225****Introduction to Linguistics****3 Credits**

Scenic view of basic language theories and approaches and their effects on the thought processes. It includes fundamental phonological, morphological, and syntactical concepts, and their application in second language learners. Moreover, special emphasis will be placed on the application of teaching activities and strategies according to each theory or approach. Research projects will be developed through the responsible use of technology.

ENGL 226**Grammatical Structure of English****3 Credits**

In depth study of linguistic principles. Syntactic functions, parts of speech, clause patterns and punctuation will be studied. It also covers linguistic processes. Designed for English teachers. The course will be developed through practical exercises, research, and drills in order to strengthen the students' proficiency level.

ENGL 230**Introduction to Literary Genres****3 Credits**

Introduction to literature through the study of the different literary genres. Emphasis is placed on reading and analysis of an extensive variety of authors and types of literature. Intensive reading course. Provides for response writing and discussion as teaching and learning techniques. Research projects will be developed through the responsible use of technology.

ENGL 310**English Phonetics****3 Credits**

The study of the phonetic system of the English language. Identification of the organs used in the production of sounds. The International Phonetic Alphabet is used in discussing the consonant and vowel system. Techniques and methods used to correct deficiencies in pronunciation are also discussed in detail. (Not an Independent Study course.)

ENGL 360**Contrastive Analysis of English and Spanish****3 Credits**

Phonemic and phonetic systems of English compared to Spanish. Correction techniques and methods in pronunciation problems of students learning English as a Second Language. Class discussions, simulations, and question and answer sessions will be stressed.

ENGL 362 **American and British Literature**
3 Credits

Reading and analysis of the principal American and British authors. The evolution of American and British thoughts and literary styles are studied. Intensive reading course. Provides for response writing and discussion as teaching and learning techniques. Research projects will be developed through the responsible use of technology.

ENGL 370 **Advanced Oral Communication**
3 Credits

Preparation and presentation of conferences and formal/informal discussions. Critical ability development in oral comprehension. Emphasis on techniques for pronunciation correction. Students will be guided to enhance their own communication, as they also prepare to enhance the oral communication of their future students by studying real cases. Course includes oral discussions and simulations.

ENGL 410 **Advanced Composition**
3 Credits

Intensive writing course. Basic principles of exposition and persuasion. Students will be guided to enhance their own written communication skills, as they also prepare to enhance the written communication of their future students by studying real cases. Course includes discussions and simulations. Technology and web-enhanced techniques will be used for this course.

Other Special Courses: General Education Courses offered by School of Education

BIOL 252 **Life in Planet Earth: Origins, Characteristics and Conditions**
3 Credits

Analysis of the development of life, matter and Universe from an evolution perspective. Emphasis to the study of the biological processes. Study of the diverse forms of energy, its management and its relation with the environment. Study of the scientific methodologies from an historical critical perspective. Contextualization of the thematic and its application to Puerto Rico. Appreciation of the diverse forms of life. Emphasis in the skills of analysis and evaluation. Responsible management for the Internet and the diverse programs of computation as research tools. Use of strategies, such as, monographic papers, investigations, field experiences and collaborative works.

EDUC 230 **Education for Peace**
3 Credits

Study of the processes and methodologies of teaching for a culture of peace from the individual to the collective. Analysis of the criticism, the responsibility, the comprehension and the positive management of the conflicts; as well as, to promote the values of respect, tolerance, dialogue, negotiation and the exchange. It examines the four axes of the education for the peace: to learn to know, to learn to do, to learn to live together and to learn to be. The course will be will carry out by means of the use of semantics maps, cases studies, problem solving, distance communication, thematic discussions and portfolios.

MATH 103 **Basic Course in Mathematics I**
3 Credits

Study of the fundamental concepts and skills of basic college mathematics: operations with whole numbers, fractions, decimals, ratio, proportions, percent, integers, measurement, statistics and

probability. Emphasis in applications, problem solving, critical thinking, cooperative learning and the use of technology.

MATH 104

Basic Course in Mathematics II

3 Credits

Study of elementary algebra and introduction to geometry: properties and operations with real numbers, algebraic expressions, exponential laws, polynomials, linear equations and inequations, points, coordinates, lines, angles, polygons, symmetry, congruence, circles, solids, perimeter, area, volume, Pythagorean theorem, parallelism and perpendicularity . Emphasis in applications, problem solving, critical thinking, cooperative learning and the use of technology. Prerequisites: MATH 103.

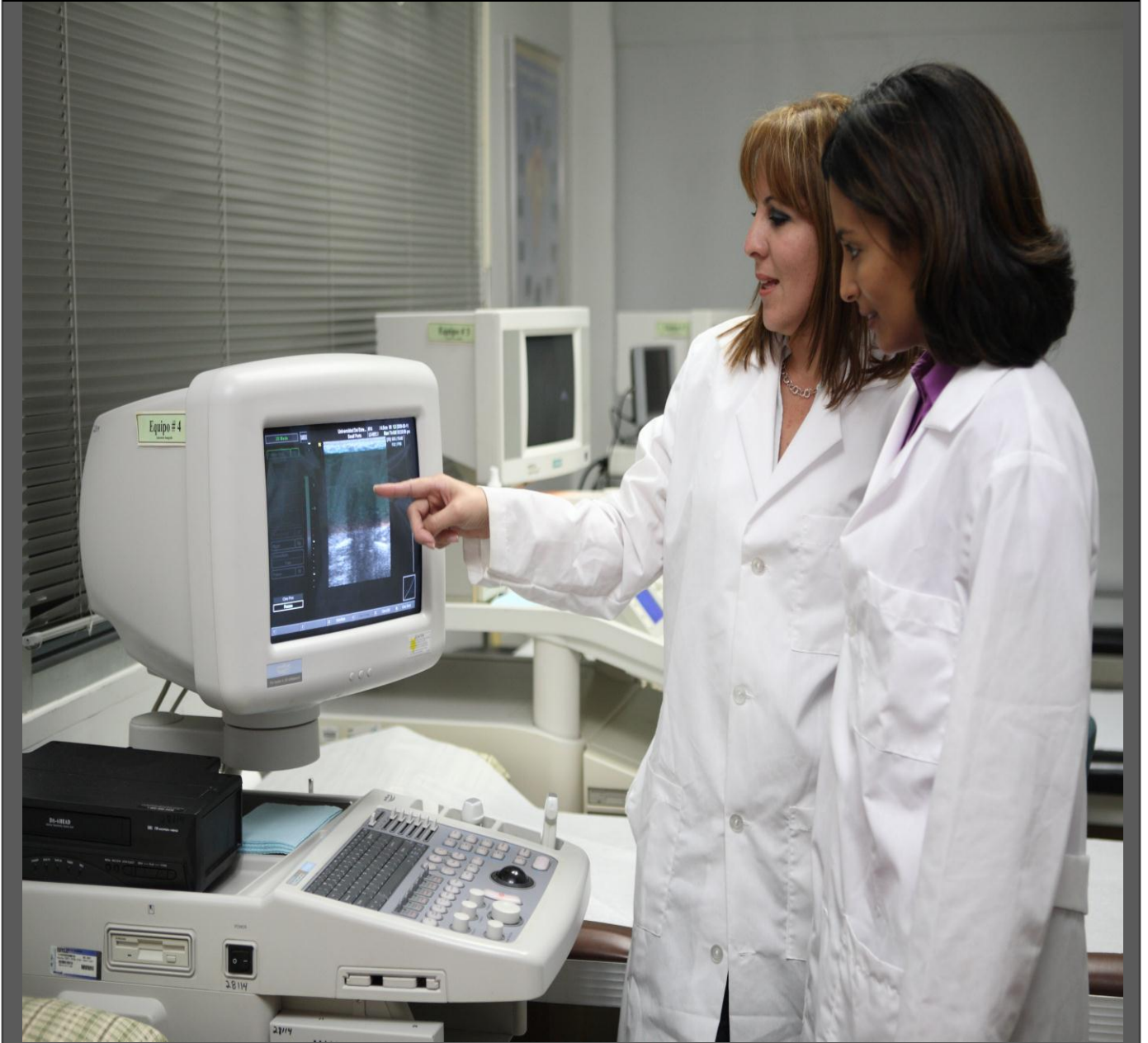
UNRE 101

Introduction to Educational Research

3 Credits

Study of basic scientific methods used for inquiry, research, and planning. It includes the techniques used in the observation, analysis and presentation of data, obtained from tests, interviews, and questionnaires. Discussion of the role of theoretical research in education. Practice in formulation of problems and hypotheses, samplings, measurement and scale construction. Students are supervised in the design and completion of simple research projects.

UNIVERSIDAD DEL ESTE SCHOOL OF HEALTH SCIENCES



UNDERGRADUATE CATALOG 2013-2014

SCHOOL OF HEALTH SCIENCES

The School of Health Sciences is ascribed to the Office of the Vice-Chancellor for Academic Affairs. It offers undergraduate programs such as; professional certificates, associate and bachelor's degrees. Continuing education activities are also given with the proper Credits or certificates.

The academic programs answer to the socioeconomic reality and complement the theory with the practice. This is possible by means of the integration of the professional community, industry, the government sector, and the community in general, by means of strategic alliances and collaboration agreements. The use of the advanced technology is one of principal teaching tools that support the academic and the service to the student's activities.

The School of Health Sciences of Universidad del Este offers and collaborates with the community in the development of an environment that will foster an ambiance for study in harmony with the Institutional vision and mission. The continuous education to different professional sectors and sponsoring of professional development activities complete this ambiance of studies. The School of Health Sciences is a community of learning and dynamics in search of the highest educational ideal.

MISSION

The School of Health Sciences of the Universidad del Este is a regional resource for education, undergraduate research and continuing education in health related professions.

Our commitment is to improve the health and quality of life of Puerto Ricans community by means of an education of excellence that promotes the academic, social and ethical development of the students.

In accordance with the Institution's mission, the School of Health Sciences provides a quality education through a highly qualified faculty, competent in their professional field with vast teaching and clinical experience. Within this learning environment the student is the center of the teaching-learning process and of the services that are offered, thus promoting his or her whole development.

The School is committed to fulfill its mission through the following goals and objectives:

GOALS

- Promote health through a commitment to the national community.
- Promote high quality, academic programs in health related professions that respond to the needs of society, and that broaden the personal and professional opportunities, as well as the social growth of the students.
- Promote the understanding and acceptance of cultural diversity inherent in society.
- Promote an administrative system that facilitates and supports student services and the teaching staff.
- Support faculty development in agreement with the philosophy of quality and the educational community.

FACULTY

Álvarez Ramírez, Olga L., R., PH., Pharm.D, Nova Southeastern University

Assistant Professor

Pharmacy Technician

Astacio Méndez, Ana I., MRA, MPH, RT (R), University of Puerto Rico

Instructor

Radiology

Brito Ortiz, Eduardo, RT, BHSA, MPH, University of Puerto Rico

Associate Professor

Radiology

Córdova Acosta, Ynés, RT, BHSA, MPH, University of Puerto Rico

Assistant Professor

Radiology

Irizarry Mora, Jesús, PhD, University of Puerto Rico

Assistant Professor

Research

Pedroso Zulueta, Teresa, PhD, El Colegio de México AC

Associate Professor

Research

Rodríguez Martínez, Ana I., B.S., M.Ed., RDMS, University of Sacred Heart

Assistant Professor

Sonography

Rosa Rivera, Migdalia, MSN, University of Puerto Rico

Instructor

Nursing

Torres Ayala, Aleida, DHSc, CNM, MSN, CNM, Nova Southeastern University

Assistant Professor

Nursing

Torres Negrón, Ivette, BS, MS, Ph.D. University of Puerto Rico

Associate Professor

Pharmacy

Academic Support Staff

Alemán Castro, Rebecca, BS, Universidad del Este

Lab Technician

Sonography

ADMINISTRATIVE STAFF

Encarnación García, Haydee, PhD, University of Puerto Rico
Dean

Feliciano Burgos, Nydia I., MD, Iberoamerican University
Associate Dean

Cruz Rivera, Pura Julia, Ed.D, MSN, MPH, University of Puerto Rico
Director, Nursing Program

Luciano Torres, Michelle, MC, BHSc, RT (R), University of Phoenix
Director, Medical Radiology Program

Fernández Mora, Rosa M., BS, RDMS, University of Puerto Rico
Associate Professor
Coordinator Medical Sonography Program

Yulfo Hoffman, Jessica, Pharm.D., Nova Southeastern University
Assistant Professor
Coordinator Pharmacy Technician Program

Ayala Robles, Juan E., DMD, Boston University
Clinical Coordinator

Reyes García, Israel, BOS, University of Puerto Rico
Coordinator of Student Affairs

Colón Torres, Rosemary, BOS, Universidad del Este
AdministrativeAssistant

Vilorio Correa, Mariana, BA, Universidad del Este
Receptionist

PROGRAM DESCRIPTION

Radiologic Technology

The increase in the use of diagnostic imaging in medicine requires specialized personnel to guarantee the quality of the health services provided.

The mission of the Radiologic Technology Program at the Universidad Del Este is to prepare professional in the radiologic technology field that can work effectively as part of a health services interdisciplinary team, during routine and specialized procedures under doctor's supervision.

Our goal is to prepare high quality radiologic technologist through two academic offerings, an Associate Degree in Science in Radiologic Technology and a Baccalaureate Degree in Radiological Sciences with two major: (1) Computerized Tomography with Magnetic Resonance Imaging, or (2) Digital Angiography with Mammography. Our faculty specializes in radiologic technology, anatomy and physiology, and physics, with vast teaching and clinical experience. Our students practice in private and public institutions throughout Puerto Rico.

Our curriculum combines didactic and practical education meeting the highest competency standards by professional accreditation institutions. Our graduates can opt for the Commonwealth of Puerto Rico Licensing Exam and/or the national exam offered by the American Registry of Radiologic Technologist (ARRT).

Medical Sonography

The program of Associate Degree in Medical Sonography prepares students to be professionals within the health area, enabled to work with highly technological equipment and with a certified physician, be able to contribute to the diagnosis of different medical conditions. Through this program the student will acquire the competencies necessary to work in different medical scenarios and will be enabled to perform ultrasound studies of the abdominal, gynecological, obstetrical area and of small parts. In the of Baccalaureate in Medical Sonography the student will acquire the competencies necessary to work in different hospital scenarios and will be able to perform ultrasound studies of the abdominal, gynecological, obstetrical area, of small parts, blood vessels and adult heart.

Pharmacy Technician

The Program of Associate Degree in Pharmacy Technician of UNE aspires to develop students with the knowledge and necessary skills to perform as an important component of the teamwork of a pharmacy. The students will have the opportunity to acquire knowledge through didactic courses directed to know the most important aspects of this field. The program will also provide the opportunity to develop the techniques and skills that will enable the student to work with a high level of competitiveness.

The pharmacy technician is the professional that helps the pharmacist to dispatch medication prescribed by the doctors, under the supervision of the authorized pharmacist. The auxiliary is qualified to work in the hospital pharmacy, community pharmacy, as well as any other licensed distributor of pharmaceutical products.

The dispatch of meds implies a series of activities in sequence that consists among others in: taking care of the patient; receive and interpret the received prescription; select the product, as well as the appropriate delivery package; to verify dose; to prepare simple solutions, ointments and other

pharmaceutical preparations; to carry out suitable labeling using computerized systems and computation of prices.

Nursing

The Bachelor in Nursing Sciences Program with concentration in Intensive Care and Emergency Room is designed to develop in the student the knowledge base and necessary skills to perform effectively and efficiently as a general nurse. He/she will also possess basic knowledge of nursing care offered to patients hospitalized in the areas of Intensive Care and Emergency Room. The program's graduates will possess an ample and critical understanding of nursing care at this level and will be trained to be responsible professionals in the delivery of the highest possible quality nursing care. The graduates will be able to operate as a general nurse in a variety of scenarios, particularly Intensive Care and Emergency Room, aside from contributing to strengthening and developing the general health environment.

ADMISSIONS REQUIREMENTS

These are in addition to the general admissions requirement at UNE.

- Applicants must be 18 years old by December 31st of the current year or older.
- Applicants should submit College Entrance Examination Board (CEEB) scores. The English, Spanish, and Math courses will be assigned according to the results of the College Board Entrance Exam or the CREE Placement Test.
- High School grade point average of 2.0 for Associate programs in:
 - Pharmacy Technician
- High School grade point average of 2.5 for Associate programs in:
 - Medical Sonography
 - Radiologic Technology
 - Nursing
- High School grade point average of 2.5 for Bachelor programs in:
 - Digital Angiography and Mammography
 - Computerized Tomography with Magnetic Resonance
 - Medical Sonography
 - Nursing
- Attend an Orientation meeting with representatives of the School.

GRADUATION REQUIREMENTS FOR ALL PROGRAMS

The graduation requirement for the Associate Degree in Pharmacy Technician Programs is a general grade point average of 2.0 and for the major component are 2.3.

The graduation requirement for the Associate Degree in Medical Sonography, Radiologic Technology and Nursing Programs is a general grade point average of 2.5 and for the major component are 2.5.

The graduation requirement for the Bachelor Degree Programs is a general grade point average of 2.5 and for the major component are 2.5.

Associates Degrees

Associate in Sciences in Radiologic Technology

63Credits	Credits
General Education	15
Professional Educational Component	14
Major Courses	34

General Education Component		15
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
MATH-120	Introduction to Algebra	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SOSC- 112	The Human Social Environment	3

Professional Educational Component		14
HESC-111	Computers in Medical Informatics	3
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
PSYC-212	Health Psychology	3

Major Courses		34
RADI-101	Introduction to Radiological Sciences and Medical Terminology	2
RADI-102	Radiological Physics	3
RADI-107	Radiographic Positioning Techniques I	3
RADI-108	Radiographic Positioning Techniques II	3
RADI-109	Radiographic Positioning Techniques III	3
RADI-121	Patient Care in Radiologic Technology	2
RADI-200	Radiobiology and Radiology Protection	2
RADI-210	Quality Assurance in Radiology	2
RADI-212	Pathology, Evaluation and Radiographic Film Critique	1
RADI-213	Principles of Radiographic Exposure and Procedures	3
RADI-214	CR & DR Image Acquisition and Display	2
RADI-230	Clinical Practicum I	1
RADI-231	Clinical Practicum II	1
RADI-255	Introduction to Imaging Modalities	2

RADI-256	Ethical and Legal Issues in Diagnostic Imaging	1
RADI-330	Clinical Practicum III	1
RADI-331	Clinical Practicum IV	1
RADI-380	Radiologic Technology Seminar -Registry review	1

Important Notes:

1. + Course with laboratory.
2. * Clinical practices should be approved with a minimum grade of "B".
3. All the Professional Component courses, Major Courses, Biology and Mathematics should be approved with minimum grade of "C".
4. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
5. Students transferring from other Universities must comply with the residency requirements at UNE.
6. After completion of all associate degree requirements the student must request graduation. The student needs the degree conferred and pass the bar examination in PR and /or U.S. for further studies leading to a baccalaureate degree.
7. The clinical areas cannot be concurrent.

Associate in Sciences in Medical Sonography

68Credits	Credits
General Education	15
Professional Educational Component	22
Major Courses	31

General Education Component		15
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		22
BIOL-231	Cross Sectional Anatomy I	4
BIOL-232	Cross Sectional Anatomy I	4
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
PSYC-228	Diversity Psychology	3
SONO-110	Compendium of General Physics	3

Major Courses		31
SONO-100	Introduction to Medical Sonography and Patient Care	3
SONO-102	Techniques and Protocols in Sonography	2
SONO-234	Ultrasound Physics and Instrumentation I	2
SONO-235	Ultrasound Physics and Instrumentation II	2
SONO-238	Abdominal Sonography & Laboratory	3
SONO-240	Small Parts Sonography & Laboratory	3
SONO-242	Gynecology Sonography & Laboratory	2
SONO-247	Pre-Clinical Observation (Clinical Education I)	1
SONO-248	Clinical Education II	1
SONO-249	Clinical Education III	1
SONO-250	Obstetrics Sonography	3
SONO-252	Pathology and Medical Terminology	3

SONO-256	Seminar in Medical Sonography Investigation	3
SONO-260	General Sonography Review	2

Important Notes:

1. + Course with laboratory.
2. The following courses should be approved with a minimum grade of "B": SONO 247, SONO 248, and SONO 249.
3. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
4. Students transferring from other Universities must comply with the residency requirements at UNE.

Associate in Sciences in Pharmacy Technician

72 Credits	Credits
General Education	18
Major Courses	54

General Education Component		18
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SPAN-112 SPAN-116 SPAN-126	Basic Oral, Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Advanced Writing in Spanish II	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3

Major Courses		54
PHAR-210	Pharmaceutical Calculations I	3
PHAR-211	Pharmaceutical Calculations II	3
PHAR-212	Pharmaceutical Administration	3
PHAR-226	Pharmacotherapy for Pharmacy Technician I	3
PHAR-227	Pharmacotherapy for Pharmacy Technician II	3
PHAR-228	Pharmacotherapy for Pharmacy Technician III	3
PHAR-230	Pharmaceutical Technology I	3
PHAR-230 L	Laboratory of Pharmaceutical Technology I	3
PHAR-231	Pharmaceutical Technology II	3
PHAR-231 L	Laboratory of Pharmaceutical Technology II	3
PHAR-233	Posology	3
PHAR-250	Hospital Pharmacy	2
PHAR-251	Prescription Dispensing and Pharmaceutical Specialties I	3
PHAR-252	Prescription Dispensing and Pharmaceutical Specialties II	3
PHAR-255	Pharmaceutical Legislation	3
PHAR-256	Supervised Practice in Pharmacy I	4

PHAR-257	Supervised Practice in Pharmacy II	4
PHAR-258	Practicum Seminar	2

Important Notes:

1. + Course with laboratory.
2. All courses PHAR should be approved with minimum grade of "C".
3. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
4. Students transferring from other Universities must comply with the residency requirements at UNE.

Associate in Sciences in Nursing

65Credits	Credits
General Education	15
Professional Educational Component	15
Major Courses	35

General Education Component		15
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SPAN-112 or SPAN-116 or SPAN-126	Basic Oral, Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Advanced Writing in Spanish II	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		15
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
HESC-207	Microbiology for Health Professionals	4

Major Courses		35
NURS-101	Introduction to Nursing	2
NURS-102 P	Fundamentals of Nursing	5
NURS-103	Basic Principles of Pharmacology	3
NURS-104 P	Maternal-Child Nursing	5
NURS-201 P	Pediatric Nursing	5
NURS-202 P	Medical-Surgical Nursing I	5
NURS-203 P	Medical-Surgical Nursing II	5
NURS-204 P	Psychiatric Nursing	5

Important Notes:

1. + Course with laboratory.
2. P courses with clinical practices.
3. All the Professional Component courses, Major Courses, Biology and Mathematics should be approved with minimum grade of "C".
4. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
5. Students transferring from other Universities must comply with the residency requirements at UNE.

Bachelor's Degrees

Bachelor in Radiological Sciences

Major in Digital Angiography and Mammography

117Credits	Credits
General Education	33
Professional Component	29
Major Courses	48
Electives	6

General Education Component		33
BIOL-115	Introduction to Human Biology	3
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
HIST-255	Analysis of Historic Processes in Puerto Rico	3
HUMA-228	Puerto Rico and its Contribution to the Caribbean and the World	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
PSYC 228	Diversity Psychology	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SPAN-112 or SPAN-116 or SPAN-126	Basic Oral, Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Advanced Writing in Spanish II	3
SOSC- 112	The Human Social Environment	3

Professional Component		29
BIOL-231	Cross Sectional Anatomy I	3
BIOL-232	Cross Sectional Anatomy I	3
ENGL-217	English for Health Professionals	3
ENGL-246	Conversational English	3
ENGL-307	Professional Writing in English	3
HESC 121	Patient Care in Radiographic Imaging	3
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
PSYC-212	Health Psychology	3

Major Courses		48
RADI-101	Introduction to Radiological Sciences	2
RADI-102	Radiological Physics	3
RADI-103	Pathology and Medical Terminology	2
RADI-105	Radiographic Chemistry and Processing	2
RADI-107	Radiographic Positioning Techniques I	2
RADI-108	Radiographic Positioning Techniques II	2
RADI-109	Radiographic Positioning Techniques III	2
RADI-200	Radiobiology and Radiology Protection	3
RADI-210	Quality Assurance in Radiology	2
RADI-213	Principles of Radiographic Exposure and Procedures	3
RADI-230	Clinical Practicum I	1
RADI-231	Clinical Practicum II	1
RADI-243	Special Procedures and Radiographic Film Critique	2
RADI-255	Introduction to Imaging Modalities	2
RADI-301	Quality Control in Mammography	2
RADI-302	Breast Pathology	2
RADI-330	Clinical Practicum III	1
RADI-331	Clinical Practicum IV	1
RADI-380	Radiologic Technology Seminar -Registry review	4
RADI-401	Digital Angiography and Cardiovascular Procedures	2
RADI-402	Cardiovascular Pathology	2
RADI-430	Clinical Education with Seminars V	1
RADI-431	Clinical Education with Seminars IX	1
HESC-200	Computer Imaging Creation and Analysis	3

Electives		6
COMP-110	Introduction to Computers and Software	3
Elective		3

Important Notes:

1. + Course with laboratory.
2. The following courses should be approved with a minimum grade of "B": RADI 101, RADI 230, RADI 231, RADI 330, RADI 331, RADI 380, RADI 430, and RADI 431.
3. All the Professional Component courses, Major Courses, Biology and Mathematics should be approved with minimum grade of "C".
4. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
5. Students transferring from other Universities must comply with the residency requirements at UNE.
6. Second year students and forward should be obtain an academic evaluation from program coordinator before completing enrollment process.

Bachelor in Radiological Sciences**Major in Computerized Tomography and Magnetic Resonance Imaging**

122Credits	Credits
General Education	33
Professional Component	20
Major Courses	53
Electives	15

General Education Component		33
BIOL-115	Introduction to Human Biology	3
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
HIST-255	Analysis of Historic Processes in Puerto Rico	3
HUMA-228	Puerto Rico and its Contribution to the Caribbean and the World	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
PSYC 228	Diversity Psychology	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN-111 SPAN-115 SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SPAN-112 SPAN-116 SPAN-126	Basic Oral, Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Advanced Writing in Spanish II	3
SOSC- 112	The Human Social Environment	3

Professional Component		20
BIOL-231	Cross Sectional Anatomy I	3
BIOL-232	Cross Sectional Anatomy I	3
HESC 121	Patient Care in Radiographic Imaging	3
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
PSYC-212	Health Psychology	3

Major Courses		53
RADI-101	Introduction to Radiological Sciences	2
RADI-102	Radiological Physics	3
RADI-103	Pathology and Medical Terminology	2

RADI-105	Radiographic Chemistry and Processing	2
RADI-107	Radiographic Positioning Techniques I	2
RADI-108	Radiographic Positioning Techniques II	2
RADI-109	Radiographic Positioning Techniques III	2
RADI-200	Radiobiology and Radiology Protection	3
RADI-210	Quality Assurance in Radiology	2
RADI-213	Principles of Radiographic Exposure and Procedures	3
RADI-230	Clinical Practicum I	1
RADI-231	Clinical Practicum II	1
RADI-243	Special Procedures and Radiographic Film Critique	2
RADI-255	Introduction to Imaging Modalities	2
RADI-311	Computerized Tomography Physics	2
RADI-312	Magnetic Resonance Physics	2
RADI-313	Compared Pathology I	2
RADI-314	Compared Pathology II	2
RADI-315	Imaging Protocols and Procedures in CT and MRI	4
RADI-330	Clinical Practicum III	1
RADI-331	Clinical Practicum IV	1
RADI-380	Radiologic Technology Seminar -Registry review	4
RADI-440	Clinical Education with Seminars VI	1
RADI-441	Clinical Education with Seminars VII	1
RADI-442	Clinical Education with Seminars VIII	1
HESC-200	Computer Imaging Creation and Analysis	3

Electives		15
COMP-110	Introduction to Computers and Software	3
Electives	Elective I	3
Electives	Elective II	3
Electives	Elective III	3
Electives	Elective IV	3

Important Notes:

1. + Course with laboratory.
2. The following courses should be approved with a minimum grade of "B": RADI 101, RADI 230, RADI 231, RADI 330, RADI 331, RADI 380, RADI 430, RADI 441, and RADI 442.
3. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
4. Students transferring from other Universities must comply with the residency requirements at UNE.

Bachelor in Medical Sonography Sciences
Major in Vascular and Echocardiography Technology

118 Credits	Credits
General Education	33
Professional Educational Component	22
Major Courses	63

General Education Component		33
BIOL-115	Introduction to Human Biology	3
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
HIST-255	Analysis of Historic Processes in Puerto Rico	3
HUMA-228	Puerto Rico and its Contribution to the Caribbean and the World	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
PSYC 228	Diversity Psychology	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SPAN-112 or SPAN-116 or SPAN-126	Basic Oral, Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Advanced Writing in Spanish II	3
SOSC- 112	The Human Social Environment	3

Professional Educational Component		22
BIOL-231	Cross Sectional Anatomy I	4
BIOL-232	Cross Sectional Anatomy I	4
BIOL-335	Cardiovascular Anatomy and Physiology	3
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
UNRE-101	Concepts and Principles of Research	3

Major Courses		63
SONO-100	Introduction to Medical Sonography and Patient Care	3
SONO-102	Techniques and Protocols in Sonography	2
SONO-110	Compendium of General Physics	3
SONO-234	Ultrasound Physics and Instrumentation I	2

SONO-235	Ultrasound Physics and Instrumentation II	2
SONO-238	Abdominal Sonography & Laboratory	3
SONO-240	Small Parts Sonography & Laboratory	3
SONO-242	Gynecology Sonography & Laboratory	2
SONO-247	Pre-Clinical Observation (Clinical Education I)	1
SONO-248	Clinical Education II	1
SONO-249	Clinical Education III	1
SONO-250	Obstetrics Sonography	3
SONO-252	Pathology and Medical Terminology	3
SONO-260	General Sonography Review	2
SONO-334	Vascular Physics and Instrumentation	3
SONO-336	Vascular Technology I: Cerebral / Vascular	3
SONO-336 L	Vascular Technology I Laboratory	2
SONO-337	Vascular Technology II: Peripheral	3
SONO-337 L	Vascular Technology II Laboratory	2
SONO-338	Techniques and Protocols for Adult Echocardiography	3
SONO-340	Adult Echocardiography with Laboratory	3
SONO-342	Cardiac Pathophysiology	3
SONO-347	Clinical Education in Vascular Technology I	1
SONO-348	Clinical Education in Vascular Technology II	1
SONO-349	Clinical Education in Adult Echocardiography I	1
SONO-350	Clinical Education in Adult Echocardiography II	1
SONO-401	Comparative Imaging	3
SONO-406	Advanced Seminar	3

Important Notes:

1. + Course with laboratory.
2. The following courses should be approved with a minimum grade of "B": SONO 100, SONO 247, SONO 249, SONO 248, SONO 347, SONO 348, and SONO 349.
3. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
4. Students transferring from other Universities must comply with the residency requirements at UNE.
5. Second year students and forward should be obtain an academic evaluation from program coordinator before completing enrollment process.

Bachelor in Sciences in Nursing

122 Credits	Credits
General Education	33
Professional Educational Component	25
Major Courses	64

General Education Component		33
ENGL-110 or ENGL-115 or ENGL-125	Basic Oral, Reading and Writing in English I Reading, Writing and Oral Communication in English I Advanced English I	3
ENGL-111 or ENGL-116 or ENGL-126	Basic Oral, Reading and Writing in English II Reading, Writing and Oral Communication in English II Advanced English II	3
HIST-255	Analysis of Historic Processes in Puerto Rico	3
HUMA-228	Puerto Rico and its Contribution to the Caribbean and the World	3
MATH-120 or MATH-130	Introduction to Algebra Pre- Calculus I	3
PSYC 228	Diversity Psychology	3
QYLE-110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN-111 or SPAN-115 or SPAN-125	Basic Oral, Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Advanced Writing in Spanish I	3
SPAN-112 or SPAN-116 or SPAN-126	Basic Oral, Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Advanced Writing in Spanish II	3
SPAN-240	Literature and Diversity	3
SOSC- 112	The Human Social Environment	3

Professional Educational Component		25
CHEM-122	Chemistry for Health Professionals	4
ENGL-217	English for Health Professionals	3
HESC-125	Human Anatomy and Physiology I	4
HESC-126	Human Anatomy and Physiology II	4
HESC-207	Microbiology for Health Professionals	4
NUTR-101	Introduction to Nutrition	3
PUHE-201	Introduction to Biostatistics	3

Major Courses		64
NURS-101	Introduction to Nursing	2
NURS-102 P	Fundamentals of Nursing	5

NURS-103	Basic Principles of Pharmacology	3
NURS-104 P	Maternal-Child Nursing	5
NURS-201 P	Pediatric Nursing	5
NURS-202 P	Medical-Surgical Nursing I	5
NURS-203 P	Medical-Surgical Nursing II	5
NURS-204 P	Psychiatric Nursing	5
NURS-300	Physical Assessment	3
NURS-320	Community Nursing	5
NURS-380	Basic Principles of Research	3
NURS-402	Emergency and Intensive Care Nursing	6
NURS-422	Nursing Seminar	3
NURS-440	Administration and Leadership in Nursing	3
NURS-480	Clinical Practice	6

Important Notes:

1. + Course with laboratory.
2. P courses with clinical practice.
3. All NURS courses should be approved with a minimum grade of "B".
4. The English, Spanish and math courses will be assigned to the results of the College Board Entrances Exam or the CREE placement test.
5. Students transferring from other Universities must comply with the residency requirements at UNE.
6. Second year students and forward should be obtain an academic evaluation from program coordinator before completing enrollment process.

COURSE DESCRIPTIONS

RADIOLOGY

RADI 101 Introduction to Radiological Sciences and Medical Terminology

2 Credits

This course introduces radiologic technology as a science and discusses aspects related to the profession. The students will learn about human diversity, ethic and cultural values and how these need to be integrated into the profession. Medical terminology related to imaging sciences will be discuss, developing a basic understanding of the medical language employed in the health care professions and Imaging department. One semester, 2 hours per week.

RADI 102 Radiological Physics

3 Credits

This course covers the fundamental principles of physics and electronics involved in the production, use and control of the various electromagnetic energies used in medical and diagnostic applications. Topics include electromagnetic waves, electricity and magnetism, electrical energy, power and circuits as they relate to radiography. Upon completion, students should be able to demonstrate an understanding of basic principles of physics as they relate to the operation of radiographic equipment.

RADI 103 Pathology and Medical Terminology

2 Credits

In this course the student will learn the technical vocabulary that he will need in the practice of his profession. The technical language of radiology will be taught to facilitate the effective collaboration of the radiologic technologist, his colleagues and the radiologist. Also covered are the prefixes, suffixes and roots of medical terminology, as well as the functions and analysis of those terms. The most frequent pathological conditions handled by the profession are emphasized.

One semester, 2 hours per week. Prerequisites: BIOL 203

RADI 105 Radiographic Chemistry and Processing

2 Credits

This course studies and analyzes the complete procedure necessary to develop an x-ray film (manual and automatic). The student will develop the capacity to recognize artifacts, fog, foreign bodies, contamination of the solutions, etc. Types of film, cassettes, intensifying screens, etc., and how to use them are also covered in this course.

One semester, 2 hours per week Prerequisite: RADI 101, RADI 102

RADI 107 Radiographic Positioning Techniques I

3Credits

This course is a study of the radiographic procedures as they relate to the skeletal system. Topics include positioning, exposure factors, film evaluation and related anatomy of the chest, abdomen, superior and inferior extremities. There are positioning laboratory components. One semester, 3 hours per week. Co-Requisites: HESC 125, RADI121.

RADI 108 Radiographic Positioning Techniques II
3Credits

This course is a study of the shoulder and pelvic girdle, bony thorax, sternum, joints (AC and SC), and radiographic special procedures including fluoroscopy and the use of contrast media. It includes discussion of correct factors exposure, positioning skills, medical indication and counter-indications for special studies pertaining to the anatomical region of study. Positioning practical workshops will be included. Students should pass successfully the pre-requisites courses to continue into the next level. One semester, 3 hours per week. Pre-requisite: RADI 107; RADI 230; RADI 121

RADI 109 Radiographic Positioning Techniques III
3 Credits

This course is a study of the vertebral column and skull. It includes discussion of correct exposure factors and positioning skills. During the clinical rotation, students will meet the competencies of vertebral column and skull. Positioning laboratory is included. Students should pass successfully the pre-requisites courses to continue into the next level. One semester, 3 hours per week. Pre-requisite: RADI 107, RADI 108, RADI 230, RADI 231; RADI 121, RADI 213

RADI 121 Patient Care in Radiologic Technology
2 Credits

This course introduces the radiologic technology student to their responsibilities when working with patients. This course will discuss patient education, safety and comfort. The course will address infection control, handling of hazardous materials, isolation precautions, patient history, body mechanic, patient transfer and lifting, vital signs oxygen therapy and patient monitoring. The students will learn how to recognize signs and symptoms in an acute patient and emergency situations. Co-requisites: RADI 107; RADI 101

RADI 200 Radiobiology and Radiology Protection
2Credits

This course introduces the student to the possible negative effects of diagnostic medical radiation on the human body. Specifically, the student will study how the quality and quantity of x-ray radiation can damage cellular structure and the different ways to minimize this potential danger. This course also discusses rules and regulations regard radiation safety surrounding the radiographer and his/her role in exposing and protecting the public to diagnostic medical radiation. Present the Students should pass successfully the Prerequisites: courses to continue into the next level. One semester, 2 hours per week. Prerequisites: RADI 107, RADI 213, RADI 214

RADI 210 Quality Assurance in Radiology
2 Credits

This course will offer students basic knowledge on the importance and implementation of a quality assurance program in a radiological facility. Emphasis will be given to the quality control tests performed on radiographic exposure and film development equipment. Prerequisites: MATH 120, RADI 107, RADI 213, RADI 214

RADI 212 Pathology, Evaluation and Radiographic Critique
1 Credit

This course is a study of the most common conditions and lesions affecting the human being and its relation to the changes observed in the radiographic image. Evaluation and analysis of radiographs

pertaining to the anatomical region studied. Evaluation of the quality on the radiographic image.
Prerequisites: RADI 107, 108, HESC 125

RADI 213 Principles of Radiographic Exposure and Processing

3 Credits

This course is designed to provide the students with principles of radiographic exposure factors, the production of a radiographic image, visibility and geometrical factors and analog film processing. The student will develop knowledge and skills necessary to recognize and evaluate qualitative factors in clinical radiographs. Prerequisites: MATH 118; RADI 101

RADI 214 CR & DR Image Acquisition and Display

2Credits

This course is a continuation of principles and radiographic exposure and processing I. It will begin with a review of technical factors necessary for image production and acquisition. It will present digital image acquisition and compare it to screen film imaging. DICOM standards will be discussed. PACS system of storage and transfer will be presented. Manipulation of various exposure factors and choices of equipment uses will be explored. The student will develop knowledge and skills necessary to recognize and evaluate qualitative factors in clinical radiographs. One semester, 2 hours per week. Prerequisites: MATH 118, RADI 213 RADI 108, RADI 231

RADI 230 Clinical Practicum I

1 Credit

This course is a competency-based clinical experience that develops the cognitive, affective, and psychomotor skill level of students in the performance of radiographic procedures. . During the clinical rotation, students will assist and perform basic radiographic procedures. Emphasis will be placed on the skeletal system and radiographic procedures of the chest, abdomen, upper and lower extremities. Students must complete 192 clinical hours and pass successfully the Co-requisites: courses to continue into the next level. Co- Requisite: RAD 107; RADI 121; RADI 101

RADI 231 Clinical Practicum II

1 Credit

This course is a competency-based clinical experience that develops the cognitive, affective, and psychomotor skill level of students in the realization of radiographic procedures of the bony thorax, shoulder and pelvis girdle, special radiographic procedures and assisting the radiologist in interventional procedures. Emphasis will be placed on the skeletal system and special procedures requiring administration of contrast media for the visualization of all the body systems. Mastery of knowledge from previous clinical practicum will occur. Students must complete 192 clinical hours and pass successfully the Pre-requisites courses to continue into the next level. Prerequisites: RADI 107, RADI 230, RADI 121

RADI 243 Special Procedures and Radiographic Film Critique

2 Credits

This course introduces the student to self-initiated didactic activities where he or she coordinates and plans an independent study, which is supervised and evaluated by the instructor. The student chooses a radiographic subject for investigation, which he develops and then orally presents. Concepts such as kilovoltage, milliamperage, time of exposure, body habitué, density, contrast, tones, definition, resolution, positions, etc., are evaluated and demonstrated radiographically. One semester, 2 hours per week. Prerequisites: RADI 109

RADI 255 Introduction to Imaging Modalities**2 credits**

This course introduces students to deal with new modalities of medical diagnosis imaging. Course includes basic concepts of principles and operational procedures of lineal tomography, digital and computerized radiology, computed tomography, vascular, magnetic resonance, nuclear medicine, radiotherapy, mammography, Sonography and bone density. Prerequisites: RADI 107, RADI108, RADI 109, RADI 230, RADI231, RADI 330

RADI 256 Ethical and Legal Issues in Diagnostic Imaging**1 Credit**

This course covers medical-legal aspects and the impact on health information management practice including computerization of release patient data, privacy, confidentiality, due process and liability. Comprise current aspects on ethic, responsibilities, obligations, and right of the health professionals towards patient and colleagues, including case presentation and discussion. One semester, 1 hour per week. Pre-requisites: RADI 107, 108,109, RADI 121, RADI 230, 231,330

RADI 301 Quality Control in Mammography**2 Credits**

Cognitive and practical study of the acquisition of high-quality diagnostic images of the mammary glands through technical skills, anatomical positioning and special procedures. Presentation of the anatomy and pathology of the mammary glands. Concepts as production of the image, analysis and evaluation of the breast, anatomical and pathological correlation, quality control and radiation protection in equipment and processing legislation. Programs of quality assurance and radiological safety are emphasized. One semester, 2 hours per week. Prerequisite: RADI 210

RADI 302 Breast Pathology**2 Credits**

Description and study of the anatomy and pathology of the breast in relation with mammography and other radiological procedures. The clinical study of the etiology and development of breast disease is included. The discussion of American College of Radiology and American Cancer Society guidelines, screening and medical history techniques related the breast and breast imaging procedures is also included. The course is developed through the use of case studies, team work, literary review and research. The responsible use of technology is encouraged. One semester, 2 hours per week. Prerequisites: BIOL 231

RADI 311 Computerized Tomography Physics**2 Credits**

Introduction to the physics and imaging instrumentation in the field of the Computerized Tomography CT. Emphasis in concepts such as: occupational exposure, sensors, pixels, collimation images delineation, function and application of the computer and the factors involved in the CT unit. One semester, 2 hours per week. Prerequisites: RADI 200 - 213

RADI 312 Magnetic Resonance Imaging Physics**2 Credits**

Introduction to the physics and imaging instrumentation in the field of Magnetic Resonance (MRI). Study of the interactions of the electromagnetic waves to generate a sign in MRI, magnetization, constant variation free inducement decay and effect of the force of the magnetic field on the MRI sign, among other are covered. One semester, 2 hours per week. Prerequisites: RADI 311.

RADI 313 **Compared Pathology I**
2 Credits

Comparison and conversion of the images and pathologies obtained from CT and MRI Imaging techniques. A thorough study of the quality of the images, tones, contrasts, anatomical and pathological delineation, medical terms, human body system, effect of the body tissues and body habits in the obtained images. Competencies in the identification of the imaging protocols to follow in the event of pathological findings. One semester, 2 hours per week. Prerequisites: RADI 231, 310, HESC 121 and BIOL 232

RADI 314 **Compared Pathology II**
2 Credits

Comparison and conversion of the images and pathologies obtained from CT and MRI Imaging techniques. A thorough study of the quality of the images, tones, contrasts, anatomical and pathological delineation, medical terms, human body system, effect of the body tissues and body habits in the obtained images. Competencies in the identification of the imaging protocols to follow in the event of pathological findings. One semester, 2 hours per week. Prerequisites: RADI 231, 310, HESC 121 and RADI 313

RADI 315 **Imaging Protocols and Procedures in Computerized Tomography, and Magnetic Resonance**
4 Credits

Discussion of the clinical protocols and basic procedures of Computed Tomography and Resonance Magnetic. Analyses the scanning techniques to best demonstrate anatomy and pathology. Study of the basic equipment, parameters to optimize image quality and technique to minimize artifacts. The course is developed through the use of conferences, team work concept application, case studies, site visits. The responsible use of technology is encouraged. One semester, 4 hours per week.

RADI 330 **Clinical Practicum III**
1 Credit

This course is a competency-based clinical experience that intensifies the cognitive, affective and psychomotor skill level of students performing radiographic procedures of the vertebral column and skull. This clinical experience provides learning opportunities in mobile, trauma and surgical radiographic procedures. Mastery of knowledge from previous clinical practicum with a focus on outcomes assessment will occur. Students must complete 288 clinical hours and pass successfully the Pre-requisites courses to continue into the next level. Pre-requisites: RADI 108, RADI 231, RADI 121, RADI (expo)

RADI 331 **Clinical Practicum IV**
1 Credit

A competency-based clinical experience that intensifies the cognitive, affective and psychomotor skill level of students in the realization of special radiographic procedures. Students will assist the radiologist in interventional procedures. This clinical experience provides learning opportunities in radiographic critique and quality assurance. The student will acquire proficiency in the realization of all radiographic and special procedures, preparation of contrast media and patient under indirect supervision. Mastery of knowledge from previous clinical practicum with a focus on outcomes assessment. Students must complete 288 hours and pass successfully the Pre-requisites courses to continue into the next level. Pre-requisites: RADI 109, RADI 330, RADI 121, RADI (expo)

RADI 380 Radiologic Technology Seminar -Registry review

1 Credit

This course is designed to summarize and integrate the didactic and clinical experience components in radiologic technology program. Students prepare for the ARRT and Puerto Rico examination. Cases studies will be used to enhance critical thinking and computed mock tests will be integrated as part of the registry review. Pre-requisites: all RAD courses

RADI 401 Digital Angiography and Cardiovascular Procedures

2 Credits

Development of the new technologies in the field of Digital Subtraction Angiography and those procedures in cardiovascular system for diagnostic of diseases in the circulatory and cardiovascular system of the human body. Concepts such as: conventional and digital angiography and their imaging units, its anatomical and pathological correlation, specialized terms, contrast media, role of the radiological technologist as health professional and its relevancy to modern technology are emphasized. One semester, 2 hours per week. Prerequisites: RADI 331, HESC. 121, BIOL 231

RADI 402 Cardiovascular Pathology

2 Credits

Description and study of cardiovascular, peripheral, neurovascular e interventional pathology in relation with radiological procedures. The clinical study of the etiology and development of disease is included. The discussion of screening and medical history techniques related to cardiovascular, peripheral, neurovascular diseases and interventional procedures. The course is developed through the use of case studies, team work, literary review, research and audiovisual aids. The responsible use of technology is encouraged. One semester, 2 hours per week. Prerequisites: BIOL 231, HESC 200.

RADI 430 Clinical Education with Seminar V

1 Credit

Evaluation of the student's skills acquisition in a practical setting. Competencies in-patient care management, utilization of the imaging mammography, angiography units and other in relation to cardiovascular imaging studies, utilization and function of the contrast media, and the establishment of the necessary quality controls. Attention is given to the student's needs ethics and new technological and clinical approaches. One semester, twenty-nine (29) hours per week of practice. Prerequisites: RADI 331

RADI 431 Clinical Education with seminar IX

1 Credit

The student will practice all the knowledge acquired in the classroom. The development of the skills needed to work in the area is expected. The student will learn the administration, use and function of contrast media in relation with radiological procedures. Attention will be given to the implementation of quality control, and the new clinical and technological developments. In addition to the 200 contact hours of practice, the course is developed through the use of case studies, literary review and research. The responsible use of technology is encouraged. One semester, 200 hundred hours per semester. Prerequisite: RADI 430

RADI 440 Clinical Education with Seminar VI

1 Credit

Evaluation of the student's skills acquisition in a practical setting. Competencies in-patient care management, utilization of the imaging mammography, angiography units and other in relation to

cardiovascular imaging studies, utilization and function of the contrast media, and the establishment of the necessary quality controls. Attention is given to the student's needs, ethics and new technological and clinical approaches. One semester, twenty-one (21) hours per week of practice. Prerequisites: RADI 301, 331

RADI 441 Clinical Education with Seminar VII

1 Credit

Continuation of the skills acquisition of the students in the practical setting. Apprenticeship and greater skills acquisition in the managing and patient care, as well as, the utilization of the units of Computerized Tomography (CT) and Magnetic Resonance (MRI). Utilization and functions of the means of contrast and necessary quality controls established for the high performance in his area. Attention will be given to the needs, ethical and new technological and clinical approaches related to the profession. One semester twenty-one hours per week.

Prerequisites: RADI 440

RADI 442 Clinical Education with Seminar VIII

1 Credit

Continuation of the skills acquisition of the students in the practical setting. Apprenticeship and greater skills acquisition in the managing and patient care, as well as, the utilization of the units of Computerized Tomography (CT) and Magnetic Resonance (MRI). Utilization and functions of the means of contrast and necessary quality controls established for the high performance in his area. Attention will be given to the needs, ethical and new technological and clinical approaches related to the profession. One semester twenty-one hours per week.

Prerequisite: RADI 441

HEALTH SCIENCES

HESC 111 Computers in Medical Informatics

2 Credits

Introductory course that includes basic concepts such as: management history, theory of management, management in health services, the administrative process, organizational models, legal aspects and technologist's role as an allied health professional. One semester, 2 hours per week.

HESC 121 Patient Care Radiographic Imaging

3 Credits

This course has been designed as an introduction to specific principles in the field of nursing and all that is related to patient care and emergency procedures in medical imaging. Concepts such as emergency units, patient movement, and transfer, aseptic techniques during the administration of contrast media, recognition of allergenic reactions, vital signs, first aid cardiopulmonary resuscitation, legal aspects, cardiac arrest, technologists role with injury patients and management of contrast media are emphasized. One (I) semester, 3 (3) hours per week. Prerequisites: Official admission to Radiologic Technology, Medical Sonography or Computerized Tomography Programs.

HESC 125 Anatomy and Physiology for Health Professions I

4 Credits

The course offers fundamental concepts of anatomy and human physiology. The relationship between structure, function and its integration within the different systems of the human body are emphasized. The course covers the basic principles of biochemistry and cellular biology including the

integumentary, skeletal, muscular nervous and endocrine systems. The course incorporates pathological conditions, medical terminology and other more common diagnostic exams for different conditions. One semester, 3 hours of lecture and 3 hours of Laboratory per week.

HESC 126 Anatomy and Physiology for Health Professions II

4 Credits

The course offers fundamental concepts of anatomy and human physiology. The relationship between structure, function and its integration within the different systems of the human body are emphasized. Pathological conditions, diagnostic exams and diagnosis and treatment will be discussed. The course covers the basic principles of biochemistry and cellular biology, the circulatory (cardiovascular and lymphatic), respiratory, digestive, immune, reproductive and urinary systems. The course incorporates medical terminology and exams in order to recognize structures, pathologies or illnesses. The responsible use of technology is encouraged. One semester, 3 hours of lecture and 3 hours of Laboratory per week.

HESC 200 Computer Image Creation And Analysis

3 Credits

This course offers an introduction to information literacy. It covers computer history, its component and infections. It describes the use and applications of computers in the different diagnostic imaging modalities; as well as the production and data processing used. Emphasis will be given to data acquisition and analysis of images in Computed Tomography, Magnetic Resonance Imaging, Medical Sonography, Radiologic Technology, and Nuclear Medicine. One semester, 3 hours per week.

HESC 207 Microbiology for Health Sciences

4 Credits

The course provides students with microbiology fundamentals and their relationship to individual health. The course permits the student to develop skills and competencies necessary for effective and safe performance in the clinical-hospital setting. Through the theoretic component the student familiarizes himself with different groups of microorganisms, paying major attention to those which affect human health. Attention is focused on the basic principles of microbiology such as morphology, physiology, identification and bacterial afflictions, molds, viruses and their relationship to diseases. In addition, infection epidemiology, host defenses and immunological principles and the application of this knowledge in the prevention of disease are developed in this course. The laboratory component provides the student with skills related to aseptic techniques, disinfection, tincture, isolation and culture of microorganisms. Methods of bacterial growth control are also emphasized. One semester, three hours of lecture and 3 hours of laboratory per week.

MEDICAL SONOGRAPHY

SONO 101 Introduction to Medical Sonography

3 Credits

The course introduces the Medical Sonography student with the roles and tasks of a Sonographer. It covers concepts such as: Origins of the Diagnostic Medical sonography, Abilities and Skills desirable in sonographer candidates, and career advantages. The course also introduces to the different sonographic specialties, the staff sonographer administrative duties, the basic instrument in all sonographic equipment and how it is used. One semester, 3 hours per week.

SONO 102 Techniques and Protocols in Sonography
2 Credits

This course presents the basic concepts and terminology, as well as guidelines protocols for the ultrasound examination. Topics include scanning techniques, patient position, images and diagnostic criteria used to make a preliminary report. One semester, 2 hours per week

SONO 110 Compendium of General Physics
3 Credits

The course introduces basics subjects of general physics, such as: the study of measurement systems, dynamics, energy saving and work, heat and temperature, fluids, light and sound waves, electricity and magnetism. The course focus is primarily directed to physics concepts, although it includes numerical problems and simple application exercises. Prerequisites: MATH 118

SONO 234 Ultrasound Physics and Instrumentation I
2 Credits

Course designed to understand acoustic concepts such as oscillation, acoustical waves, reflection & refraction of sound waves. During the course the student learns all the processes produced from the interaction between sound waves and the different human tissues. One semester, 2 hours per week. Prerequisite: PHSC 110

SONO 235 Ultrasound Physics and Instrumentation II
2 Credits

The course presents different ways to operate the Diagnostic Ultrasound equipment. It includes Amplitude, Brightness and real-time modes. Along the course many concepts are discussed related to Doppler Physics and the Biological Effects of the Diagnostic Ultrasound. One semester, 2 hours per week. Prerequisite: SONO 234

SONO 238 Abdomen Sonography and Laboratory
3 Credits

The course emphasizes the clinical procedure and interpretation in sonographic examinations of the abdomen. Includes the ultrasound evaluation of the Gallbladder (GB), Liver, Spleen, Kidneys, Adrenals, Pancreas, and other abdominal organs. Normal anatomy and pathology of the abdomen will be discussed, as seen in a sonogram. One semester, 2 hours of laboratory per week and 3 hours of lecture per week. Prerequisite: SONO 101

SONO 240 Small Parts Sonography and Laboratory
3 Credits

The course emphasizes the clinical procedures used in diagnostic medical sonography of the small parts examinations. Includes the techniques and sonographic evaluation used to examine structures like the: Thyroid, Parathyroid, Carotid Vessels, Scrotum and Testicles, Breast, Prostate, Popliteal Area, and others glands. One semester, 2 hours of laboratory per week and 3 hours of lecture per week. Prerequisites: SONO 101, 238 and 242.

SONO 242 Gynecology Sonography
3 Credits

This course covers all the clinical examinations involved in diagnostic ultrasound gynecologic procedures. The student will be able to recognize normal pelvic anatomy and gynecologic pathology

seen in a pelvic sonogram. Emphasis is given to different imaging techniques. One semester, 2 hours of laboratory per week and 3 hours of lecture per week.

Prerequisites: SONO 238, 252.

SONO 247 Clinical Education I

1 Credit

This is the first of three clinical education's courses. In this course the student learns by observing the different sonographic procedures made along the clinical practice. The student will have the opportunity of see different sonographic procedures, scanning techniques and instrumentation used for patient's evaluation. The course's purpose is exposing the student with all tasks performed by a professional sonographer in a clinical field. One semester. Prerequisite: Satisfactory grades in first semester major courses.

SONO 248 Clinical Education II

1 Credit

This second clinical experience demands an active role of the student. This phase of clinical education emphasizes in the performance of sonographic studies with direct supervision of a medical sonography professional. The student will have to participate in the performance of different sonographic procedures to evaluate patients by using the appropriate scanning techniques. One semester. Prerequisite: SONO 247

SONO 249 Clinical Education III

1 Credit

This clinical education course is designed to give the student time and opportunity to practice doing different sonograms with minimal supervision. The students must possess the skills needed to make abdominal and gynecological sonograms. The course will prepare them to develop the skills needed to practice these studies and learn how to do obstetrical and small parts examinations. One semester. Prerequisite: SONO 248

SONO 250 Sonography in Obstetrics

3 Credits

The course emphasizes the clinical procedures in diagnostic ultrasound obstetrics examinations. This course covers concepts such as: fetal growth and development, fetal measure, evaluation of fetal well-being and the scanning techniques used to evaluate pregnancy in Trimesters. One semester, 3 hours per week. Prerequisites: SONO 238, 252.

SONO 252 Pathology and Medical Terminology

3 Credit

This course is designed for the discussion of human physiology and pathology of the different body systems as seen sonographically. A discussion of the pertinent medical terminology, pathologic aspects and its association with patient clinical history and the sonographic features are also included. One semester, 3 hours per week. Prerequisite: SONO 101

SONO 256 Seminar and Student Project in Medical Sonography

3 Credits

The course is designed to promote interest in clinical and bibliographic research among the program students. During the course are discussed journal articles and clinical cases performed by the students. Each student will be assigned with a research work which intends to extend its knowledge in

all ultrasound areas in which he or she is involved during the clinical education. One semester, 3 hours per week. Prerequisite: SONO 238, 242, 250, 247, 248, 249 (CONCURRENTLY)

SONO 260 General Sonography Review

2 Credits

This course serves as a review in preparation for the American Registry of Diagnostic Medical Sonography (ARDMS) examinations. Students will be given exercises in the areas of Abdomen, OB/Gyn and Small parts. The student will take "mock registries" of the different specialties.

SONO 334 Vascular Physics and Instrumentation

3 Credits

This course emphasizes the Vascular Physics Principles and the use and function of the Doppler Instruments. Detailed evaluation of Doppler physics, including Color, Spectral, and Power Doppler principles will be covered, as the artifacts and image optimization methods associated with these techniques. The physics and laws that govern blood flow in the circulatory system will be also emphasized. One semester. 3 hours per week. Prerequisite: SONO 234-235.

SONO 336 Vascular Technology I

3 Credits

This course studies the circulatory system anatomy and pathophysiology as seen in a B-Mode, Doppler and physiologic studies techniques. Protocols commonly used to evaluate the Carotid System (Extra and Intracranial), venous, arteries (Upper and Lower extremities) and abdominal vasculature will be discussed. One Semester. 3 hours of lecture and 2 hours of Laboratory. Prerequisites: BIOL 335, SONO 334.

SONO 337 Vascular Technology II

3 Credits

Course directed to the uses of non-invasive vascular exams for the diagnosis of peripheral and abdominal venous diseases. Emphasis on the different modalities used to evaluate the leg and abdominal vessels. Examination protocols, patient history and physical findings and the validation test are discussed. Clinical experience and laboratory sessions are required. One Semester. 3 hours of lecture and 2 hours of Laboratory. Prerequisites: BIOL 335, SONO 334 and SONO 336.

SONO 338 Techniques and Protocols for Adult Echocardiography

2 Credits

Study of the ultrasound instrumentation principles, modes of operation, operator control options, scanning motion and planes used in adult cardiac scanning examination. It covers, subjects such as: patient history, preparation and physical signs, also, the Doppler versus Color Doppler protocols used to evaluate the adult heart. One semester. 2 hours lecture and one hour of laboratory. Prerequisites: SONO 334 and BIOL 335.

SONO 340 Adult Echocardiography with Laboratory

3 Credits

This course explains the adult cardiac anatomy, physiology and pathology. Scanning techniques and protocols using 2-D, M-Mode as well as Color and pulsed Doppler are also covered. Special attention will be given to most use cardiac measurements and calculations. One semester. 3 hours of lecture and 2 hours of Laboratory. Prerequisites: SONO 338.

SONO 342 Cardiac Pathophysiology

3 Credits

Study of cardiac pathologies, their physiological symptoms, outcomes, and their echosonographic appearance. Special attention will be given to the valves diseases, cardiomyopathies, coronary artery disease, neoplastic and inflammatory processes and other cardiac conditions. During the course other subjects are covered such as: cardiac trauma, prosthetic heart valves and congenital heart diseases. One semester, three hours lecture. Prerequisites: SONO 338 and SONO 340.

SONO 347 Vascular Technology and Echocardiography

1 Credit Clinical Education I

Supervised off-campus clinical education to provide the student with the skills for vascular scanning and sonographic evaluation. Requires 180 hours of practice during the semester.

SONO 348 Vascular Technology and Echocardiography

1 Credit Clinical Education II

Supervised off-campus clinical education to provide the student with the skills for vascular scanning and sonographic evaluation. Requires 180 hours of practice during the semester. Prerequisite: SONO 347.

SONO 349 Vascular Technology and Echocardiography

1 Credit Clinical Education III

Supervised off-campus clinical education to provide the student with the skills for adult heart scanning and sonographic evaluation. Requires 180 hours of practice during the semester.

SONO 350 Vascular Technology and Echocardiography

1 Credit Clinical Education IV

Supervised off-campus clinical education to provide the student with the skills for adult heart scanning and sonographic evaluation. Requires 180 hours of practice during the semester. SONO 349

SONO 401 Comparative Imaging

3 Credits

The course studies the uses and applications of the different diagnostic Imaging modalities. Emphasis will be given to the analysis of images in Computed Tomography, Magnetic Resonance Imaging, Radiological Technology and Nuclear Medicine as compared with Medical Sonography. The student will be able to recognize the indications and importance of each diagnostic study. Prerequisite: SONO 249, 334.

SONO 406 Advanced Seminar

3 Credits

This is an advance-level course designed to develop critical thinking attitudes in our students towards the objective evaluation of sonographic studies performed on their clinical practice. Throughout evaluation of sonographic techniques, clinical history taken and background information about pathology on sonograms will be encouraged. Also, the course gives the opportunity to discuss breakthroughs in ultrasound as well as newer applications. One semester. One hour of laboratory. Prerequisite: SONO 349, 336.

BIOLOGY

BIOL 335 Cardiovascular Anatomy and Physiology **2 Credits**

The course is an in-depth study of cardiovascular anatomy and physiology, with emphasis in venous and arterial hemodynamics. This course also includes discussion of the pathophysiological basis of cardiovascular disease. Prerequisites: BIOL 231-232.

PHARMACY

PHAR 210 Pharmaceutical Calculations I **3 Credits**

In this course the aspects related to the solution of problems of pharmaceutical nature are discussed: foundations of measures and calculations, reasons and proportions, metric system, apotecary and avoirdupois systems, domestic system, conversions between system and the interpretation of prescriptions. One semester, 3 hours per week. Prerequisites: MATH 117

PHAR 211 Pharmaceutical Calculations II **3 Credits**

In this course the following aspects related to the solution of problems of pharmaceutical nature are discussed: preparations of percentage, increase and reduction of formulas, concentration and dilution, pediatrics dosage, thermometry, parenteral preparations and calculations related to filling prescriptions. One semester, 3 hours per week. Prerequisite: Pharmaceutical Calculation I (PHAR 210)

PHAR 212 Pharmaceutical Administration **3 Credits**

The course is designed to provide the student with the basic business management skills, the laws and regulations applicable to the operational aspects of a commercial drugstore. The relations with the suppliers, patients, management and other personnel of the community pharmacy are studied. The students through study cases evaluate facts for the purchase, management and maintenance of a drugstore. One semester, 3 hours of lecture per week.

PHAR 226 Pharmacotherapy for Pharmacy Technicians I **3 Credits**

This is the first of a three parts course that integrates the basic knowledge in anatomy, physiology, pathophysiology and pharmacology necessary to carry out effectively the functions of a pharmacy technician described in the Puerto Rico Law # 247 as of September 2004. Emphasis is given not only to the pharmacologic part where the student is familiarized with the generic and trade names of the drug, but also safe and effective use of medicines of more demand today. One semester, 3 hours of lecture per week. Prerequisites: none

PHAR 227 Pharmacotherapy for Pharmacy Technicians I I **3 Credits**

This is the second of a three parts course that integrates the basic knowledge in anatomy, physiology, pathophysiology and pharmacology necessary to carry out effectively the functions of a pharmacy technician described in the Puerto Rico Law # 247 as of September 2004. Emphasis is given not only to

the pharmacologic part where the student is familiarized with the generic and trade names of the drug, but also safe and effective use of medicines of more demand today. One semester, 3 hours of lecture per week. Prerequisites: Phar 226

PHAR 228 Pharmacotherapy for Pharmacy Technicians I II

3 Credits

This is the third of a three parts course that integrates the basic knowledge in anatomy, physiology, pathophysiology and pharmacology necessary to carry out effectively the functions of a pharmacy technician described in the Puerto Rico Law # 247 as of September 2004. Emphasis is given not only to the pharmacologic part where the student is familiarized with the generic and trade names of the drug, but also safe and effective use of medicines of more demand today. One semester, 3 hours of lecture per week. Prerequisites: Phar 226

PHAR 230 Pharmaceutical Technology I

3Credits

This course presents the different types of dosage forms and drug delivery systems. The aspects related to the drug bioavailability, and route of administration for different dosage forms are discussed. Emphasis is given to the physicochemical properties, formulations, preparation methods, preservation packaging and storage of the different types of dosage forms and drug delivery systems discussed. One semester, 3 hours of lecture per week. Prerequisite: PHAR 210

PHAR 230L Laboratory of Pharmaceutical Technology I

3 Credits

This laboratory type course offers students the opportunity to put into practice the knowledge acquired in the Pharmaceutical Technology I course. It familiarizes the student with the basic equipment and materials required in a community or hospital pharmacy for the preparation of compounding drugs. Examples of different dosage forms that are prepared are: solutions, syrups, tinctures, emulsions, lotions, ointments, among others. One semester, 3 hours of lecture per week. Co-requisite: PHAR 230, Prerequisite: PHAR 210

PHAR 231 Pharmaceutical Technology II

3Credits

This is a continuation course that presents the different types of dosage forms and drug delivery systems. The aspects related to the drug bioavailability, and route of administration for different dosage forms are discussed. Emphasis is given to the physicochemical properties, formulations, preparation methods, preservation packaging and storage of the different types of dosage forms and drug delivery systems discussed. One semester, 3 hours of lecture per week. Prerequisite: PHAR 210, PHAR 230

PHAR 231L Laboratory of Pharmaceutical Technology II

3 Credits

This laboratory type course offers students the opportunity to put into practice the knowledge acquired in the Pharmaceutical Technology II course. It familiarizes the student with the computer system used in community or hospital pharmacies for proper billing of different dosage forms discussed in the course. The correct way of administration, management and interpretation of prescriptions of dosage forms is discussed and practiced. Examples of dosage forms discussed are: ophthalmic products, optic products, nasal products, pharmaceutical aerosols and topical oral

products, among others. One semester, three hours of lecture per week. Co-requisite: PHAR231, Prerequisite: PHAR210

PHAR 233 Posology

3 Credits

Study of the activities related to the filling of facultative prescriptions. The student will apply concepts studied on dose, administration routes, drug concentration and interactions. Emphasis is given in the prescription interpretation, correct labeling and instructions to the patient. One semester 3 hours lecture. Prerequisite: PHAR 210

PHAR 250 Hospital Pharmacy

2 Credits

The course is a comprehensive study of the pharmaceutical services provided by the pharmacy to the hospital departments in concern. The content includes analysis and evaluation of the drug distribution systems. It also emphasizes in-patients and outpatients dispensing procedures that govern the safe administration of drugs and biological. Computers in hospital pharmacy, intravenous additives system, hyper alimentation and other special topics are also evaluated. One semester, two hours of lecture per week. For third year students.

PHAR 251 Prescription Dispensing and Pharmaceutical Specialties I

3 Credits

This course includes the discussion of all the activities related to the prescription dispensing procedures. Topics included are prescription interpretation, product selection, prescription preparation, packaging and labeling. Instruction to the patient in regard to proper use of the medication, possible interactions and proper storage and disposition are discussed. Emphasis is given to the study of the different product specialties such as, generic drugs, trade names and over the counter drugs. One semester, 3 hours of lecture per week. Prerequisites: PHAR 210-211, 230-231, 224-225.

PHAR 252 Prescription Dispensing and Pharmaceutical Specialties II

3 Credits

This is a continuation course that includes the discussion of all the activities related to the prescription dispensing procedures. Topics included are prescription interpretation, product selection, prescription preparation, packaging and labeling. Instruction to the patient in regard to proper use of the medication, possible interactions and proper storage and disposition are discussed. Emphasis is given to the study of the different product specialties such as, generic drugs, trade names and over the counter drugs. One semester, 3 hours of lecture per week. Prerequisites: PHAR 210-211, 224-225, 230-231, 251.

PHAR 255 Pharmaceutical Legislation

2 Credits

This course presents the laws related to the production, distribution of pharmaceutical products and other substances sold by the community drugstore under the Commonwealth of Puerto Rico and the United States Government. It also discusses the laws and regulations that affect the pharmacy profession. One semester, 2 hours of lecture per week.

PHAR 256 **Supervised Practice in Pharmacy I**
3 Credits

This course offers the student a hands-on experience in a real pharmacy work environment. The pharmacy practice will be performed in a community drugstore and/or a hospital pharmacy. The practice will be supervised by a licensed pharmacist of the institution in which the practice is performed, and by the supervising professor. Twenty hours of practice per week, for a minimum total number of 300 hours per semester (1,000 hours are strongly recommended). Prerequisite: PHAR 210-211,224-225,230-231.

PHAR 257 **Supervised Practice in Pharmacy II**
3 Credits

This is a continuation course that offers the student a hands-on experience in a real pharmacy work environment. The pharmacy practice will be performed in a community drugstore and/or a hospital pharmacy. The practice will be supervised by a licensed pharmacist of the institution in which the practice is performed, and by the supervising professor. Twenty hours of practice per week, for a minimum total number of 300 hours per semester (1,000 hours are strongly recommended). Prerequisite: PHAR 210-211, 224, 225, 230, 231, 251 and 256.

PHAR 258 **Practicum Seminar**
2 Credits

This seminar-style course is intended to provide the student the opportunity to review all the knowledge acquired in approved courses and during the first phase of practical experience to prepare them to take their state exam. Emphasis will be on those aspects relevant to the state exam for pharmacy technicians such as mathematics pharmaceutical, pharmacotherapy, technical, administrative and legal aspects of pharmacy practice. Prerequisite: Phar 256

NURSING

NURS 101 **Introduction to Nursing**
2 Credits

This is an introductory course to the discipline of Nursing. The historical evolution of nursing and different theories of nursing is discussed. The contribution of distinguished personalities in Nursing from Puerto Rico and the United States are discussed as well. The conceptual framework of the nursing program, as well as, laws and legislation applicable to the nursing profession and their implications to the clinical practice are presented. Ethical and moral aspects of the profession are also discussed. The course requires a two (2) hour lecture a week.

NURS 102 **Fundamentals of Nursing**
5 Credits

This course is designed to develop the knowledge base and the basic nursing skills to enable the learner to perform satisfactorily during the course and also in future clinical experiences. The fundamentals of nursing care and basic skills are discussed so that the learner can lead the client towards the satisfaction of his basic needs such as hygiene, physical and psychological comfortless, safety, prevention and control of infections. The course includes three (3) lecture hours and six (6) hours clinical experience a week where the learner is able to put in practice his knowledge base and skills in a variety of settings.

NURS 103 Basic Principles of Pharmacology**3 Credits**

The learner is provided with the knowledge base and basic skills of medication administration. General concepts of pharmacology, pharmacokinetics and pharmacodynamics as well as different measurement systems such as the metric, apothecary and home system are discussed. The use basic math skills such as proportions, ratios in dosage calculation are discussed in the administration of medications through different routes. The course includes two (2) lecture hours a week and two (2) hours of skills lab a week where the student will be required to demonstrate and perform procedures with anatomical models. Prerequisites: MATH 117.

NURS 104 Maternal-Child Nursing**5 Credits**

This course focuses on the theoretical concepts of the nursing process in the satisfaction of the women's basic needs, before, during and after pregnancy. Emphasis on concepts of preconception care and the normalcy of pregnancy is discussed and its implication to a healthy pregnancy outcome. Factors that affect maternal-child well-being as well as immediate newborn care are also discussed. The course includes a three (3) lecture hours and six (6) hours of clinical practice a week in primary, secondary and tertiary health care settings. Prerequisites: NURS 101, 102.

NURS 201 Pediatric Nursing**5 Credits**

This course offers the learner the knowledge base regarding growth and development theories, the family issues and ethical/legal aspects of pediatric nursing care. It provides the learner with the necessary skills to provide nursing care in the identification of situations that affect the health of the infant, child and adolescent and how these may affect growth and development and the family homeostasis. The course includes a three (3) lecture hours and six (6) hours of clinical practice a week in primary, secondary and tertiary health care settings. Prerequisites: NURS 101-104.

NURS 202 Medical-Surgical Nursing I**5 Credits**

The course is based on the inherent principles of nursing care for individuals, family and community in their different stages of growth and development where emphasis is placed upon the basic needs that are interfered in the adult and elderly. The learner is presented with the physiological and pathological changes that occur holistically in the different systems. The interfered health needs that are discussed in this first part of the course include: fluid and electrolyte balance, peri-operative disorders, oxygenation, cardiovascular, hematological, immunological, nutritional and gastrointestinal elimination. Emphasis is also placed in the use of the nursing process to assess, plan, implement and evaluate the nursing care provided. The course includes three (3) lecture hours and six (6) hours of clinical practice a week in primary, secondary and tertiary health care settings. Prerequisites: NURS 101, 104.

NURS 203 Medical-Surgical Nursing II**5 Credits**

The course is based on the inherent principles of patient care for individuals, family and community in their different stages of growth and development where emphasis is placed upon the basic needs that are interfered in the adult and elderly. The learner is presented with the physiological and pathological changes that occur holistically in the different systems. The interfered health needs that are discussed in this second part of the course include: genito-urinary elimination, reproductive and gynecological

including sexually transmitted diseases (STDs), integumentary, musculoskeletal, neurological, sensory and perceptual, endocrine and metabolic and management during emergency and disaster situations. Emphasis is also placed in the use of the nursing process to assess, plan, implement and evaluate nursing care provided to individuals, family and community presenting common and recurrent alterations in their health. The course includes three (3) lecture hours and six (6) hours of clinical practice a week in primary, secondary and tertiary health care settings. Prerequisites: NURS 202.

NURS 204 Psychiatric Nursing

4 Credits

This course discusses the basic and fundamental concepts and theories regarding mental health including importance of promoting mental health and factors that may affect mental wellbeing. Medical-legal aspects of mental health care are also discussed. Emphasis is placed on the nursing process to identify alterations in the mental health of individuals, family and community. It focuses on the alterations in mental health such as stress and crisis intervention, anxiety, somatiform, cognitive, affective, schizophrenic, auto-destructive, and eating disorders. Suicide, sexual behavior disorders, infant and adolescent mental disorders and patient reactions to terminal diseases and death are also discussed. Emphasis is placed on the importance on the therapeutic communication skills necessary to satisfy the altered basic needs identified. The course includes two (2) lecture hours and six (6) hours of clinical practice a week in diverse mental health care settings. Prerequisites: NURS 202.

NURS 300 Physical Assessment

3 Credits

This course is designed to prepare students with the basic knowledge and skills necessary for the gathering and analysis of data for the health assessment. Emphasis is placed on the application of the nursing process during the physical examination. The role of the nurse during the health assessment as well as the essential pathophysiological mechanisms of diverse health problems is discussed with emphasis in the identification of abnormal findings. The course prepares the students to evaluate and analyze findings from the comprehensive health assessment in order to establish a nursing diagnosis. The course requires two (2) hours of lecture and two (2) hours of skills laboratory a week. Prerequisites: HESC 125-126, NURS 201, NURS 204.

NURS 320 Community Nursing

5Credits

This course is designed to present the students with the concepts, skills and attitudes of community nursing necessary for the health promotion and disease prevention of individuals, family and community throughout their different stages of growth and development. Emphasis is placed on the role of patient education, counseling and patient advocate. Ethical, moral aspects and factors that influence or cause health deviations in the community are discussed based on the use of the nursing process. Concepts of epidemiology and biostatistics to identify health deviations in community groups are also discussed. The different levels of nursing care are discussed with emphasis on primary care concepts with the purpose of helping the student recognize the importance of public health in the promotion and maintenance self-care activities in individuals, family and community. . The course includes two (2) lecture hours and six (6) hours of clinical practice a week in community health care settings. Prerequisites: NURS 300.

NURS 380 Basic Principles of Research
3 Credits

This course is designed for the student to be able to analyze the process of scientific research and its use in the practice of nursing. The course begins with the discussion of the historical evolution of research. The use of the scientific method with emphasis in problem-solving skills is emphasized. Application of computer literacy skills is emphasized in data analysis as part of the research process. Ethical, moral and legal considerations of the patient and the investigator are also discussed. The role of the nurse in research and the impact of research in nursing are discussed as well. Students will be required to perform critical analysis of research extracts done in nursing emphasizing critical thinking and knowledge based skills. The course requires three (3) lecture hours a week.

NURS 402 Emergency and Intensive Care Nursing
6 Credits

This course is designed for students to acquire knowledge, skills and competencies to provide nursing care to clients who are in critical care in the emergency room or intensive care units. Students get prepared to care for patients in all stages of growth and development, while experiencing critical health conditions that put his life at stake. The student learn about triage, estimated and immediate care, wound management, pain management, care of the dying, emergency management, arrested patient management, legal and ethical issues, client and family education, as well as the role of the nurse in intensive care, in light of technological advances of the 21st century and the role of nurses in situations of child abuse, sexual abuse, domestic violence, substance abuse and mental emergencies.

Related with the most significant trauma emergencies such as car accidents, head trauma, spinal cord, chest, gastrointestinal, renal and genitourinary. It also discusses emergency care to special populations (obstetric, pediatric and geriatric), medico-surgical emergencies, such as respiratory, cardiovascular shock, neurological, infectious, environmental, toxicological, gynecological, ENT and eye. It emphasizes critical deviations health such as cardiovascular, pulmonary, neurological, renal, gastrointestinal and endocrine, in addition to scientific knowledge and the use of patterns Marjorie Gordon functional level, to make a estimate and plan the care required. The course includes four (4) hours of theory and six (6) hours of clinical practice weekly in various intensive care units.

NURS 422 Nursing Seminar
3 Credits

This course integrates the knowledge and skills of nursing. It advises the students on the steps to take when preparing to take tests, and the rationale for identifying possible correct answers and distracters. This course is intended as a guide to help students develop and refine the techniques of analysis, evaluation and reflection, as needed in different interactions nurse/or-patient. Allows students to identify areas of strengths and weaknesses, helping you to pay particular attention to their individual needs when preparing to take the bar examination. The course requires three (3) lecture hours a week.

NURS 440 Administration and Leadership in Nursing
3 Credits

In this course the student acquires knowledge regarding the administrative and supervision role of the professional nurse. Concepts regarding the development of the leader and manager role as well as legal and ethical issues are discussed. The student is presented with different administrative theories and styles including knowledge pertaining to healthcare organization and structure, the importance of communication and motivation, conflict management and the management of stress at the

organizational level. Emphasis is also given to concepts regarding the selection, development and evaluation of staff, management of personnel needs and problems, problem solving and decision making, staffing and scheduling, care delivery strategies and managing costs and budgets. Institutional risk management and quality assurance programs are also discussed. The course requires three (3) lecture hours a week. Prerequisites: NURS 400, 420.

NURS 480 Practicum

6 Credits

This course is designed for the student to be able to integrate the acquired knowledge throughout his/her academic preparation. The student will be required to perform as a leader and change agent in the management of nursing care provided to clients in diverse nursing situations. The student will be able to choose the learning experiences they understand will enhance their professional development. The use of the nursing process, clinical judgment and problem-solving skills are emphasized in the provision of nursing care to individuals, family and community as well as an evidence-based practice. The theory component of the course will include discussion of the experiences, difficulties, problem-solving methods used, obtained outcomes and areas that require follow-up. This course requires two (2) lecture hours a week and twelve (12) hours of clinical practice. Prerequisites: NURS 400, 420.

PUBLIC HEALTH

PUHE 201 Introduction to Biostatistics

3 Credits

Basic concepts and principles of statistics applied to life and health. Emphasis in the basic techniques used in scientific research, primarily in areas of health education and public health. Analysis of the major statistical concepts such as: the scientific method and the statistics method and others. One semester, 3 hours per week.

UNIVERSIDAD DEL ESTE SCHOOL OF SOCIAL AND HUMAN SCIENCES



UNDERGRADUATE CATALOG
2013-2014

SCHOOL OF SOCIAL AND HUMAN SCIENCES

The School of Social and Human Sciences offers graduate and undergraduate degrees as well as general education courses. The School also houses two specialized units: the *Department of Social Work* and the *Institute of Security and Protection* (ISeP).

VISION

The School of Social and Human Sciences is a learning community committed to the continuous development and application of the highest quality of education.

MISSION

The School of Social and Human Sciences' mission promotes the integral development of an individual that is capable of successful accomplishments in his/her social, spiritual, political, and economical environment. The school is committed to foster responsibility with the human morals and ethics, as well as a comprehensive attitude and an appreciation of diversity and respect of human dignity.

The School encourages strengthening, enriching, and continuing the academic development of the faculty and student body, as well as, research and assessment in all its graduate and undergraduate programs. The school also promotes the integration of information skills and the proper use of technology.

The curriculum is focused on stimulating critical and creative thinking skills, in addition to stimulating the enhancement of the teaching and learning process. The School of Social and Human Sciences prepares the student to confront the opportunities and challenges presented by the social, cultural, political, and economical circumstances of the changing world.

GOALS

- ◆ Offer a multidisciplinary curriculum that guarantees the quality of its offerings and is geared towards the professional development of the student.
- ◆ Promote the professional development of the faculty and students in order to contribute to the attainment of the School's mission.
- ◆ Promote research and investigation within and among the student body and faculty.
- ◆ Promote the development of the student through the use of a variety of teaching strategies, support services, research experiences, co-curricular activities, and experiences in the workplace.
- ◆ Develop and improve decision-making skills, problem-solving skills, oral and written expression, team work, and leadership skills.
- ◆ Foster the development of national and international alliances and collaborative agreements.

FACULTY

Acevedo Biaggi, Francis I., Instructor
MEd, TESL, University of Puerto Rico, Mayaguez Campus

Almeida Rodríguez, Manuel S., Assistant Professor
PhD, Political Sciences, University of Massachusetts-Amherst

Andino González, Pedro J., Full Professor
JD, Interamerican University of Puerto Rico

Arana Curet, María M., Associate Professor
PhD, Literature, Centro de Estudios Avanzados y del Caribe
MEd, Spanish, New York University

Báez Arroyo, María I., Associate Professor
PhD, Hispanic Studies, University of Puerto Rico, Rio Piedras Campus
MEd, Spanish Curriculum, University of Puerto Rico, Rio Piedras Campus

Camuñas Madera, Ricardo R., Full Professor
PhD, American History, Universidad de Valladolid, Spain

De Jesús Ceballos, Francheska E., Instructor
JD, Interamerican University of Puerto Rico, School of Law
MA, Criminal Justice, Interamerican University of Puerto Rico, Metropolitan Campus

Encarnación Rivera, Ángel M., Full Professor
PhD. HispanicStudies, University of Puerto Rico, Rio Piedras Campus
JD, University of Puerto Rico, Rio Piedras Campus

Figueroa Flores, Jorge F., Associate Professor
PhD, Education, Capella University
MA, TESL and Bilingual Education, the University of Findlay

García Meléndez, Glenda I., Instructor
MA, Italian Literature, Middlebury College, Vermont

Igartua Soto, Marie B., Assistant Professor
EdD, Curriculum and Instruction, Interamerican University of Puerto Rico, Metropolitan Campus
MEd, Administration and Supervision, Turabo University

López Figueroa, Yolanda, Assistant Professor
PhD, Latin-American Studies, Universidad Nacional Autónoma de México
MA, History, University of Puerto Rico, Rio Piedras Campus

Lugo Hernández, Eduardo A., Assistant Professor
PhD, Clinical and Community Psychology, DePaul University

Lugo Morales, Evelyn, Associate Professor
EdD, Curriculum and Teaching in Education, TESL, University of Puerto Rico,
Rio Piedras Campus

Medina, Nilda G., Assistant Professor
PhD, Psychology, University of Puerto Rico, Rio Piedras Campus

Mercado Cruz, Daniel, Instructor
MEd, TESOL, University of Phoenix

Mirabal, Sandra, Associate Professor
MEd, University of Puerto Rico, Rio Piedras Campus

Molina Morgado, Evelyn, Full Professor
MPA, Public Affairs, University of Puerto Rico, Rio Piedras Campus

Muñoz Berríos, María S., Full Professor
PsyD, Clinical Psychology, Carlos Albizu University
MA, Criminal Justice, Interamerican University, School of Law

Nieves de Colón, Ibis, Assistant Professor
MA, Spanish, University of Puerto Rico, Rio Piedras Campus

Ocasio Vega, Maritza, Assistant Professor
EdD., Curriculum and Teaching in Spanish, Pontifical Catholic University of Puerto Rico,
Ponce Campus

Pagán Morales, Manuel, Associate Professor
MA, Spanish, Interamerican University

Pérez Cordero, Gladys, Associate Professor
EdD, Education Administration and Leadership, Dowling College
MEd, TESL, University of Puerto Rico, Rio Piedras Campus

Piñeiro Ocasio, Iris, Assistant Professor
MA, Theology, Seminario Evangélico de Puerto Rico

Rivera Pacheco, Emilda, Assistant Professor
EdD, Curriculum and Teaching ESL, University of Puerto Rico, Rio Piedras Campus

Rodríguez Cancel, Jaime L., Assistant Professor
PhD, History, Centro de Estudios Avanzados del Puerto Rico y el Caribe

Rosado Figueroa, Nilda I., Full Professor
MEd, Administration and Supervision, Interamerican University of Puerto Rico,
San German Campus
MA, English as a Second Language, Interamerican University of Puerto Rico, Metro Campus

Sanabria Rodríguez, Jhon J., Assistant Professor
PhD, Community and Prevention Research, University of Illinois at Chicago

Shaw Oppenheimer, Kathleen, Associate Professor
MEd, English, University of Puerto Rico, Rio Piedras Campus

Toledo López, Ángel A., Assistant Professor
PhD, American Politics, Pennsylvania State University
JD, University of Puerto Rico, School of Law

Umpierre Rodríguez, Casilda, Associate Professor
JD, Pontifical Catholic University of Puerto Rico, Ponce Campus

Vázquez Hernández, Zulma, Associate Professor
MA, Economy, Interamerican University of Puerto Rico

Vázquez Vidal, Ada I., Instructor
MEd, Spanish, University of Puerto Rico, Rio Piedras Campus

Villamil Rodríguez, Myria, Associate Professor
PsyD., Clinical Psychology, Carlos Albizu University
MEd, Counseling, University of Puerto Rico, Rio Piedras Campus

Villanueva Pérez, José, Full Professor
PhD., Industrial/Organizational Psychology, Carlos Albizu University

ADMINISTRATIVE STAFF

Sanabria Rodríguez, Jhon J., Dean
PhD, Community and Prevention research, University of Illinois at Chicago

Igartúa Soto, Marie B., Associate Dean
EdD, Curriculum and Instruction, Interamerican University of Puerto Rico,
Metropolitan Campus

Crespo Rivera, Evelyza, Director, Department of Social Work
PhD, Public Policy, University of Puerto Rico, Rio Piedras Campus
MSW, Administration and Supervision, University of Puerto Rico, Rio Piedras Campus

De Jesús Ceballos, Francheska E., Director, Criminal Justice Programs
JD, Interamerican University of Puerto Rico, School of Law
MA, Criminal Justice, Interamerican University of Puerto Rico, Metropolitan Campus

Meléndez Centeno, Rosario del P., Director, Communications Program
MaC, Communications, University of Puerto Rico

Martínez Romero, Ricardo, Administrative Director
MBA, Accounting, Universidad Metropolitana-SUAGM

Bidot Baerga, Ruth, Director of Student Affairs
MBA, Marketing, Phoenix University

Barriera Ortiz, Diana, Academic Coordinator
MBA, Management, Universidad del Este

Velázquez, Vimary, Student Services
MBA, Universidad del Este

Méndez, Ana C., Student Services
BA, Interamerican University of Puerto Rico, San German Campus

Torres Ojeda, Ivette, Administrative Assistant
BOS, Universidad del Este

Mangual Escobar, Eneid, Administrative Assistant
MA, Labor Relations, Interamerican University of Puerto Rico, Metropolitan Campus

PROGRAM DESCRIPTIONS

Criminal Justice

The Criminal Justice System is composed of the agencies that deal with social control, such as, the Justice Department, Corrections, Police Department, and the Court System. Although these departments work independently, they share a common interest, which is to control crime while upholding justice.

The study of Criminal Justice is related to the nature and scope of crime, as well as, the reactions to those who infringe on the law. The curriculum includes the study of crime and the factors that lead to delinquency. Human behavior is emphasized in aspects of public policy and the role that citizens play in the democratic and judicial processes. Professionals in this field develop positive attitudes that allow them to be productive citizens in society. Graduates from this program will have the ability to work in the public or private sector. They will be provided with the most recent and innovative knowledge within the field of criminology, sustained by courses that discuss the Penal Code, Evidence, Juvenile Delinquency, Administration of Public Security, and the Correctional System, among others. Students will be equipped with oral and written skills necessary for the field of criminology, as well as, terminology and technical tools within the area that increase competence as a professional in this field.

Paralegal Studies

Paralegals (legal assistants) are professionals whose duties are related to the field of Law and who work in close collaboration with lawyers and legal service institutions. These professionals fill an urgent need in the legal services that are offered in Puerto Rico. Their most important role will be to offer all the administrative support that lawyers need in order to practice law quickly and efficiently by researching laws and prior cases, investigating facts and evidence, write legal documents and briefs, coordinate communications, and keep records of all documents.

Their knowledge of the fundamental principles of law, the techniques used in legal research, and the compilation of evidence will allow them to perform their duties in a more efficient manner. These professionals can occupy positions at an operational level in any state or federal government agency, and also in a private enterprise. They will have the skills and knowledge that will enable them to establish an office of paralegal services, offering paralegal services to lawyers and public or private agencies, and to continue studies in law enforcement.

Social Work (see Department of Social Work)

The professional in Social Work promotes social change, problem solving in human relationships and the empowerment of people to enhance well-being. Utilizing theories of human behavior and social systems, social work intervenes at the points where people interact with their environments. Principles of human rights and social justice are fundamental to social work.

The social work professional offers a variety of services to individuals, families, groups, and communities. Among the professional services performed by social workers are service interviews, referrals, gathering and evaluating information, and documentation of services provided. In addition the social worker may use other intervention systems related to their professional endeavors. Graduates are offered a variety of experiences in the various fields of Social Work so they may be apt

to provide those services upon graduating. Graduates from the Social Work Program may seek professional licensing provided by the Board of Examiners of the Social Workers of Puerto Rico.

Penal Justice (see Institute of Security and Protection)

This program allows the development of any person aspiring to become proficient in the areas of protection, correction and security in general. Graduates from these programs will have increased employment opportunities in agencies like: Municipal Police, State Police, Correction, and Private Security Firms, among others. From a training perspective, students develop new knowledge and skills attuned with the new requirements in the federal and state agencies in the areas of security and protection.

Psychology

A graduate with a major in psychology will have developed professionally in the scientific study of human behavior. The graduate will be a professional with vast knowledge and skills that will allow him/her to conduct research on human behavior. The curriculum emphasizes prevention and mental health care services. The program develops responsible leaders who will foster community education geared towards finding a solution for social problems.

Communications

Digital Communication and Media/Multimedia

The media plays an important social role and meet the needs of society. The preparation of Communication professionals must respond to social changes and it is important that the Academy update their curricula to meet these needs. The program will prepare Social Communication professionals with extensive knowledge of general culture, fluent in digital technology and media convergence, able to adjust to the new communication paradigm shift in the Internet.

Graduates of this program can work in both print magazines and in online publications, on radio and television. The school includes training in Entrepreneurship that will allow this new communications professional to acquire the necessary knowledge to create their own media company in the network.

MINOR CONCENTRATIONS

The School of Social and Human Sciences also offers minor concentrations to the undergraduate students. Following is the list of Minor concentrations available (with the required credits in parenthesis).

Investigative and Legal Writing (18 credits)

Legal Assistant (20 credits)

Administration of the Criminal Justice System (18 credits)

Investigative Procedures in Criminal Justice (15 credits)

Forensic Psychology (21 credits)

Social Work (15 credits)

ADMISSIONS REQUIREMENTS

These are in addition to the general admissions requirement at UNE.

- High School grade point average of 2.0 for Bachelor in:
 - Criminal Justice
- High School grade point average of 2.5 for Bachelor programs in:
 - Social Work, Psychology and Communications

GRADUATION REQUIREMENTS

The graduation requirement for the bachelor's degree programs are:

- Criminal Justice, Paralegal Studies and Psychology
 - General grade point average of 2.0
 - Major component 2.50
- Communications: Digital Communications and Media/Multimedia
 - General grade point average of 2.80
 - Major component 3.00

Bachelor's Degrees

Bachelor in Social Sciences Major in Criminal Justice

120 Credits	Credits
General Education	33
Professional Educational Component	33
Major Courses	54

General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Language, Reading and Writing in Spanish I	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advance English I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Language, Reading and Writing in Spanish II	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advance English II	3
SOSC 112	The Human Being and its Social Environment	3
SOSC 242	Socioeconomic and Political Principles of globalization	3
HIST 255	Analyses of Historical Processes in Puerto Rico	3
HUMA 228	Puerto Rico and its Contributions to the Caribe and the World	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
BIOL 115	Introduction to Human Biology	3

Professional Educational Component		33
ART 101	Appreciation of Fine Arts	3
PHIL 205	Philosophical and Sociological Foundations of Science	3
PALE 103	Introduction to Legal Research and Legal informatics	3
PALE 105	Puerto Rico's Constitutional Law	3
SOCI 203	Principles of Sociology	3
SOCI 216	Contemporary Social Problems	3
PSYC 121	Psychology I	3
PSYC 122	Psychology II	3
PSYC 225	Social Psychology	3
SOSC 250	Statistics for Social Sciences	3
SOSC 258	Research Techniques for the Social Sciences	3

Major Courses		54
PALE 205	Introduction to Private Law I	3
PALE 206	Introduction to Private Law II	3
CRIM 103	Introduction to Criminal Justice	3
CRIM 203	General Principles of Penal Law and Crimes Against the Individual	3
CRIM 204	Special Penal Laws	3
CRIM 206	Introduction to Judicial Procedures	3
CRIM 320	Criminal Investigation	3
CRIM 333	Prevention and Sociological Aspects of Criminal Behavior	3
CRIM 335	Ethical Aspects of Justice	3
CRIM 336	Seminar on Substance Use and Abuse	3
CRIM 340	The Justice System and Juvenile Delinquency	3
CRIM 415	Evidence, Case Preparation and Testimony	3
CRIM 425	Applied Criminalistics	3
CRIM 430	Rehabilitation, Civil Rights and the Correctional System in Puerto Rico	3
CRIM 432	Criminal Technology, Fraud and Ciber-crimes	3
CRIM 434	Forensic Psychology in the Criminal Justice System	3
CRIM 436	General Overview of the Forensic Sciences	3
CRIM 475	Supervised Practicum	3

1. *The English, Spanish, and Math courses will be assigned according to the results of the College Board Entrance Exam or CREE Placement Test.
2. A minimum average of "C" is required for all major courses.
3. CRIM 475 must be passed with a "B" or above. CRIM 103, 203, 204, 206, 320, 335, 340, 415, and 425 must be approved before taking the Practicum course.
4. Students transferring from other Universities must comply with the residency requirement at UNE.

**Bachelor in Social Sciences
Major in Paralegal Studies**

120 Credits	Credits
General Education	33
Professional Educational Component	36
Major Courses	51

General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading and Writing I Reading, Writing and Oral Communication in Spanish I Language, Reading and Writing I	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advance English I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading and Writing II Reading, Writing and Oral Communication in Spanish II Language, Reading and Writing II	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advance English II	3
SOSC 112	The Human Being and his Social Environment	3
SOSC 242	Socio-economic and Political Principles of globalization	3
HIST 255	Analysis of the in Puerto Rican Historical Processes	3
HUMA 228	Puerto Rico and its Contributions to the Caribbean and the World	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
BIOL 115	Introduction to Human Biology	3

Professional Educational Component		36
ART 101	Art Appreciation	3
PHIL 205	Philosophical and Sociological Foundations of Science	3
SOCI 203	Elementary Principles of Sociology	3
SOCI 216	Contemporary Social Problems	3
SOCI 335	Ethics, Moral and Society	3
PSYC 121	General Psychology I	3
PSYC 122	General Psychology II	3
PSYC 225	Social Psychology	3
SPAN 275	Advanced Writing in Spanish	3
SOSC 228	Interpersonal Relations	3
SOSC 250	Statistics in Social Sciences	3
SOSC 258	Research Techniques in Social Sciences	3

Major Courses		51
PALE 101	Fundamentals of Puerto Rican Law	3
PALE 103	Legal Investigation	3
PALE 105	Constitutional Principles	3
PALE 107	Fundamentals of Civil Procedure	3
PALE 205	Introduction to Private Law I	3
PALE 206	Introduction to Private Law II	3
PALE 301	Aspects of Notary Law and Registration Law	3
PALE 307	Principles of Administrative Law	3
PALE 311	Professional Responsibility	3
PALE 313	Investigation and Editing of Documents	3
PALE 403	Administration of the legal office	3
PALE 405	Foundations of Bankruptcy and Immigration	3
CRIM 203	General Principals of Penal Law and Crimes Against Individuals	3
CRIM 206	Criminal Procedures	3
CRIM 340	The Justice System and Juvenile Delinquency	3
CRIM 415	Evidence, Case Preparation and Testimony	3
PALE 425	Practicum	3

1. *The English, Spanish, and Math courses will be assigned according to the results of the College Board Entrance Exam or CREE Placement Test.
2. A minimum average of "C" is required for all major courses.
3. PALE 425 must be passed with a "B" or above. PALE 101, 103, 105, 107, 205, 206, 301, 307, 311, 313, 403 and 405 must be approved before taking the Practicum course.
4. Students transferring from other Universities must comply with the residency requirements at UNE.

Bachelor in Social Sciences
Major in Psychology

117Credits	Credits
General Education	33
Professional Educational Component	30
ElectiveCourses	9
MajorCourses	45

General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Language, Reading and Writing in Spanish I	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advance English I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Language, Reading and Writing in Spanish II	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advance English II	3
SOSC 112	The Human Being and its Social Environment	3
SOSC 242	Socioeconomical and Political Principles of globalization	3
HIST 255	Analyses of Historical Processes in Puerto Rico	3
HUMA 228	Puerto Rico and its Contributions to the Caribe and the World	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
BIOL 115	Introduction to Human Biology	3

Professional Educational Component		30
ART 101	Appreciation of Fine Arts	3
PHIL 205	Philosophical and Sociological Foundations of Science	3
SOCI 203	Principles of Sociology	3
SOCI 216	Contemporary Social Problems	3
PSYC 121	Psychology I	3
PSYC 122	Psychology II	3
PSYC 228	Psychology of Diversity	3
SOSC 228	Interpersonal Relationships	3
SOSC 250	Statistics for Social Sciences	3
SOSC 258	Research Techniques for the Social Sciences	3

Major Courses		45
PSYC 210	Human Sexuality	3
PSYC 222	Adolescent Psychology	3
PSYC 225	Social Psychology	3
PSYC 226	Developmental Psychology	3
PSYC 321	Personality Theories	3
PSYC 322	Theories and Techniques in Psychotherapy	3
PSYC 324	Psychology of Gender	3
PSYC 327	Psychology of the Elder	3
PSYC 343	Theories of Learning and Motivation	3
PSYC 350	Fundamentals of Psychopathology	3
PSYC 355	Industrial Psychology	3
PSYC 400	Psychological Measurement	3
PSYC 423	Physiological Psychology	3
PSYC 450	Seminar In Psychology I	3
PSYC 451	Seminar In Psychology II	3

Electives		9
HUMA 224	Contributions of the Great Western Civilizations	3
	Free Elective	3
	Free Elective	3

1. *The English, Spanish, and Math courses will be assigned according to the results of the College Board Entrance Exam or CREE Placement Test.
2. A minimum average of "C" is required for all major courses.
3. PSYC 450 -451 must be passed with a "B" or above. PSYC 121, 122, 225, 226, 321, 322, 340, 400, and 423 must be approved before taking the Practicum course.
4. Students transferring from other Universities must comply with the residency requirement at UNE.

Bachelor in Communications
Digital Communications and Media

120 Credits	Credits
General Education	33
Professional Educational Component	60
Major Courses	27

General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Language, Reading and Writing in Spanish I	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advance English I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Language, Reading and Writing in Spanish II	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advance English II	3
SOSC 112	The Human Being and its Social Environment	3
SOSC 242	Socioeconomic and Political Principles of globalization	3
HIST 255	Analyses of Historical Processes in Puerto Rico	3
HUMA 228	Puerto Rico and its Contributions to the Caribe and the World	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
BIOL 115	Introduction to Human Biology	3

Professional Educational Component		60
SOCI 203	Principles of Sociology	3
SOCI 216	Contemporary Social Problems	3
SOSC 250	Statistics for Social Sciences	3
SPAN 275	Advanced Writing in Spanish	3
COMM 310	Research in Communication: Methods and Techniques	3
WEBD 101	Publication in the Web	3
ECON 125	Interpretation and Analysis of Economic Reports	3
COMM 101	Theory of Communication	3
COMM 102	Introduction to Mass Media	3
COMM 260	Introduction to Public Relations	3
COMM 270	Introduction to Publicity	3
COMM 275	Elements and Application of the Language of Comic	3

COMM 280	Use and Projection of the Voice	3
MARK 133	Fundamentals of Marketing	3
ENTR 201	Enterprise Creation	3
ENTR 240	Sales and Marketing for the Entrepreneur	3
COMM 350	Management of a Media Enterprise	3
ENTR 101	Introduction to Entrepreneurship	3
SOCI 335	Ethics, Moral and Society	3
ENGL 307	Professional Writing	3

Major Courses		27
COMM 210	Human Sexuality	3
COMM 330	Adolescent Psychology	3
COMM 400	Social Psychology	3
COMM 315	Developmental Psychology	3
COMM 320	Personality Theories	3
COMM 340	Theories and Techniques in Psychotherapy	3
COMM 420	Psychology of Gender	3
COMM 430	Psychology of the Elder	3
COMM 440	Theories of Learning and Motivation	3

1. The English, Spanish, and Math courses will be assigned according to the results of the College Board Entrance Exam or CREE Placement Test. A minimum average of “B” is required for all major courses and Spanish & English.
2. The courses have been designed menu to ensure the competence of the graduate profile. Communications Students may take only those detailed in this sequence.
3. COMM 315 and 320 must be approved with a “A”.
4. Students transferring from other Universities must comply with the residency requirement at UNE.

Minor Concentrations

Investigative and Legal Writing		18
PALE 101	Fundamentals of Puerto Rican Law	3
PALE 103	Legal Investigation	3
PALE 107	Fundamentals of Civil Procedure	3
PALE 301	Aspects of Notary Law and Registration Law	3
PALE 313	Investigation and Editing of Documents	3
SOSC 258	Research Techniques in Social Sciences	3

Legal Assistant		21
PALE 101	Fundamentals of Puerto Rican Law	3
PALE 103	Legal Investigation	3
PALE 107	Fundamentals of Civil Procedure	3
PALE 301	Aspects of Notary Law and Registration Law	3
PALE 307	Principles of Administrative Law	3
PALE 313	Investigation and Editing of Documents	3
PALE 403	Administration of the Legal Office	3

Administration of the Criminal Justice System		18
CRIM 103	Introduction to Criminal Justice	3
CRIM 204	Special Penal Laws	3
CRIM 331	Organization, Administration, Supervision and Police Reports	3
CRIM 335	Ethical Aspects of Justice	3
CRIM 340	The Justice System and Juvenile Delinquency	3
CRIM 430	Rehabilitation, Civil Rights and the Correctional System in Puerto Rico	3

Investigative Procedures in Criminal Justice		15
PALE 205	Introduction to Private Law I	3
CRIM 203	General Principles of Penal Law and Crimes Against the Individual	3
CRIM 320	Criminal Investigation	3
CRIM 415	Evidence, Case Preparation and Testimony	3
CRIM 425	Applied Criminalistics	3

COURSE DESCRIPTIONS

English

ENGL 110 Basic Oral, Reading and Writing in English I

3 Credits

This course emphasizes basic oral communication, reading comprehension, and writing competencies. Oral communication competencies developed in this course will lead to understanding, interpreting, and expressing ideas verbally and nonverbally. Reading comprehension competencies will focus on fluency, comprehension, and text analysis. Writing competencies will include sentence development, grammar, punctuation, spelling, and the introduction to paragraph writing. It is designed to develop the student's ability to express thought coherently and effectively in oral and written forms. This one semester course includes two hours of English laboratory. This course is designed for students who scored 449 or less on the College Board Entrance Examination. It is a pre-requisite for ENGL 111.

ENGL 111 Basic Oral, Reading and Writing in English II

3 Credits

This course emphasizes strengthening basic oral communication, reading comprehension, and writing competencies. The focus of this course is on the refinement of oral communication competencies by engaging students in verbal and nonverbal interactions. Reading comprehension competencies will focus on analysis of fiction and non-fiction texts. Writing competencies will include the development of the basic essay structure, following the writing process and grammar use. This one semester course includes two hours of English laboratory. Students must approve ENGL 110 as a pre-requisite for this course.

ENGL 115 College Reading and Writing I

3 Credits

Emphasis is given in strengthening of basic reading comprehension and writing skills. An integrated language arts approach will be used; therefore, specific grammatical skills will also be developed along with oral communication and listening skills. The ability to organize one's thoughts, to express them simply and clearly, and to observe the standard and conventions of language usage will be developed. In order to acquire these academic skills, students will be introduced to the writing process, learning how to express themselves clearly and effectively by reinforcing the basic structure of a paragraph leading to the writing of essays. Short research projects will be developed through the use of technology.

ENGL 116 College Reading and Writing II

3 Credits

Strengthening of the student's reading comprehension and composition skills. Emphasis on strategies for generating ideas for writing, planning, and organizing material, intended to prepare students for the demand of college writing, focusing on reading critically and incorporating source material in student's own writing. By differentiating between rhetorical styles, students in this course will compose appropriate types of essays, building upon the paragraph development skills acquired in ENGL 115. Research projects will be developed through the responsible use of technology.

ENGL 118 English for the Workplace I**3 Credits**

English for the workplace will provide students with a general introduction of business English for business purposes. It provides learners with an opportunity to practice relevant language and communication skills in a variety of business situations. Skills such as written and oral communication will be developed through work with various topics, such as formal research report, preparing professional meetings, organizing ideas, using technology, principles of written communication, constructing sentences, planning of effective communication, and formatting letters. Reconstruction of real life activities will be used in a constructivist approach to learning.

The integration of technology will be used to facilitate the presentations of the activities.

ENGL 119 English for the Workplace II**3 Credits**

This is English for the Workplace II, the second part of the course. The aim of this course is to intensify the developing of oral and writing skills. The course is based on speaking exercises of workplace oriented topics and informative and persuasive presentations using technological resources. Technical writing will be emphasized. Professional portfolio will be developed; since conducting a job search and preparing employment communications is an important goal students will conduct job interviews, and professional presentations. Reports and media communications will be emphasized to equip them with the necessary tools to develop new releases and newsletters.

ENGL 125 Advanced English I**3 Credits**

This course provides intensive practice at an advanced level of oral and written communication skills. This course also combines intensive reading with critical analysis of representative works, responding to different types of writing styles such as: expository and descriptive. Students will be required to carry out a research project on a current issue. The course requires the integration of technological devices in the production of written texts, critical analysis, and presentations. Advanced English is designed for students who scored 575 or higher on the College Entrance Examination Board or obtained a score of 90% or above on the English Placement Test.

ENGL 126 Advanced English II**3 Credits**

This course provides intensive practice at an advanced level of oral and written communication skills. This course also combines intensive reading with critical analysis of representative works, responding to different types of writing styles such as: argumentative and persuasive. Students will be required to carry out a research project on a current issue. The course requires the integration of technological devices in the production of written texts, critical analysis, and presentations. Pre-requisite: ENGL 125

ENGL 217 English for Allied Health Professions**3 Credits**

The course enables health professionals to more effectively comprehend oral and written English in a health care setting. Emphasis is placed in increasing knowledge of terminology related to health care professions. Strengthening fluency in oral communication and writing records and reports is also included. Grammar is reinforced as an integral part of language. The course will provide opportunities for communicative activities and role-play, research and integration of technology to enhance oral and written presentations.

ENGL 225 Introduction to Linguistics**3 Credits**

This course offers a scenic view of basic language theories and approaches and their effects on the thought processes. It includes fundamental phonological, morphological, and syntactic concepts, and their application in second language learners. Moreover, special emphasis will be placed on the application of teaching activities and strategies according to each theory or approach. Research projects will be developed through the responsible use of technology.

ENGL 226 Grammatical Structure of English**3 Credits**

In depth study of linguistic principles, syntactic functions, parts of speech, clause patterns, and punctuation will be studied. It also covers linguistic processes. Designed for English teachers. The course will be developed through practical exercises, research, and drills in order to strengthen the students' proficiency level.

ENGL 230 Introduction to Literary Genres**3 Credits**

Introduction to literature through the study of the different literary genres. Emphasis is placed on reading and analysis of an extensive variety of authors and types of literature. Intensive reading course. Provides for response writing and discussion as teaching and learning techniques. Research projects will be developed through the responsible use of technology.

ENGL 234 Advanced Conversational English**3 Credits**

Extensive practice in the use of academic speaking, listening, communication skills. The course prepares students to master successful communication skills in everyday settings such as the workplace, social events, and problem solving situations. Conversations, role-playing, discussions, and debates, among others, will be used in the classroom. Technology will be integrated to facilitate the development of the activities.

ENGL 246 Conversational English**3 Credits**

This course provides intensive speaking and listening practice in everyday situations in order to strengthen and increase fluency and accuracy. Topics of general interest relative to aspects of the process of communicating, such as verbal and nonverbal communication, are discussed. Oral presentations, role-playing, and group discussion are used. Research activities will be developed through the integration of technology by individual, pair or group work. This course includes laboratory experiences to aid in improving pronunciation.

ENGL 307 Professional Writing**3 Credits**

Advanced expository writing for professional and technical venues, including research writing skills and composition using computer media. This course focuses on "real world" writing that emerges from social and personal civic commitments. Analysis of strengths and weaknesses of text and crucial features of major professional writing documents with the use of checklists and rubrics are discussed. Course requires extensive writing practice and portfolio presentation.

ENGL 310 English Phonetics**3 Credits**

The study of the phonetic system of the English language. Identification of the organs used in the production of sounds. The International Phonetic Alphabet is used in discussing the consonant and vowel system. Techniques and methods used to correct deficiencies in pronunciation are also discussed in detail. (Not an Independent Study course.)

ENGL 360 Contrastive Analysis of English and Spanish**3 Credits**

Phonemic and phonetic systems of English compared to Spanish. Correction techniques and methods in pronunciation problems of students learning English as a Second Language. Class discussions, simulations, and question and answer sessions will be stressed. (Not an Independent Study course)

ENGL 362 American and British Literature**3 Credits**

Reading and analysis of the principal American and British authors. The evolution of American and British thoughts and literary styles are studied. Intensive reading course. Provides for response writing and discussion as teaching and learning techniques. Research projects will be developed through the responsible use of technology.

ENGL 370 Advanced Oral Communication**3 Credits**

Preparation and presentation of conferences and formal/informal discussions. Critical ability development in oral comprehension. Emphasis on techniques for pronunciation correction. Students will be guided to enhance their own communication, as they also prepare to enhance the oral communication of their future students by studying real cases. Course includes oral discussions and simulations. (Not an Independent Study course)

ENGL 410 Advanced Composition**3 Credits**

Intensive writing course. Basic principles of exposition and persuasion. Students will be guided to enhance their own written communication skills, as they also prepare to enhance the written communication of their future students by studying real cases. Course includes discussions and simulations. Technology and web-enhanced techniques will be used for this course.

Spanish**SPAN 111 Reading and Writing I****3 Credits**

Study and analysis of written text: comprehension, interpretation, vocabulary in context, central idea, secondary ideas, relationship between ideas, types of texts, attitude and purpose of the author. Focus on the writing process from the sentence to the paragraph and short composition, considering the linguistic structures and integrating technology. Basic development of verbal expression skills. This course includes laboratory.

SPAN 112 **Reading and Writing II**
3 Credits

Analysis and interpretation of texts used. Focus on the study of the main techniques and resources used by the authors. The student will compose coherent, cohesive and adequate texts, through oral reports, argumentations, critical reviews, basic research principles and writing of compositions, using the technology. Includes laboratory experience.

SPAN 115 **Reading, Writing, and Oral Communication in Spanish I**
3 Credits

The course focuses on the discussion, reflection and critical analysis of lectures. Focus in the writing process from the paragraph to the short essay, considering the linguistic structures, cohesion and coherence. Elements of the research process are highlighted: topic delimitation, construction of the main hypothesis, guiding questions, and the production of bibliographical indexes. Verbal structures will be part of the reflective analysis, through the verbal discussions, class participation and the presentation of oral reports using technology. Includes laboratory experience.

SPAN 116 **Reading, Writing, and Oral Communication in Spanish II**
3 Credits

The course emphasizes critical interpretation of texts and their relationships with the social and cultural contexts. Examines the transcendence of the text meaning through the practice of reading, writing and verbal expression. Decodes the main techniques y resources used by the authors. Aims for the student to construct coherent analysis and critical reflections, supported on technology. A research-based essay will be developed. Includes laboratory experience.

SPAN 125 **Language, Reading and Writing I**
3 Credits

In this course students will study the essential tools and characteristics of communication, based on readings intended to develop critical thinking and creativity. The rules of grammar and logic will be applied in the creation of written and verbal messages: proper orthography, syntax, lexis and semantic. In order to achieve the mastery of the processes, types and goals of writing emphasis will be made on the presentation and explanation of the various stages of the communication process (generation, selection and organization of ideas). Through the supervised practice of the construction of short essays and research, focus will be placed on the integration of concepts of unity, coherence, order, pertinence and precision.

SPAN 126 **Language, Reading and Writing II**
3 Credits

Study of the strategies that allow an effective communication based on readings and the creation of diverse types of discourse. Strategies and types of communications will be emphasized, in the elaboration of written and verbal messages. The course includes the determination of the thesis and conclusion, and its relationship with the elaboration of arguments in the production of short essays and research. Diverse forms to structure a text will be studied as well as the use of connectors. Students will work on the analysis and writing of descriptive, narrative and expositive, professional or industrial texts, with the purpose of promoting their creative capacity.

SPAN 240**Literature and Diversity****3 Credits**

The study of the concept of diversity within the literary context of different genres. Appreciation and analysis of literary productions from the perspectives of gender, race, ethnic origin, and social class, among others. Emphasis is on the analysis of customs, beliefs, traditions, and life styles of the groups under study. The course will be developed through critical reflections, research, oral and written presentations, collaborative work, and the responsible use of technology.

SPAN 275**Advanced Writing in Spanish****3 Credits**

Study and analysis of the metacognitive and cognitive processes of the written text. Integration of the information skills (research, evaluation, and synthesis) and basic research methodology, as well as planning and organizing strategies for the development of summaries, expository and argumentative essays will be emphasized. The course requires the integration of the computer in the production of written texts, critical reflections, and the presentation of a portfolio.

French**FREN 103****Introduction to Basic French I****3 Credits**

Study of the French language at an elementary level with emphasis on conversational skills. Emphasis is placed on the basic conversational requirements applied to day-to-day situations. Research skills are developed through the study of the French culture. The course will be developed through the use of films, documentaries, songs, and group activities, such as, simulations and interviews. The responsible use of emails to correspond in French with faculty and students is used as an instrument of technological communication.

FREN 104**Introduction to Basic French II****3 Credits**

A continuation course of the study of the French language at an elementary level with emphasis on conversational skills. Emphasis is placed on the basic conversational requirements applied to day-to-day situations. Research skills are developed through the study of the French culture. The course will be developed through the use of films, documentaries, songs, and group activities, such as, simulations and interviews. The responsible use of emails to correspond in French with faculty and students is used as an instrument of technological communication.

German**GERM 103****Basic German I****3 Credits**

Analysis and application of the grammar and the fundamental aspects of German, as well as the analysis of cultural aspects of German-speaking countries. At the end of the course, the students will be able to apply the structures orally and in writing and to communicate at an elementary level in everyday situations. We propose the concomitant development of skills in reading, writing, speaking and culture. The course will integrate authentic and adapted materials, and promote oral and written individual and cooperative work.

GERM 104 Basic German II**3 Credits**

Analysis and application of grammar and the fundamentals of German, plus analysis of cultural aspects of German-speaking countries. At the end of the course, the students will be able to apply their knowledge through the recognition of the structures discussed in class and exercised, either orally or in written form and will be able to communicate at an elementary level in everyday situations. We propose the concomitant development of skills in reading, writing, speaking and culture. There will be the application of theoretical frameworks relevant to the teaching of foreign languages through the communicative approach. Course will be developed through the use of authentic materials and adapted, individual work and cooperative as well as oral and written practice. It will also seek to make performance assessment of the participant continuously for the entire class period.

Italian**ITAL 101 Basic Italian I****3 Credits**

This is a beginning course in the fundamentals of expression and communication for those who have had no previous contact with the language. The course will provide a basic functional literacy in Italian. In particular, the students will learn proper pronunciation and correct spelling, and they will be able to describe themselves and their surroundings using the present tense and a useful and immediate vocabulary.

ITAL 102 Basic Italian II**3 Credits**

This is a continuation course of Basic Italian I. It is a beginning course in the fundamentals of expression and communication for those who have had no previous contact with the language. The course will provide a basic functional literacy in Italian. In particular, the students will learn proper pronunciation and correct spelling, and they will be able to describe themselves and their surroundings using the present tense and a useful and immediate vocabulary.

Mandarin**MAND 101 Mandarin Chinese I****3 Credits**

This Basic Mandarin Chinese I course will provide students with information about the fundamental aspects of the Mandarin Chinese language as well as about general aspects of the Chinese culture. By the end of the course, students will be able to use the language at a basic level and will be able to act and communicate within daily and familiar situations. Likewise, students will be able to recognize and use a certain number of Chinese characters.

MAND 102 Mandarin Chinese II**3 Credits**

This Basic Mandarin Chinese II course will provide students with information about the fundamental aspects of the Mandarin Chinese language as well as about general aspects of the Chinese culture. By the end of the course, students will be able to use the language at a basic level and will be able to act and communicate within daily and familiar situations. Likewise, students will be able to recognize and use a certain number of Chinese characters.

Portuguese

PTUG 103 Basic Portuguese I

3 Credits

Analysis and application of grammar and basic aspects of the Portuguese language, as used in Brazil and cultural aspects of Brazilian culture. At the end of the course, students will be able to apply their knowledge through the recognition of the structures discussed in class and exercised, either orally or in written form and will be able to communicate at an elementary level and in everyday situations. We propose the concomitant development of skills in reading, writing, listening, speaking and culture. There will be the application of theoretical frameworks relevant to the teaching of foreign languages through the communicative approach. Course will be developed through the use of authentic material and adapted, individual and cooperative work and oral and written practice. It also will seek to make the performance evaluation of the participant or continuously over the entire class period.

PTUG 104 Basic Portuguese II

3 Credits

Analysis and application of grammar and basic aspects of the Portuguese language, as used in Brazil and cultural aspects of Brazilian culture. At the end of the course, students will be able to apply their knowledge through the recognition of the structures discussed in class and exercised, either orally or in written form and will be able to communicate at an elementary level and in everyday situations . We propose the concomitant development of skills in reading, writing, listening, speaking and culture. There will be the application of theoretical frameworks relevant to the teaching of foreign languages through the communicative approach. Course will be developed through the use of authentic material and adapted, individual and cooperative work and oral and written practice. It also will seek to make the performance evaluation of the participant or continuously over the entire class period.

Humanities

HUMA 224 Contributions of the Great Civilizations of the World: Old, Medieval, 3 Credits and Modern

Theoretical and critical analysis of the principle historical, social, political, and economical processes of the great civilizations of humanity (European, African, Asian, and Amerindian) from the ancient classic Greek-roman and medieval ages to the modern and postmodern ages. Study of the principle cultural, philosophical, and religious contributions that have influenced the structures that characterize society and apply them to the reality of the Puerto Rican society. The course will be carried out through research, ethnographic, geopolitical and socio-economic analysis of the classic and modern writings of readings, and integration of technology. The course will be framed by general value judgments applied to the Puerto Rican society.

HUMA 228 Puerto Rico and its contributions to the Caribbean and the World 3 Credits

Study and critical analysis of the political, economic, social, and cultural contributions of Puerto Rico to the Caribbean with emphasis on their projection to the world. Emphasis will be given to individuals and organizations that have made philosophical, scientific, and humanistic contributions. Ethical and civic aspects that developed these contributions will be considered. The course will be developed through collaborative work, oral presentations, and research. Responsible use of technology will be encouraged.

HUMA 230**Appreciation of the Arts and Music****3 Credits**

Study of the four principle arts: architecture, sculpture, painting, and music. Emphasis on the fundamental resources of communication and resources of communication and expression of each of the arts; and analysis of works of art from the eye of the artist to the perspective of the spectator. The course will be carried out through the use of conceptual mapping, cooperative work, field trips, reflections, and research projects with the responsible use of technology.

History**HIST 255****Analysis of the Puerto Rican Historical Processes****3 Credits**

Analytical and interpretive study of the historical processes of Puerto Rico: economic, social, cultural, anthropological, geographic, and political development. The causes and consequences that determine the present and contribute to the future framed by general value judgments and apply them to the Puerto Rican society will be studied. Models and strategies that lead to the construction of knowledge and development of critical thinking that will promote value of national development, such as, the study of public documents, ethnographic studies, case studies, research, concept mapping, and team work. The responsible use of technology will be encouraged.

HIST 274**History of the United States****3 Credits**

Study and critical analysis of the economic, political, social, and cultural transformations that have manifested the historical development of the United States of America. Study of the geographic environment and the population theories of America and the pre-Columbian people. Analysis of the conditions and factors that contributed to the development of this nation and its evolution up to the present. The course is carried out through research, collaborative work, oral and written presentations, and the responsible use of technology.

HIST 310**Latin American and Caribbean Cultural Perspectives****3 Credits**

Study of Latin American and Caribbean culture and the European and North American influence. Analysis and appreciation of the cultural concepts as they are interpreted by the Latin American and Caribbean countries, as well as, its manifestation on contemporary societies of this region. The aspects that identify each culture and those that are shared will be examined. The course will be carried out through teamwork, research, and oral and written presentations that integrate technology.

Art**ART 101****Art Appreciation****2 Credits**

This course is designed to develop in the student a broad understanding of the basic principles of art. Study includes the elements of art, with special emphasis on plastic arts. The student will also gain aesthetic appreciation of great masterpieces.

ART 105 **History of Art**
3 Credits

This course is a study of visual arts and their relation to history and culture. The student will gain appreciation of the great masterpieces in sculpture and painting, and will learn to recognize the stylistic forms of the various historical periods. The course includes visits to museums, expositions and exhibits of works of art.

Philosophy

PHIL 205 **Philosophical and sociological Foundations of Science**
3 Credits

Critical analysis of the principles of knowledge and human nature from a socio-cultural perspective. Study of the evolution of scientific endeavors from a historical-critical dimension, this is, by setting the development of scientific knowledge within the complex web of social practices, institutions and power relations that serve as material conditions of possibility. Evaluation of the main philosophical and epistemological, as well as, from the diversity of positions with respect to the meaning of knowledge, scientific knowledge and the relationship between science and society. The course is developed through the critical analysis of reading, internet research, presentations, monographs or essays and case studies.

Social Sciences

SOSC 112 **The Human Being and His Social Surroundings**
3 Credits

This course studies the conceptual and critical analysis of human social environment focusing on the main theoretical approaches and social organization, the integration of social and cultural structures, the social norms and roles, social inequality, and deviant behavior, as well as, the social institutions and their functions. The study of social processes, social interaction, and socialization and their consequences for the individual will be emphasized

SOSC 113 **Analysis of Cultural and Historical Processes**
3 Credits

Analysis of culture based on the influences of the historical processes that have produced the individuals that live in society. Study of the past, present, and future social and cultural patterns by means of a transcultural /comparative approach, as well as, ethical and civic considerations, such as: industrialization, modernization, economic and political development, education, and computer science. The course will be developed through ethnographic studies and applied research, as well as the critical analysis of cases and historical events. Responsible use of technology will be encouraged.

SOSC 227 **Cultural Diversity**
3 Credits

Scientific and anthropological study of cultural diversity with emphasis on theory and practice from a historical perspective. The course includes the concepts of multiculturalism, transnationalism globalism, ethnocentricity, transculturation, endoculturation, and cultural relativity, among others. Analysis and ethical and personal appraisal of ethnic variations, movements of minority groups in their struggle for political and economic power, as well as, for civil and human rights; national and personal identity; the nature of socio-cultural conflicts, and the way in which societies deal with these

situations. The course will be carried out through the adequate use of technological resources to develop ethnographic research, case analysis, critical reflection and group work

SOSC 228 Interpersonal Relations

3 Credits

Philosophical and theoretical study of human and interpersonal relations from the behavioral perspective. Critical analysis and evaluation of human conduct starting with the individual and ending with his/her relationships with others. Emphasis will be on motivational skills, conflict management, decision making, problem solving, and ethical reflections, among others. The course will be carried out through case analysis, research, reflective exercises, group dynamics, and team work. The responsible use of technology will be encouraged.

SOSC 230 Political and Economic Systems

3 Credits

Study of the theories and concepts of the political and economical systems of the past, present, and future. Analysis of the challenges that formal governments face and their interaction with a global political and economic system. Emphasis is placed on economic policies, political culture, and the institutionalization and application of these to the political environment of a country. The course is developed through research, case studies, analysis of political and economic cases and processes, and their application. Responsible use of technology will be encouraged.

SOSC 242 Socio Economic and Political Principles of Globalization

3 Credits

Study of the origin and development of the political and economical systems of a global society of the 20th Century. Critical analysis of the transformation of the cultural and informational environment within the civil society, globalize, globalization, regionalism, governability, nationalism, sovereignty, human rights, sustainable development, and environmental protection. The course will be developed through readings, discussion of situations, analysis of official documents and original writings, case studies and research. Responsible use of technology will be encouraged.

SOSC 250 Statistics in Social Sciences

3 Credits

An introduction to the statistical methodology as applied to Social Sciences. Basic statistical concepts and techniques are introduced. Emphasizes the scientific and graphical presentation of data, as well as its analysis.

SOSC 258 Research Techniques in Social Sciences

3 Credits

Introduces the learner to the application of all scientific techniques for research and investigation in the social sciences. Places emphasis on basic procedures for gathering data, establishing the problem and hypothesis, analyzing, interpreting and applying findings. Prerequisites: SOSC 250

SOSC 336 Substance abuse and Legal Implications

3 Credits

The course is designed to explore the use and abuse of alcohol, tobacco, and other drugs. The physiological, psychological, and social effects will be studied and analyzed critically and objectively. Particular emphasis will be placed on the participation of various agencies in relation to prevention, treatment, and the control that the substance use and abuse exercises over the community.

Quality of Adaptation to University Life

QYLE 110 Development of Values, Attitudes, and Adaptation to University Life **3 Credits**

Analysis and evaluation of values, attitudes, and prejudices in university life and the world of work. The course studies the effect that our behavior has on others and how it also affects us. Evaluation of different types of ethical conduct from different philosophical perspectives that allow for the selection of those which give the individual more self-control with emphasis on the university surroundings. Application of concepts through the use of concepts maps, self-reflections, case studies, role playing, team work, and the responsible use of technology.

Social Communication

COMM 101 Theory of Communication **3 Credits**

Study and analysis of the processes, concepts and importance of communication from the point of view of the main humanistic and scientific theories as well as its historic and philosophical foundations. Includes definitions and models of communication, the use of language, motivation, persuasion, response and the factors that are part of communication processes. The course is developed through discussion of theories, critical analysis of situations, simulations, readings, research, and the responsible use of technology. It is offered in eight-week sessions.

COMM 102 Introduction to Mass Media **3 Credits**

Panoramic study of the mass media. Includes historical development, organization, structure, characteristics, and analysis of social responsibility, as well as, the impact that media has over the public. The course is developed through discussions, critical analysis, readings, case analysis, presentations and the responsible use of technology. It is offered one semester.

COMM 210 Digital Photography **3 Credits**

This is a laboratory-intensive course that emphasizes communication technology, digital photography and its tools, techniques and modalities. Through class discussions and work in the laboratory the student will recognize technologies such as black-and-white photography, color photography, computers, satellite, telephone and Internet transmissions, and will work on photography projects from the development of a concept to final product. The course will entail two 2-hour weekly meetings at the digital media laboratory. It will be offered in a semester.

COMM 260 Introduction to Public Relations **3 Credits**

Introduction to public relations and the analysis of its social impact and function. Includes the historical development, structure, and organization of public relation agencies as well as the study of the management of communication processes between organizations, internal and external audiences, crisis management, and the importance of public opinion. The course emphasizes ethical principles and social responsibility. The course is carried out through the use of readings, discussions, research, field trips, and the responsible use of technology. It is offered in one semester.

COMM 270 Introduction to Advertising

3 Credits

Study of fundamentals of advertising and the analysis of its social impact and function. Includes the historical development, structure, organization of public relations and advertising agencies, and the phases within the operation of these businesses, as well as, the advertising strategies for consumer persuasion. The course emphasizes ethical principles and social responsibility when designing advertising campaigns and in crisis communication contexts. The course is carried out through the use of readings, discussions, research, field trips, and the responsible use of technology. It is offered in one semester.

COMM 280 Use and Projection of the Voice

3 Credits

Course directed to the knowledge of the voice and organs involved in speech, functions and practical ways to achieve a proper vocal technique. The course emphasizes proper projection to achieve a compelling communication that instills credibility, clarity and accuracy for the message to be broadcast. The course combines anatomical knowledge, theoretical and practical work, exercises with diction and projection, to use what they have learned.

COMM 285 Design and Publishing of Web Pages

3 Credits

This course introduces students to tools used today to develop Web pages. This course is taught in a laboratory and includes technologies such as HTML and Content Management Systems (CMS), and other complementary technologies.

COMM 310 Communication Research: Methods and Techniques

3 CREDITS

Analysis and application of the basic processes, methods and techniques commonly in use within the field of communications. The course explores problem definition and hypothesis development, research design, from both quantitative and qualitative perspectives, data collection and analysis in traditional settings and in cyberspace. The course is taught through the development of research projects, presentations and responsible use of technology.

COMM 315 Media Writing I

3 Credits

This course provides the student with the basic writing skills for the traditional media: print, radio and television. It will also familiarize the student with the distinctive language of advertising and public relations. It is offered in one semester.

COMM 320 Media Writing II

3 Credits

This course studies the theories, techniques, styles, and formats of writing for the digital media in the era of media convergence. Among the platforms studied are: digital media, blogs, microblogs, social networks, among others. It is offered in one semester.

COMM 330**Digital Graphic Designs****3 Credits**

This course focuses on the great movements of graphic design, its rationale and application in the preparation of sketches, brochures, business cards and posters. In addition, it focuses on the need to find the creativity to achieve a greater responsiveness of the public they will spread the message to.

COMM 340**Digital Audio Production****3 Credits**

The study of the principles and techniques of digital audio production. Theoretical aspects of this course present a general vision of Radio as an industry. Sound production's legal, esthetical and managerial aspects are also studied in combination with the audience, programming, script writing, equipment and production facilities. This course emphasizes on content production. Students will create programming by handling industry standard software. The nature of sound and its theoretical principles will be used in the recording, editing and broadcasting processes for the radio, video and web.

COMM 350**Management and Planning in Media Business****3 Credits**

This course provides students with the necessary tools for the management, planning and organization of a communications company. It will emphasize on the challenges and the new trends of the communications industry modern development. The course will direct students to integrate management and communications concepts into a social-entrepreneurial strategy. One semester, 3 hours per week.

COMM 400**Legal and Ethical Aspects in Communication****3 Credits**

Study of the laws, jurisprudence, and regulations regarding media and analysis of the state and federal jurisdictions as they apply to the immediate context. Emphasis is placed on the values, ethical and moral principles, and their application to the communications field from the individual and the business standpoints. The course also includes discussion of copyright, privacy, slander, defamation, speech rights, obscenity, pornography, and freedom of information. The course is carried out through the use of case analysis, readings, research, presentations, and the responsible use of technology. It is offered in one semester.

COMM 420**Production and Direction for Digital Video****3 Credits**

Introductory course to the theory and practice of video production and direction. This course offers an integrated perspective of the television business; its role and performance. The theoretical aspect includes the fundamental concepts of audiovisual production as well as the legal, ethical and managerial elements. It will also incorporate the development of an audiovisual concept; script writing; the proposal; the production stages; the production crew; equipments; distribution and marketing of the final product. The practical component of the course includes technical and aesthetical aspects in several audiovisual content creations and the use of recording and digital editing equipment.

COMM 430 Multimedia Production**3 Credits**

This course focuses on the study and practice of various digital media related to graphic design, websites, photography and video. Presents the development of the creative arts directed towards the converging media and its application in computer graphics arts. In addition, it addresses the complexity of multimedia production, in its aspects of design and technical solution in hardware and software. It is offered in one semester.

COMM 440 Portfolio Seminar**3 Credits**

This course is devoted to the creation of a portfolio that serves as a register of the aesthetics, talents and differences of a media professional in relation to others. The course leads toward the definition of the student's character in a one-stop repository of the creative tools that will allow the student to communicate the range of his or her talents to potential employers and clients. The course will develop an individualized, creative and functional digital portfolio concept. It will strive towards the completion of a memorable and desirable portfolio through the completion of weekly projects involving the totality of the student's experience and previous work. The course will focus on weekly sessions at the laboratory, critical analyses of specific cases, reading and research, and the intensive and responsible use of technology. It will be offered in one semester.

Psychology**PSYC 121 General Psychology I****3 Credits**

This course is an introduction to the scientific study of the fundamental principles that govern the human conduct. The concepts and principles related to the development of psychology as a science, the function of the nervous system, endocrine system, sensorial, and motor systems, perception, learning and intelligence. The basic theories and their relation with individual and social relations.

PSYC 122 General Psychology II**3 Credits**

The course is an introduction to the scientific study of the fundamental principles that rule human behavior. Concepts and principles related to the development and maturity, such as impulses, motivation feelings and emotions, frustrations and conflicts, abnormal and normal, etc. will be studied. Also, basic relations and their relationship with the individual and society will be included.

PSYC 210 Human Sexuality**3 Credits**

This course will offer the student the opportunity to understand the principles and concepts related to human sexuality, its history and tradition. The contributions made by scholars in this field and also the basic determinants of sexual conduct. Physiology, anatomy and the psychological and cultural aspects of sexuality will be stressed. The different sexual dysfunctions and their origins will be studied. All themes will be discussed within the reality of the Puerto Rican culture.

PSYC 212 Health Psychology**3 Credits**

This course offers the student an introduction to the study of human behavior. Emphasis is placed on the behavior of the organism. Primary prevention techniques that lead to healthy behaviors are

discussed, as well as, how to modify these in the treatment scenario. The student will have the opportunity to apply these techniques in his/her clinical scenario.

PSYC 222 Adolescent Psychology

3 Credits

Detailed study of the biological, cognitive, moral emotional and social changes that occur during adolescence. The contexts in which these changes occur will be discussed, such as, family, school, community, and how these affect behavior. The principle theories relating to the behavior of the adolescent will be discussed according to the field of psychology. The problems and research relating to adolescence will be discussed throughout the course. The course will be carried out through the use of discussions, research, case studies, case analysis, responsible use of technology and cooperative work.

PSYC 225 Social Psychology

3 Credits

Scientific study of social interaction in the development of personality from the perspectives of psychology and sociology; includes relationships with others, as well as, with groups within the cultural environment. Emphasis is given to understanding the process of socialization, symbolism, social values, citizenship, behavioral dynamics, and group interrelation and cultural context influence each other; and analysis of how conflicts arise in the workplace and the individual as a result of this interaction. The study of the theoretical context of both approaches will be the base for the discussion of readings, personal and workplace case analysis, problem solving, teamwork, and critical reflections. Responsible use of technology will be encouraged.

PSYC 226 Evolutional Psychology

3 Credits

Study of human development since its conception to death. Study of the theories of learning, cognitive in the development and psychodynamic. Emphasis on the interpersonal processes, cognitive and motivations. It makes reference to the findings in the scientific investigation of the study of human development.

PSYC 228 Psychology of Diversity

3 Credits

Study of human and cultural diversity framed in the behavioral sciences. Analysis of differences and similarities of individual human behavior, related to: ethnicity, gender, religion, age, physical condition, sexual orientation, learning differences, level and type of intelligence, language, socio-economic status, among others. Analysis of the psychological, social, economic, and legal implications using research in the field of diversity. The course will be carried out through the use of discussions, research, case studies, case analysis, responsible use of technology and cooperative work.

PSYC 321 Personality Theories

3 Credits

A critical evaluation of the principal psychological theories from their origin to the present, establishing their application to psychotherapy. The concept of personality from psychoanalytic theories, social, epistemological and existentialist.

PSYC 322 Theories and Techniques in Psychotherapy

3 Credits

Various focus and psychotherapeutic processes of the therapy; theories of personality and learning for counseling, psychology and psychoanalysis of the function that is carried out, the discernment in the changed of conduct or behavior in the treatment and the justification of the psychotherapeutic techniques.

PSYC 324 Gender Psychology

3 credits

Study of myths, theories, and research related to masculinity and femininity. The course examines theoretical perspectives relating to sex and gender. Discussion of topics relating to gender in the world of work, gender and sexuality, double standards, and the way men and women relate to stress. Comparison and contrast of gender concepts from the social, educational, work, cognitive, individual, and the analysis of discourse perspectives. Students will differentiate the concepts of health and mental illness from the gender and sexuality standpoint. The course will be carried out by case studies, critical analyses of recent research, panel discussions on current topics related to the study of gender and sexuality.

PSYC 327 Psychology of the Elderly

3 Credits

This course offers the student the opportunity to develop the necessary skills to critically evaluate the psychological theories related to the elderly population, recent research in the field, and their implications. The implications of sensory and perceptual changes, learning, memory, intelligence, personality, and motivation in the daily routines of the elderly will be examined. The course will be carried out through readings, discussions, and research in which the students can apply the acquired knowledge.

PSYC 343 Theories of Learning and Motivation

3 Credits

This course establishes an introduction to the basic theories of the personality, the critical reflection concerning the theories. It presents a clear and precise picture of the principal characteristics of each theory. It should also foster criteria in order to guide each evaluation following them.

PSYC 350 Psychopathology

3 Credits

The course offers the student a comprehensive foresight of the concepts, the history, social aspects and scientific of normal behavior in the human being. It introduces the classification of psychological disturbances and the development of the necessary skills in the use and management of the DSMIV. One semester, 3 hours weekly.

PSYC 355 Industrial Psychology

3 Credits

Analysis of the fundamental theories, approaches, techniques, and procedures relating to human conduct within the workplace. Study of the principles, practices, methodologies, instruments, and strategies inherent to human conduct in the workplace to achieve the success of business in the new Century. The course will be carried out by case studies, critical analyses of recent research, panel discussions on current topics related to industrial psychology in Puerto Rico and other countries.

PSYC 400 Psychological Measurement
3 Credits

Study of the principles of psychological measurements; evaluation of the characteristics of the test, such as validity and trustworthiness, quantification, conversion of points, linguistic adoption and normalization. A general vision of the test that will be used will be offered in the psychological field, focusing on the arisen controversies regarding the use and interpretation of the same. One semester, 3 hours weekly.

PSYC 402 Methodology and Research
3 Credits

Introduction to the scientific study of behavior with special emphasis on laboratory methods, the design, recompilation and analysis of the facts using static's programs of the computers. Work will be done with outcomes of the scientific studies, their interpretation, theoretical and the contrast with new investigation. One semester, 3 hours weekly.

PSYC 423 Physiological Psychology
3 Credits

Study of the human organism with emphasis on the central nervous system, the somatic sensorial, and the endocrine system. The relationship between organism and behavior, and the superior cortical processes. The different emotional theories will be analyzed, motivation and learning and its impact on behavior. In addition, the different types of drugs will be considered as well as their effect in the human behavior. One semester, 3 hours weekly.

PSYC 435 Psychology Statistics
3 Credits

Introduction and discussion of the descriptive statistics and its application in the psychological investigation field. Study of the compendium, organization and analysis of facts, such as the sample distribution, among other things. Statistic models, correlation and simple regression, instrument and validity.

PSYC 450 Seminar in Psychology I
3 Credits

Acquisition and development of the basic communication and interview skills. Students will apply and use the help process, such as empathy, respect, approval and confidentiality. Other themes such as: Mental health and some other related to the course will be discussed in class.

PSYC 451 Seminar in Psychology II
3 Credits

Analysis of the theories and models of crisis intervention used with individuals in different situations from the perspective of psychology. Students will examine the techniques used to deal with crisis intervention in different scenarios. Research of different techniques on trainings for crisis intervention will be carried out. The course will be carried out through the use of discussions, research, case studies, case analysis, responsible use of technology and cooperative work.

Economics

ECON 123 Elementary Principles and Problems of Economics

3 Credits

This course places emphasis on microeconomics, particularly the theory of firms and markets. It provides a condensed vision of modern macroeconomic theory, including the problems of physical and monetary policy that are pertinent to economic systems.

ECON 124 Economics for Engineering

3 Credits

This course is designed to introduce undergraduate engineering students to the discipline of economics, in general, and principles of engineering economics in particular. Utilizing economic theory and applications, this course will present a rigorous graphical and mathematical treatment of such topics as market equilibrium, elasticity's costs of production, and market structure. While quantitative tools are used throughout the course, the primary focus of the material is on the fundamental engineering economics for manufacturing decision-making and project evaluation.

ECON 125 Analysis and Interpretation of Economics Reviews

3 Credits

The course is designed to provide majors in Social Communications on the Web with knowledge of key economic issues and debates, emphasizing the Puerto Rico and US economies. Basic principles of economic theory and analysis are presented, focusing on critical issues that impact societal economic wellbeing and ignite debates and controversies on government policies and the activities of various social actors. The course emphasizes learning about official and private sources of information on key economic issues and debates, such as publications specializing in economic statistics and analytical studies of the Puerto Rico economy.

ECON 253 Economy of Puerto Rico

3 Credits

This course provides an analysis of the characteristics and trends of the Puerto Rican economy. Special emphasis is placed on the main structural elements in the economy: the roles of agriculture, manufacturing, banking, construction and other services in the production, distribution and use of economic resources. The course also emphasizes production and national income indexes; and the government's role and the economic relationship between Puerto Rico and the United States.

Political Sciences

POSC 253 Political System of Puerto Rico

3 Credits

This course is an analysis of the political and judicial development of Puerto Rico from the 19th century to the present and the relationship of this development to organizations and the international world. The students will receive an introduction to the principles related to the government of Puerto Rico.

POSC 350 Dynamics of International Political Relations

3 Credits

Study of the principle theory of political science related to the field of international relations and its application of practices, concepts, and problems. Analysis of the relations among governments, organizations, and individuals and their social, political, and economic ties taking into consideration

the levels of cooperation and conflict. Study of critical issues in the context of globalization. The course is developed through research, the use of the Internet, group work, and reflective critiques.

Sociology

SOCI 203 Elementary Principles of Sociology

3 Credits

This course will study the individual and his relationship with his environment and social organizations, and the nature of this relationship. The course will also emphasize the development, functions and influences of interaction, changes and social processes.

SOCI 213 Social Problems of Puerto Rico

3 Credits

Discussion and analysis of the social problems those are most frequently present in the Puerto Rican society. The presentation of the themes to be discussed will be from a sociological perspective.

SOCI 215 Culture and Folklore of Puerto Rico

3 Credits

Analysis of the essential cultural foundations of the Puerto Rican people and their ethical and civic arts, traditions, literature, music, paintings, sculpture, and the national festivals as they relate to the development of the historical processes from the 16th Century to the present. The course will be framed by general value judgments and applied to the Puerto Rican society. The course will be developed through field trips, research, and cooperative group work. The responsible use of technology will be encouraged.

SOCI 216 Contemporary Social Problems

3 Credits

Critical, theoretical, and empirical examination from the sociological perspective of the social problems, their classification of deviant behavior and the subsequent informal and formal social control. The course includes the influence of the social communication media and the structures in the construction of social problems. Comparative analysis of these local and global problems, their possible solutions by means of citizen actions and by the governmental structures that generate public policy destined to attend to and extenuate them. Analysis of readings and simulation exercises, case studies, statistical analysis, responsible use of technology, and the study of public policies related to the course will be used.

SOCI 225 Sociology of Deviant Behavior

3 Credits

This course examines the social construction of crime, taking into consideration the process by which criminal problems are generated. Emphasis is placed on the constructs of deviation behavior within a historical and contemporary framework and the social and symbolic construction of crime by analyzing videos, literature, and music. Topics, such as behavioral controls, civil rights, normal behavior, deviant behavior, crime, and the relationship between criminal and victim, will be discussed throughout the course.

SOCI 330 **Sociology of Marriage and Family**
3 Credits

An analysis of the marriage as a system and its influence on the family and society. Different modes of intervention of prevention and therapeutic interventions are studied so to achieve the skills needed for successful professional intervention with the marital couple and the family.

SOCI 335 **Ethics, Morality, and Society**
3 Credits

Scientific and philosophical analysis of the classic and modern axioms related to ethics, morality, and individual and collective human behavior. The course is also the study of the ethical and moral foundations of society with special attention to the relation between the individual and his/her personal codes of conduct when faced with those held by the community. Emphasis is on the analysis of ethical, moral, and self-concepts, as well as how they are modeled, internalized, and impact the vision of a responsible life in society, education, economy, religion, government, and professions; appreciation for the diversity of values within the perspective of a global society. The course will be developed through the study of theoretical contributions and their application to real and hypothetical situations and problems, teamwork, discussion groups, reflections, ethnographic research, and use of the Internet. Responsible use of technology will be encouraged.

SOCI 360 **Sociological Imagination**
3 Credits

Scientific and philosophical study of the theoretical foundations of sociology with emphasis on the integration of the individual with the group, of the groups among themselves and social change. Analysis of the importance and the responsibility in the fulfillment of the creation of social reality and its diverse structures to comprehend the impact of society on the individual. Discussion and reflection of the theoretical contributions of the studies of social groups and implications in everyday life of the student as a social being as a professional. Collaborative work, research on diverse cultures and their respective formal and informal organizations will be some of the strategies that will be used in this course. Responsible use of technology will be encouraged.

Geography

GEOG 203 **Cultural Geography**
3 Credits

Study of the development and distribution of cultural elements in the world. Emphasis is placed on the critical organization of knowledge and its application in the comprehension of the environment that surrounds us and our activities. Analysis is of the way that societies around the world interact with one another and the environment. Consideration on the impact of the particularities of diverse human groups, cultural ecology, migratory movements, and changes in culture, customs, religions beliefs and values. The study of cultural diversity will be used as an instrument to value the importance of individual and community quality of life. The course will be developed through ethnographic research, case analysis, team work, and reflections on the individuals place on the planet. Responsible use of technology will be encouraged.

Criminology

CRIM 103 Introduction to Criminal Justice

3 Credits

Introductory course in which the origin and development of the Criminal Justice system in Puerto Rico will be studied. The class will examine the aspect and basic functions of the police, the courts, the lawyers of the defense, the district attorney, the correction facilities and the juvenile justice system. Consideration is given to the study of the crime, definition, reach and factors associated with crime.

CRIM 203 General Principles of the Penal Code and Crimes Against Individuals

3 Credits

The general principles of the penal code of Puerto Rico is studied. The topics covered are criminal intention, tentative, authors. The conspiracy, classification of crimes, criminal concealment, the defenses, penalties, aggravating circumstance, the theory of the physiology of causality. Included are crimes against the person and property. Case study and jurisprudence.

CRIM 204 Special Penal Laws

3 Credits

Study of the special penal laws that regulate the penal conduct in Puerto Rico. The psychology of juvenile legislation and the study of the law that cover minor offenders. Case study and jurisprudence. One semester, 3 hours weekly.

CRIM 206 Criminal Procedure

3 Credits

This course is a study of the established procedures for the treatment of lawbreakers. Also covered are the criminal procedures to be followed in the investigation, arrest and the corrective measures applied. Attention is also given to civil rights of citizens and important decisions of the Supreme Court.

CRIM 320 Criminal Investigation

3 Credits

The course of Criminal Investigation consists of the study of the origin and evolution of the criminal investigation and its relation with the antisocial in Puerto Rico. The process of the investigation of the felony from the study of the scene where the crime was committed until the judicial process takes place. The basic techniques of scientific interviews cross examination, and the modern methods for the investigation of crime.

CRIM 333 Prevention and Sociological Aspects of Criminal Behavior

3 Credits

Sociological study of criminal behavior based in the search of its etiology. This course emphasizes in the analysis of the criminal phenomenon, based on sociological and criminological theories of crime. Students will analyze the individual and collective effects of crime. They will also develop proposals and discuss the public policies related to prevention, intervention and treatment of crime worldwide.

CRIM 335 **Ethical Aspects of Justice**
3 Credits

This course studies the principles and ethical theories that guide the individual decision making process within the Criminal Justice System. The laws that regulate individual and professional ethical behavior are discussed. This course is carried out by use of conferences and research in jurisprudence.

CRIM 336 **Seminar of Substance Use and Abuse**
3 Credits

The course is designed to explore the use and abuse of alcohol, tobacco, and other drugs. The physiological, psychological, and social effects will be studied and analyzed critically and objectively. Particular emphasis will be placed on the participation of various agencies in relation to prevention, treatment, and the control that the substance use and abuse exercises over the community.

CRIM 340 **The Justice System and Juvenile Delinquency**
3 Credits

The course presents a broad vision of juvenile delinquency. The theories relating to the causes of delinquency (nature and extent) are studied in order to analyze the causes of illegal behavior of youths, within the context of the family, school, and community, are discussed. Delinquent behavior and due process of the law related to the modern social institutions in Puerto Rico will be discussed. The students will analyze the social relations to the problems of juvenile crime (prevention, treatment, and control), as well as, the analysis of the history and role of the juvenile court system.

CRIM 415 **Evidence, Case Preparation and Testimony**
3 Credits

A study of the rules of evidence relating to the judicial process, with emphasis on hearsay and its exception, how to prepare an effective presentation of a case before a court, and how to present to evidence.

CRIM 425 **Applied Criminalistics**
3 Credits

Study the origin and development of the forensic sciences basing the study in the different types of evidence utilized by the criminal investigation. Emphasis is made on the importance of preservation and handing of evidence in the judicial process. Prerequisite: CRIM 320

CRIM 430 **Rehabilitation, Civil Rights and Correctional System of Puerto Rico**
3 Credits

Principles of the correction system in Puerto Rico, its philosophy, legal bases, organization and administration of correctional facilities. Included are the area of penal institutions, community programs, the parole board, community rehabilitation, the bureau of evaluation and canceling, program of treatment and assistance for people confined to penal institutions and the penal officers group.

CRIM 432 **Criminal Technology, Fraud and Cyber Crimes**
3 credits

This course aims to familiarize students with the term fraud and its definition in the Penal Code, and offenses in which the term applies to fraud in our criminal justice system. Also consider the terms for the inhabitants of Cyberspace. Students will learn to apply the form of search and tracking of evidence on computers and digital equipment. Work on how to identify, preserve, package and

present such evidence in a legal and proper scrutiny should be submitted to the preservation of the "Chain of Evidence". Includes the study of Federal Law, State & International, applied in the digital computer fraud.

CRIM 434 Forensic Psychology in the Criminal Justice System

3 Credits

Studies the application of psychology to legal proceedings. Integrates different types of psychology to the evaluation of witnesses, evidence and presentation of oral evidence in court. Students will learn to use modern techniques of interrogation and psychological interview. They will also apply theoretical knowledge in a dynamic practice in the classroom.

CRIM 436 General Principles of Forensic Sciences

3 Credits

Study of the basic principles of the auxiliary sciences of Criminal Law. Emphasizes in the application of science to legal proceedings in the Criminal Justice System. They work on issues related to toxicology, anthropology, pathology, chemistry, physics, dentistry, among other disciplines, from a forensic perspective. Applies scientific knowledge to the legal context for the training of forensic expert thinking.

CRIM 475 Supervised Practicum

3 Credits

This is a field experience in which the student will have the opportunity to apply the knowledge gained and the skills and values developed in a private or public agency that has as working relation with the Criminal Justice System. Prerequisites: CRIM 203, 415, 425.

Paralegal Studies

PALE 101 Fundamentals of Puerto Rican Law

3 Credits

Introduction to our legal system and its historical development. Study of the judicial system of Puerto Rico.

PALE 103 Legal Investigation

3 Credits

Introduction to the techniques and resources of basic legal investigation. Introductory studies of the use of computers in legal investigation. Primary and secondary sources of legal rights will be examined. The techniques of editing summaries of jurisprudence and memorandum will be studied.

PALE 105 Constitutional Principles

3 Credits

Study of the Constitution of Puerto Rico and the Constitution of the United States of America. Emphasis on the rights, privileges, and immunities comprised in both constitutions.

PALE 107 Fundamentals of Civil Procedure

3 Credits

Introduction to the judicial system of Puerto Rico. Study of the Rules of Civil Procedure from its practical point of view. The development of a civil case with emphasis on the discovery of evidence will be used.

PALE 205 Introduction to Private Law I

3 Credits

Study of the Civil Code of Puerto Rico and its more important matters: family rights, estate, and inheritance.

PALE 206 Introduction to Private Law II

3 Credits

The study of the Code of Civil Laws of Puerto Rico in the matters of rights, duties and genuine contracts, and the vindictive damages.

PALE 301 Aspects of Notary Law and Registration Law

3 Credits

Study of notary law, the obligations and responsibilities of the notary. It will familiarize the student with the principles of the Property Law and the Registration Law.

PALE 307 Principles of Administrative Law

3 Credits

Fundamental aspects of the administrative litigation with emphasis on law suits. Topics to be covered: personnel administration, consumer affairs, public benefits and others.

PALE 311 Professional Responsibility

3 Credit

Analysis of the paralegal role within the system and professional behavior with the lawyer. Study of the Code of Ethics for Lawyers. As a final project the student will develop a code of ethics for the paralegal profession.

PALE 313 Investigation and Editing of Documents

3 Credits

Application of investigative techniques, including the localization and analysis of the law, jurisprudence and administrative rules. Techniques of editing legal documents will be examined, editing of legal memorandums and documents. Prerequisite: PALE 103

PALE 403 Administration of the Legal Office

3 Credits

This course is designed to prepare the student in the daily management of the office: implantation of procedures, training of personnel, purchases and supplies, accounting, reports, etc. Basic concepts of general administration.

PALE 405 Foundations of Bankruptcy and Immigration

3 Credits

This undergraduate course in Paralegal Studies, discusses the general principles in Bankruptcy and Immigration Law. Students' will study chapters 7, 11, 12 and 13 of the Federal Bankruptcy Law, including the discussion of total bankruptcy, corporative and commercial reorganization, fisherman, and agriculture chapter and individual reorganizations. All the analysis will be done under the normative of the Federal Courts. The participants will also analyze the general aspects of Immigration Law as a current theme in the federal government. For that purpose, this course emphasizes the study of the different federal authorities related to the classification of immigrants, non-immigrants and refugees. Students will have a general overview of the foundations of two aspects of Federal law. With this course we complete the basic knowledge needed to work in the legal system.

PALE 425 Practicum

3 Credits

The students will be sent to a public or private entity where they will put into practice the knowledge and skills learned. Prerequisites: PALE 103, 107, 205, 206, 301, CRIM 203, 415.

**SCHOOL OF SOCIAL AND HUMAN SCIENCES
DEPARTMENT OF SOCIAL WORK**

VISION

To be recognized as the best Social Work program in Puerto Rico.

MISSION

To produce and disseminate a body of knowledge that encourages the development of Social Work skills and competencies in line with our pursuit of social justice and equality, respect for human rights, and recognition of the importance of human dignity as well as the appreciation of diversity, integrity, personal and professional responsibility, and an unwavering commitment to bring social transformation to Puerto Rico.

FACULTY

Acosta Hernández, Griselles, Full Professor
MSW, University of Puerto Rico

Crespo Rivera, Evelyza, Assistant Professor
PhD, Social Work with Specialization in Public Policy, University of Puerto Rico, Rio Piedras
MSW, Administration and Supervision, University of Puerto Rico, Rio Piedras

Delgado Pereira, Iris, PsyD, Assistant Professor
PhD, Clinical Psychology, Pontifical University of Puerto Rico, Ponce Campus
MSW, Interamerican University of Puerto Rico

González Guarderrama, José A., Assistant Professor
PhD, Counseling Psychology, Interamerican University of Puerto Rico, Metropolitan Campus
MSW, Interamerican University of Puerto Rico, Metropolitan Campus

Nieves Rolón, Irvyn, Assistant Professor
PhD, Social Work with Specialization in Public Policy, University of Puerto Rico, Rio Piedras
MSW, Families, Children and Adolescents, Central University of Bayamon

Ortiz Rosa, Margarita, Instructor
MSW, Interamerican University of Puerto Rico, Metropolitan Campus

Rivera Moret, Maritza, Instructor
MSW, Interamerican University of Puerto Rico, Metropolitan Campus

Rivera Rivera, Carmen Belén, Assistant Professor
PhD, Social Work with Specialization in Public Policy, University of Puerto Rico, Rio Piedras
MA, Administration of Social Services, University of Illinois at Chicago
MS, Urban Education, Fordham University New York

Rosa Dávila, Emarely, Assistant Professor
PhD, Psychology, University of Puerto Rico, Rio Piedras Campus
MSW, University of Puerto Rico, Rio Piedras Campus

Santiago Orria, Astrid, Assistant Professor
PhD, Social Work with Specialization in Public Policy, University of Puerto Rico, Rio Piedras
MSW, Administration, Interamerican University of Puerto Rico, Metropolitan Campus
MPHE, University of Puerto Rico, Medical Sciences Campus

ADMINISTRATIVE STAFF

Crespo Rivera, Evelyza, Department Director
PhD, Social Work with Specialization in Public Policy, University of Puerto Rico, Rio Piedras
MSW, Administration and Supervision, University of Puerto Rico, Rio Piedras

Rosa Dávila, Emarely, Director, Graduate Program
PhD, Psychology, University of Puerto Rico, Rio Piedras Campus
MSW, University of Puerto Rico, Rio Piedras Campus

González Guarderrama, José A., Director, Field Practicum Program
PhD, Counseling Psychology, Interamerican University of Puerto Rico, Metropolitan Campus
MSW, Interamerican University of Puerto Rico, Metropolitan Campus

Jessica Rodríguez Rodríguez, Administrative Assistant
MBA, Universidad del Este

PROGRAM DESCRIPTION

The professional in the Social Work Program promotes social and economic equity and justice and the well-being of human and social systems. Social workers utilize theories of human behavior and social systems to intervene at the points where people interact with their environments. Human rights and social justice are fundamental tenants of social work. Social workers offer a variety of services to individuals, families, groups, organizations and communities.

Social workers understand both the public and the private social service systems and how it serves its clientele. Among the services performed by social workers are appropriate referrals, direct services, short term therapies, crisis interventions, information gathering, planning, administration and evaluation of social services. Social workers analyze legislation and social policies in order to make recommendations for improving the quality of life of all citizens. Graduates of Social Work may seek professional licensing from the Social Work Board of Examiners at the State Department of Puerto Rico.

MINOR for students from other fields such as: Education and Psychology

Social Work		15
SOWO 250	Introduction to Social Work	3
SOWO 255	Interviews and Communication in Social Work	3
SOWO 305	Recording Case Studies in Social Work	3
SOWO 321	Social Work with Individuals and Families	3
SOWO 322	Social Work with Group and Communities	3

ADMISSIONS REQUIREMENTS TO THE PROGRAM

These are in addition to the general admissions requirement at UNE.

- High School grade point average of 2.5 for Bachelor program in:
- Social Work

GRADUATION REQUIREMENTS THE PROGRAM

The graduation requirement for the general grade point average is of 2.0 and for the major component is 2.5.

Bachelor in Social Work

120 Credits		Credits
General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 111 or SPAN 115 or SPAN 125	Reading and Writing in Spanish I Reading, Writing and Oral Communication in Spanish I Language, Reading and Writing in Spanish I	3
ENGL 110 or ENGL 115 or ENGL 125	Basic Oral, Reading and Writing in English I College Reading and Writing I Advance English I	3
SPAN 112 or SPAN 116 or SPAN 126	Reading and Writing in Spanish II Reading, Writing and Oral Communication in Spanish II Language, Reading and Writing in Spanish II	3
ENGL 111 or ENGL 116 or ENGL 126	Basic Oral, Reading and Writing in English II College Reading and Writing II Advance English II	3
SOSC 112	The Human Being and its Social Environment	3
SOSC 242	Socio-economic and Political Principles of globalization	3
HIST 255	Analyses of Historical Processes in Puerto Rico	3
HUMA 228	Puerto Rico and its Contributions to the Caribe and the World	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
BIOL 115	Introduction to Human Biology	3

Professional Educational Component		30
PSYC 121	Psychology I	3
PSYC 122	Psychology II	3
SOCI 203	Principles of Sociology	3
SOCI 216	Contemporary Social Problems	3
PSYC 350	Principles of Psychopathology	3
CRIM 336	Substance Abuse and Its Legal Implications	3
SOSC 230	Political and Economic Systems	3
SOSC 330	Marriage and Family	3
SOSC 250	Statistics for Social Sciences	3
SOSC 258	Research Techniques for the Social Sciences	3

Major Courses		47
SOWO 250	Introduction to Social Work	3
SOWO 255	Interviews and Communication in Social Work	3
SOWO 305	Recording Case Studies in Social Work	3
SOWO 321	Social Work with Individuals and Families	3
SOWO 322	Social Work with Groups	3

SOWO 325	Legal and Ethical Aspects of Social Work	3
SOWO 340	Crisis Intervention	3
SOWO 360	Administration and Supervision	3
SOWO 373	Social Work with Special Populations	3
SOWO 375	Social Policy	3
SOWO 380	The Child, Adolescent, and the Family	3
SOWO 385	Social Work in the Industrial Setting	3
SOWO 387	Social Work in the Socio-Medical Setting	3
SOWO 480	Practicum and Seminar I	4
SOWO 481	Practicum and Seminar II	4

COURSE DESCRIPTIONS

Social Work

SOWO 250 Introduction to Social Work

3 Credits

This course studies the historical and philosophical development of social work and its place among related professions. Discussion and analysis of the principles, values, goals, regulations and sanctions, social policy, and code of ethics that regulates the practice of the profession is emphasized.

SOWO 255 Interviews and Communication in Social Work

3 Credits

This course focuses on the various techniques and interpersonal interviewing skills necessary in the helping process. Emphasis is placed on the attainment of the necessary skills for effective communication in interviews.

SOWO 305 Recording Case Studies in Social Work

3 Credits

Discussion of the types of documents required by social service agencies. The ethical aspects involved in the management of information obtained from interviews and analysis of cases are examined. Prerequisite: SOSC 255

SOWO 321 Social Work with Individuals and Families

3 Credits

An analysis of the family as a system and its influence in the individual and society. Different modes of intervention for prevention and therapeutically purposes are studied in order to achieve the skills needed for successful professional intervention with the individual and the family.

SOWO 322 Social Work with Groups and Communities

3 Credits

This course develops the students' capacity to understand the diverse social roles that exist in groups and how they impact the community. Special attention will be given to the leader's role within the group as well as the different leadership styles. Discussion of different strategies that can be used to solve the various problems that can arise when working with small groups and community settings.

SOWO 325 Legal and Ethical Aspects of Social Work

3 Credits

Explores the evolution of social work ethics and legal aspects. The course will provide the student the basic understanding of the importance that ethics and values legalities are to the practice of social work. Ethics and values laws and codes will be thoroughly examined and discussed.

SOWO 340 Crisis Intervention

3 Credits

Reviews the generic theory of crisis intervention, as well as, the counseling skills used in helping individuals in crisis situations, including battering, sexual assaults, suicide attempts, drug overdoses, psychiatric emergencies, and family crisis. Students review the theory and approaches to crisis

intervention, including the origins or causes of crisis, how a crisis develops, management of crisis, and resources within the community, well enough to apply these to suicides and other crisis situations.

SOWO 360 Administration and Supervision of Social Service Agencies

3 Credits

Presents the principles, processes and practices for administration and supervision of Social Services Agencies. Emphasis is placed on the role of the social worker in such a setting.

SOWO 373 Social Work with Special Populations

3 Credits

Examines the problems confronted by diverse groups in society, such as drug addicts, AIDS patients, the elderly, handicapped, battered women and children. Emphasis is placed on the management, strategies and types of interventions for the various target groups.

SOWO 375 Social Policy and Social Services

3 Credits

A study of social issues and the corresponding government policy. Social programs, agencies and services rendered to the community are discussed in depth.

SOWO 380 Social Work: The Child, Adolescent, and the Family

3 Credits

Students learn about the direct impact of social problems on children and adolescents. Existing legislation in favor of these age groups is also examined, in particular, the Juvenile Legislation and The Minors Protection Law of P.R.

SOWO 385 Social Work in the Industrial Setting

3 Credits

Existing labor and industrial legislature is discussed. Emphasis is placed on matters of social impact and current labor issues and conflicts. The handling of interventions inherent to industrial and work force settings is included.

SOWO 387 Social Work in the Socio-Medical Setting

3 Credits

Deals with the role of social work in a socio-medical setting as individuals and groups. All local and national legislatures concerning the rendering of services is discussed. Focuses on the handling of social and emotional circumstances that affect recovery. Emphasis is placed on applicable interventions to the terminally ill patient, as well as the immediate family.

SOWO 480 Practicum and Seminar I

4 Credits

The course offers the trainee the opportunity of receiving a service training in a private or public agency. During their practice students will get acquainted with the performance of the Social Worker who will be trained to apply the acquired knowledge during the teaching learning process, by taking the required courses of their concentration. In addition they will learn to develop and polish the necessary skills needed for rendering services. The course will conciliate the formation of ethical attitudes and the application of the professional principles in relation to Social Work. The supervised practice will offer the student the opportunity to deal with situations inside the methodology of Social Work with individuals and families, community groups, and of other auxiliary methods.

SOWO 481**Practicum and Seminar II****4 Credits**

The course, a continuation of SOWO 480, offers the student trainee the opportunity implementing the skills learned in a private or public agency. In addition, they will learn to develop and refine the necessary skills for the rendering of services. The course will conciliate the formation of ethical processes and application of professional related principles of Social Work. The supervised practice will offer the student the opportunity to manage situations inside the methodology of Social Work, with individuals and families, groups and communities of other auxiliary methods. Prerequisite: SOWO 480

**SCHOOL OF SOCIAL AND HUMAN SCIENCES
INSTITUTE OF SECURITY AND PROTECTION (ISeP)**

MISSION

The Institute of Security and Protection (ISep) mission is to offer more and better opportunities to municipal police officers, correction agents and other law and order personnel, as well as to civilians, so that they can broaden their knowledge, experiences and employment opportunities in the areas of security and protection. Through its instructors and professionals in the areas of security and social sciences, ISeP will generate a new focus on the professionalization of the police that will warrant the greatest quality standards expected from law and order personnel.

PROGRAM DESCRIPTION

This program allows the development of any person aspiring to become proficient in the areas of protection, correction and security in general. Graduates from these programs will have increased employment opportunities in agencies like: Municipal Police, State Police, Correction, and Private Security Firms, among others. From a training perspective, students develop new knowledge and skills attuned with the new requirements in the federal and state agencies in the areas of security and protection.

ADMISSIONS REQUIREMENTS TO THE PROGRAM

These are in addition to the general admissions requirement at UNE.

- High School grade point average of 2.0 for Associate programs in:
 - Penal Justice

GRADUATION REQUIREMENTS THE PROGRAM

The graduation requirement for the general grade point average is of 2.0 and for the major component is 2.5.

ASSOCIATE DEGREE

Associate in Penal Justice with emphasis in Security and Protection

54 Credits		Credits
General Education Component		27
SPAN 111	Reading and Writing in Spanish I	3
ENGL 110	Basic Oral, Reading and Writing in English I	3
SPAN 112	Reading and Writing in Spanish II	3
ENGL 111	Basic Oral, Reading and Writing in English II	3
PJPS 108	Basic Ethical Values	3
PJPS 112	Civil Rights and Crisis Situations	3
PJPS 116	Intervention with Special Populations	3
PJPS 120	Mediation and Intervention	3
PJPS 124	Human Relations and Community	3

Professional Educational Component		11
PJPS 132	Information And Communication Technologies For Officials	2
PJPS 204	First Aid For Penal Justice Officials	2
PJPS 216	Traffic Accident Investigation	2
PJPS 210	Integrated Seminar In Criminal Law, Criminal Procedure And Evidence	3
PJPS 214	Scene Investigation	2

Major Courses		16
PJPS 208	Physical Training And Nutrition For Penal Justice Officials	2
PJPS 220	Transit Interventions	2
PJPS 224	Vehicle Operation	2
PJPS 228	Police Patrol I	2
PJPS 229	Police Patrol II	2
PJPS 236	Use And Management Of Less Lethal Weapons	2
PJPS 238	Principles of Tactic operations	2
PJPS 240	Use and Handling of Firearms	2

**Associate in Penal Justice with emphasis in
Correctional Security**

54 Credits		Credits
General Education Component		27
SPAN 111	Reading and Writing in Spanish I	3
ENGL 110	Basic Oral, Reading and Writing in English I	3
SPAN 112	Reading and Writing in Spanish II	3
ENGL 111	Basic Oral, Reading and Writing in English II	3
PJPS 108	Basic Ethical Values	3
PJPS 112	Civil Rights and Crisis Situations	3
PJPS 116	Intervention with Special Populations	3
PJPS 120	Mediation and Intervention	3
PJPS 124	Human Relations and Community	3

Professional Educational Component		11
PJPS 132	Information And Communication Technologies For Officials	2
PJPS 204	First Aid For Penal Justice Officials	2
PJPS 210	Integrated Seminar In Criminal Law, Criminal Procedure And Evidence	3
PJPS 214	Scene Investigation	2

Major Courses		18
PJPS 208	Physical Training And Nutrition For Penal Justice Officials	2
PJPS 218	Corrections Management System	2
PJPS 222	Constitutional Law and Corrections	2
PJPS 226	Management And Supervision Of Confined	2
PJPS 232	Growth And Development Of The Confined In Corrections	2
PJPS 234	Probation, Parole And Community Treatment	2
PJPS 236	Use And Management Of Less Lethal Weapons	2
PJPS 238	Principles of Tactic operations	2
PJPS 240	Use and Handling of Firearms	2

COURSE DESCRIPTIONS

Penal Justice

PJPS 108 Basic Ethical Values

3 Credits

Study of the basic ethical values and the importance of its application in labor scenario by security, protection and correctional officers. Discussion of applicable legislation and jurisprudence.

PJPS 112 Civil Rights and Crisis Situations

3 Credits

Study of Civil Rights in Puerto Rico and the United States. It presents the Constitutions of both countries and highlights the Bill of Rights, Privileges and Immunities within those Constitutions. This course prepares students for the effective implementation of strategies for safety and security while ensuring respect for civil rights. Teaching strategies include lecture, discussion and case analysis.

PJPS 116 Intervention with Special Populations

3 Credits

Study of theoretical and practical aspects related to the intervention of security officers, correctional officers protection and intervention with special populations such as children, elderly, victims of domestic violence, ethnic groups and alcoholics and people with health conditions mental.

PJPS 120 Mediation and Intervention

3 Credits

Mediation promotes communication and understanding between the parties in conflict dialog offering alternatives to the parties involved. This course includes concepts of conflict resolution, the relevant legislation, communication skills and aspects of the intervention in situations related to the work environment and tasks performed by legal professionals.

PJPS 124 Human Relations and Community

3 Credits

Study of human relationships and the community for public safety personnel. It focuses on describing the characteristics of the police system for the community, its relevance and applicability in today's society. It also seeks to develop a sense of commitment to working with communities and the development of preventive and proactive rather than reactive or palliative to the crime. Teaching strategies include lecture, discussion and case analysis.

PJPS 132 Information And Communication Technologies for Officials

3 Credits

Course aimed at studying the evolution of human communication and application of technology to exchange information. It is based on the principles governing communications technology for achieving effective management of information. It lays the foundation in the methods of safety and security of communications between individuals. It describes the processes of verbal interaction and written in a laboratory for the application of technology to the processes that occur in class.

PJPS 204 **First Aid For Penal Justice Officials**
3 Credits

Instruct students in the primary care of a medical emergency and include the occupation of public safety personnel as the first rescuer. The student will learn to provide services in settings which require special knowledge and skills: anatomy, basic physiology of the human body, vital signs, shock or fainting, burns, diabetes, childbirth, epilepsy and stroke. Through practical exercises are taught to handle emergencies: choking, bleeding, and basic measures of cardiopulmonary resuscitation (CPR).

PJPS 208 **Physical Training And Nutrition for Penal Justice Officials**
3 Credits

The students will learn different workout routines that will allow them to perform each of their tasks or functions as an agent of law and order. Emphasis in the holistic physical development, including aspects of nutrition, rest and exercise.

PJPS 210 **Integrated Seminar In Criminal Law, Criminal Procedure And Evidence**
3 Credits

Study of the general principles of the Puerto Rico Penal Code, the Special Penal Laws, Rules of Criminal Procedure and the Rules of Evidence, which govern the area of criminal law in Puerto Rico. It lays the foundation as to the legal rules applicable to minor offenses, special procedures and exceptions to exceptions previously established standards. It is used as the main methodology of the analysis of case study on the techniques of legal hermeneutics.

PJPS 214 **Scene Investigation**
3 Credits

The study of the history and purpose of criminal investigations and the terminology of this specialty. Provide adequate instruction in the elements, concepts and fundamental techniques in criminal investigations, such as: profile of the delinquent or criminal, emphasizing criminology, crime scene management, development of confidants and informants, and characteristics of an investigator. Practical exercises that apply the acquired knowledge will be presented.

PJPS 216 **Traffic Accident Investigation**
3 Credits

This course will discuss the duties, responsibilities, and regulations of drivers mandated by Vehicles and Transit Law of Puerto Rico. Additionally, the student will learn how to apply and enforcement this law. Also, the student will understand the different determining factors and legal aspects of accidents in order to conduct traffic accident investigations.

PJPS 218 **Corrections Management System**
3 Credits

The study of the correction system, including the purposes, structures of the victim and the inmate. In addition, we will study the various theories and types of situations faced daily in the correctional field. These include contemporary theories of punishment, correction and rehabilitation, in addition, to address problems and issues affecting the correctional officer in the broad field of the correction system.

PJPS 220 Transit Interventions

3 Credits

Discussion of the duties and responsibilities of law enforcement officer, the driver according to the Vehicle and Traffic Law and Puerto Rico and the regulations have been promulgated for implementation and applicability. The student will know the internal guidelines and protocols to follow in a safe and effective intervention.

PJPS 222 Constitutional Law and Corrections

3 Credits

It is based on the study of the constitutional rights of prisoners, by some kind of crime in Puerto Rico. Deepens in the analysis of practices and interventions, with inmates in penal institutions. Integrates the foundations and changes of the rules in the country's prisons, after the Morales Feliciano case and its effect on our jurisdiction. Integrates on the daily discussion in class, the current constitutional jurisprudence in state and federal level. Students use as a working tool the Constitution of the Commonwealth of Puerto Rico and the Constitution of the United States of America.

PJPS 224 Vehicle Operation

3 Credits

Will discuss the form and manner as the operation and execution of motor vehicles to travel on public roads are an unknown factor if the provisions of the Vehicle Traffic Law of Puerto Rico and the regulations have been promulgated for implementation and applicability. In addition, the student will know and identify the different categories of licenses for driving on roads in Puerto Rico.

PJPS 226 Management And Supervision Of Confined

3 Credits

Introductory course on techniques for monitoring inmates, as well as prison guards and employees of Corrections. Emphasis is on developing specific communication methods necessary to work effectively in a correctional institution. The primary goals of the course are: developing the ability to work in a potentially dangerous environment, implementation and monitoring of direct orders, recognition of the handling of offenders, methods of observation to be put into practice, knowledge and body language implementation and problem solving daily work within a culturally distinct population.

PJPS 228 Police Patrol I

3 Credits

Study skills and techniques of patrol officers to safety and security need to respond appropriately to the different calls. Will emphasize methods of approach to high-risk situations: techniques of patrol vehicles, safety interventions and structures, foot patrol, responding to crimes in progress, communication and report writing. Includes practice exercises.

PJPS 229 Police Patrol II

3 Credits

This course Provides skills to respond to Hazardous Material incidents, bomb Threats, building evacuation, and weapons of mass destruction. The students are introduced to the Existence and Activities of criminal groups, tumults and extremist groups. Practical exercises included.

PJPS 232 Growth And Development Of The Confined In Corrections
3 Credits

The course will review and analyze the history of correctional treatment, rehabilitation strategies, philosophies, ideologies and developments related to correctional policies and practices, organizational and managerial. Students focus critically on theoretical issues, practices and policies related to rehabilitation treatment programs and adult and juvenile offending.

PJPS 234 Probation, Parole And Community Treatment
3 Credits

Comprehensive study of the general principles of Probation, Parole and community treatment of convicts in Puerto Rico. Job requirements and the effects of probation. Similarly analyzes the structure of the Board of Parole and its regulations. Explore alternative community treatment for offenders and the importance of effective social reintegration to achieve rehabilitation.

PJPS 236 Use And Management Of Less Lethal Weapons
3 Credits

This course is the study and management of less-lethal weapons, from its structure, components and definition to its effects. The student will learn the types of less lethal weapons and how they differ from firearms. Likewise, know the importance of responsible use of these weapons and the proper equipment to protect yourself and others.

PJPS 238 Principles of Tactic operations
3 Credits

Study and practice in self-defense techniques, use and management of rattan (expandable baton). The student is trained in the techniques and mechanics of arrest. It trains the student in tactical formations to handle situations of civil unrest and crowd control. Students will learn and apply the water rescue. We study the procedures applicable in situations and hostage negotiation.

PJPS 240 Use and Handling of Firearms
3 Credits

This course enables students to handle the gun carriage and regulations of the Police of Puerto Rico in a proper and legal. Emphasis is given to the laws, both state and federal regulations and the General Orders of the Police of Puerto Rico, in the use of the weapon. Also become familiar with the use and management of the Remington shotgun cartridge 12, the Rifle Colt M-16 A-1 and A-2, including tear gas and pepper spray.

UNIVERSIDAD DEL ESTE
SCHOOL OF SCIENCE AND TECHNOLOGY



UNDERGRADUATE CATALOG
2013-2014

SCHOOL OF SCIENCE AND TECHNOLOGY

The School of Science and Technology is a collegial learning community in continuous development and expansion of our academic programs. It offers undergraduate programs such as associate degrees, bachelor's degrees and a professional certificate.

The School's academic program includes engineering technology, natural sciences, and applied sciences at the associate degree level and biology, microbiology and biotechnology at the bachelors of sciences level. The School also offers a Professional Certificate in Food Safety and courses in chemistry, physics, environmental sciences and mathematics to all the academic programs in the Institution.

Our academic programs respond to the present socioeconomic reality, and complement theory with practice. This is possible through the integration of the professional community, industry, the government sector, and the community in general, by means of strategic alliances and collaborative agreements. The use of advanced technology is one of the principal teaching tools that supports the entire academic and administrative services, and has a direct impact on the student's activities.

The School of Science and Technology of Universidad del Este collaborates with the university community in the development of an environment that fosters the study in harmony within the goals of the Institutional Vision and Mission Statement.

MISSION

The School of Science and Technology is a learning community where the student is the main participant and the center of the learning process, where high quality support services are offered for facilitating their holistic development. The learning process is based on the search for knowledge, and is therefore in a continuous process of personal and professional development.

GOALS

The goals of the School of Science and Technology are as follows:

- Provide service courses to contribute to the development of an analytical, scientific, and environmentally conscious culture within the university community.
- Strengthen the undergraduate research program through activities related to faculty and student development.
- Provide a stimulating academic environment where students will be prepared for life, assume leadership roles, and develop critical thinking skills to be able to confront a technologically changing world.
- Maintain and continue to develop strategic alliances and collaborative agreements that allow for the strengthening of the academic programs.
- Implement assessment tools in the classroom, the academic programs, and the services offered by the School.

FACULTY

Arcelay Gutiérrez, Angel, Full Professor
PhD, Biochemistry, The Ohio State University

Colón Guasp, Wilfredo, Full Professor
PhD, Environmental Horticulture, University of Florida

Castro Simmons, Mónica, Assistant Professor
MS, Mathematics, Virginia Polytechnic Institute

González Rodríguez, Sandra, Associate Professor
MS, Chemistry, University of Puerto Rico Río Piedras Campus

Laham Bauzó, Isis, Instructor
MS, Computer Engineering, Boston University

Lizardi O'Neill, Lilliam, Full Professor
PhD, Physiology, University of Puerto Rico Medical Sciences Campus

Lopez Goglad, Jorge, Instructor
MA, Applied Mathematics, Interamerican University

Ortiz Reyes, Jorge, Instructor
M. Ed, Mathematic Education, University of Phoenix

Méndez Merced, Ana T., Assistant Professor
PhD, Biology, University of Puerto Rico Río Piedras Campus

Monterrubio Álvarez, José, Assistant Professor
PhD, Biology, University of Puerto Rico Río Piedras Campus

Peraza González, Carmen D., Associate Professor
PhD, Research and Evaluation, Universidad Estatal a Distancia de Costa Rica

Pérez Vélez, Mariel E., Assistant Professor
PhD, Microbiology and Medical Zoology, University of Puerto Rico Medical Sciences Campus

Restrepo, Gerson, Assistant Professor
MS, Physics, University of Puerto Rico Mayaguez Campus

Rodríguez Bonano, Nydia, Associate Professor
PhD, Microbiology and Medical Zoology, University of Puerto Rico
Medical Sciences Campus

Roig López, José L., Assistant Professor
PhD, Biology, University of Puerto Rico Río Piedras Campus

Santiago Pereira, Carlos, Associate Professor
PhD, Biochemistry, The Ohio State University

Torres Colón, Jorge, Instructor
M.S., Mathematics, Inter American University of Puerto Rico Río

ADMINISTRATIVE STAFF

Colón Guasp, Wilfredo, Dean
PhD, Environmental Horticulture, University of Florida

Rivera Ruiz, Marielis E., Associate Dean
PhD. Biochemistry, University of Puerto Rico Medical Sciences Campus

Carrasquillo Medina, Alex D., Director Engineering Program
MS, Networking and Telecommunications Management. Universidad del Turabo

Rivera Rosa, Miriam, Director Administrative Services
MBA, Management, Universidad Metropolitana

Bigio Ferreira, Yazmin, Student Coordinator
MBA, Human Resources, Universidad del Turabo

Martínez Algarín, Luz T., Administrative Assistant
MBA, Human Resources, Universidad del Turabo

Cirilo Ramos, Carol, Administrative Assistant
BA, Executive Secretary, Universidad del Este

TECHNICAL STAFF

Hernandez Burgos, Carmen L., Coordinator CECMAT
MS, Environmental Health, University of Puerto Rico, Medical Sciences Campus

Meléndez Sánchez, Judy A., Laboratory Technician
MS, Biotechnology, Universidad Metropolitana

Velez Rivera, Maribel, Laboratory Technician
MS, Marine Science, University of Puerto Rico Mayaguez Campus

PROGRAM DESCRIPTIONS

Electronic Engineering Technology

The Electronic Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communications systems, and power electronic systems. The program is designed to prepare the individual to become a competent electronic technician capable of working and communicating with engineers, scientists, and production personnel. Their work requires the application of scientific and mathematical theory as well as specialized knowledge and skills in some aspect of technology.

Networking Engineering Technology

The Networking Engineering Technology curriculum prepares individuals to become engineering technicians who design, install, test, troubleshoot, repair, and modify data communications networks systems such as local area computer networks, wide area computer networks and industrial devices networks within an automation system. The curriculum includes the CISCO Academy courses that will prepare the student for the Cisco Certified Network Associates CCNA professional certification. The graduates from this program will be capable of working and communicating with engineers, scientists, and production personnel. Their work requires the application of scientific and mathematical theory as well as specialized knowledge and skills in some aspect of networks technologies.

Avionics Engineering Technology

The Avionics program is an Associate of Science Degree in Engineering from a technical and practical perspective that rains high-quality professional technicians with great domain expertise, appropriate manual skills and effective communication skills.

This degree aims to develop the student's capacity to implement a selection of fundamental concepts of Science, Mathematics, Computers, General Engineering and the expertise of Avionics. The program incorporates activities related to the repair and maintenance of navigation equipment, radio communications, radar systems, and other instruments and computers that control the aircraft electronic systems within a dynamic industrial or technical services.

Natural Sciences with emphasis in Applied Sciences

The Natural Science program with emphasis in applied sciences prepares the students for the various baccalaureate degree programs in the sciences. Students admitted to this associate degree program may not have a clear science program in mind but the applied sciences will prepare them to continue in some of the following science degree programs: microbiology, biology, and biotechnology to environment sciences. The students will be able to continue at Universidad del Este or transfer to another institution to continue his/her baccalaureate degree in science related fields.

Microbiology

The microbiologist studies the growth, structure, development, and characteristics of bacteria and other microorganisms, matches the transformation and manipulation of them and incorporates them in the manufacture of genetically engineered products. A graduate in this program can be employed in the food industry, manufacturing and pharmaceuticals, biotechnology, and environmental microbiology. This degree can also be used to continue studies in medicine or go on to graduate studies.

Biology

The graduate with this degree will be fully able to grasp and understand the theories, concepts, and practical foundation of biology in all its dimensions. The graduate will be able to identify and solve problems using scientific inquiry procedures. This degree can also be used to continue studies in medicine or go on to graduate studies.

Biotechnology

A graduate from this degree will be able to work in specialized laboratories in the food industry, pharmaceuticals, and regulatory agencies either within government institutions or agencies or within the private sector. This degree can also be used to continue graduate studies.

PROFESSIONAL CERTIFICATE PROGRAM

Professional Certificate in Food Safety

Professional Educational Component		18
BIOL 383	Food Microbiology	3
FAES 440	Food Safety and Protection (HACCP)	3
FAES 425	Good Manufacturing Practices	3
BIOL 410	Public Health and Risk Assessment of Foodborne Diseases	3
FAES 435	Pre- and Post- Harvest Food Safety	3
BIOL 420	Microbial Food Safety Hazards and Quality Control	3

MINORS/ SPECIAL CERTIFICATION

Food Safety

Professional Educational Component		18
BIOL 383	Food Microbiology	3
FAES 440	Food Safety and Protection (HACCP)	3
FAES 425	Good Manufacturing Practices	3
BIOL 410	Public Health and Risk Assessment of Foodborne Diseases	3
FAES 435	Pre- and Post- Harvest Food Safety	3
BIOL 420	Microbial Food Safety Hazards and Quality Control	3

Chemistry

Professional Educational Component		20
CHEM 203	General Chemistry I	4
CHEM 204	General Chemistry II	4
CHEM 351	Organic Chemistry I	4
CHEM 352	Organic Chemistry II	4
CHEM 323 or CHEM 385	Analytical Chemistry	4
	Biochemistry	4

Environmental Science

Professional Educational Component		17
BIOL 228	Introduction to Ecology	3
ENTE 101	Environmental Science Technology	3
ENTE 250	Air and Atmosphere Pollution Technology	4
ENTE 310	Soil Conservation and Management Technology	3
ENTE 331	Water Pollution and Treatment	4

ADMISSIONS REQUIREMENTS

Admissions Requirements to some Specific Programs

- Associate in Natural Sciences
 - a. High school grade point average of 2.00 or above.
 - b. Passing grades in high school Biology and Chemistry and/or Physics.
- Associate in Engineering
 - a. High school grade point average of 2.00 or above.
 - b. Passing grades in high school Mathematics.
- Bachelors of Science
 - a. High school grade point average of 2.50 or above.
 - b. Passing grades in high school Biology, Mathematics, and Chemistry.

GRADUATION REQUIREMENTS

Students must have satisfactorily completed the prescribed number of credits with a grade point average of 2.00 (C) or higher or as required in their program of studies. Students receiving associate or bachelor degrees with a grade point average ranging from 3.50 to 3.74 will graduate with Cum Laude, and those within the 3.75 to 3.89 range will graduate Magna Cum Laude, and those with a grade point average ranging from 3.90 to 4.00 will graduate Summa Cum Laude.

ASSOCIATE'S DEGREES

Associate in Science in Electronic Engineering Technology

62 Credits	Credits
General Education	15
Professional Educational Component	22
Major Courses	25

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
MATH 120	Introduction to Algebra	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		22
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
ECON 124	Engineering Economics	3
ENGI 100	Introduction to Engineering	3
ENGI 160	Introduction to Engineering Graphics	3
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
PHSC 203	General Physics I	4

Major Courses		25
EETP 202	Circuit Analysis I	3
EETP 203	Circuit Analysis II	4
EETP 210	Microprocessors	3
EETP 211	Electronic Communications	4
EETP 212	License Review	1
EETP 215	Digital Circuit	4
EETP 216	Electronic Circuit	5
ETAP 300	Engineering Application Project	1

Associate in Science in Networking Engineering Technology

65 Credits	Credits
General Education	15
Professional Educational Component	22
Major Courses	28

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
MATH 120	Introduction to Algebra	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		22
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
ECON 124	Engineering Economics	3
ENGI 100	Introduction to Engineering	3
ENGI 160	Introduction to Engineering Graphics	3
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
PHSC 203	General Physics I	4

Major Courses		25
EETP 202	Circuit Analysis I	3
EETP 203	Circuit Analysis II	4
NETP 202	Networking Basics - CCNA I	3
NETP 203	Routers and Routing - CCNA II	4
NETP 204	Switching and Internet Routing - CCNA III	4
NETP 205	Wan Technologies-CCNA IV	3
NETP 208	Computer and Networks Operating Systems	3
NETP 209	Network Security	3
ETAP 300	Engineering Application Project	1

Associate in Science in Avionics Engineering Technology

65 Credits	Credits
General Education	21
Professional Educational Component	16
Major Courses	28

General Education Component		21
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
ECON 124	Engineering Economics	3
MATH 120	Introduction to Algebra	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		16
ENGI 100	Introduction to Engineering	3
ENGI 160	Introduction to Engineering Graphics	3
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
PHSC 203	General Physics I	4

Major Courses		28
EETP 202	Circuit Analysis I	3
EETP 203	Circuit Analysis II	4
EETP 216	Electronic Circuit	5
AETP 202	Aircraft Digital Circuit	3
AETP 203	Aircraft Communication System	3
AETP 204	Aircraft Navigation System	3
AETP 205	Aircraft Pulse System	3
AETP 206	Radar System	3
AETP 207	FCC License Review	1

Associate in Science in Natural Sciences

54 Credits	Credits
General Education	15
Professional Educational Component	39

General Education Component		15
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
MATH 120	Introduction to Algebra	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		39
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
HIST 255	Analysis of the Puerto Rican Historical Process	3
BIOL 203	General Biology I	4
BIOL 204	General Biology II	4
CHEM 203	General Chemistry I	4
CHEM 204	General Chemistry II	4
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
BIOL 255	Environmental Science	3
PHSC 203	General Physics I	4
PHSC 204	General Physics II	4

BACHELOR'S DEGREES

Bachelor of Science in Biology

118 Credits	Credits
General Education	33
Professional Educational Component	48
Major Courses	34
Elective	3

General Education Component		33
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
MATH 120	Introduction to Algebra	3
HUMA 228	Puerto Rico and its contribution to the Caribbean and the World	3
BIOL 255	Environmental Science	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
HIST 255	Analysis of the Puerto Rican Historical Process	3
SOSC 113	Analysis of Cultural and Historical Process	3
SOSC 242	Socio Economic and Political Principles of Globalization	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		48
BIOL 203	General Biology I	4
BIOL 204	General Biology II	4
CHEM 203	General Chemistry I	4
CHEM 204	General Chemistry II	4
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
MATH 221	Analytical Geometry and Calculus I	4
MATH 304	Introduction to Biostatistics	3
CHEM 351	Organic Chemistry I	4

CHEM 352	Organic Chemistry II	4
PHSC 203	General Physics I	4
PHSC 204	General Physics II	4
UNRE 201	Undergraduate Research	3

Major Courses		34
BIOL 206	General Microbiology	4
BIOL 228	Introduction to Ecology	3
BIOL 240	Modern Genetics	3
BIOL 325	General Plant Botany	4
BIOL 330	Immunology	3
BIOL 331	Developmental Biology	3
BIOL 345	Evolution	3
BIOL 395	Laboratory Techniques in Biotechnology	3
BIOL 398	Cellular and Molecular Biology	4
BIOL 430	Animal Biology	4

Electives		3
	Free Elective	3

Bachelor of Science in Microbiology

120 Credits	Credits
General Education	33
Professional Educational Component	53
Major Courses	31
Elective	3

General Education Component		33
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
MATH 120	Introduction to Algebra	3
HUMA 228	Puerto Rico and its contribution to the Caribbean and the World	3
BIOL 255	Environmental Science	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
HIST 255	Analysis of the Puerto Rican Historical Process	3
SOSC 113	Analysis of Cultural and Historical Process	3
SOSC 242	Socio Economic and Political Principles of Globalization	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		53
BIOL 203	General Biology I	4
BIOL 204	General Biology II	4
CHEM 203	General Chemistry I	4
CHEM 204	General Chemistry II	4
CHEM 323	Analytical Chemistry	4
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
MATH 221	Analytical Geometry and Calculus I	4
MATH 304	Introduction to Biostatistics	3
CHEM 351	Organic Chemistry I	4
CHEM 352	Organic Chemistry II	4

CHEM 385	Biochemistry	4
PHSC 203	General Physics I	4
PHSC 204	General Physics II	4

Major Courses		31
BIOL 206	General Microbiology	4
BIOL 208	Ecology and Microbial Diversity	3
BIOL 260	Bacteriology	3
BIOL 308	General Mycology	3
BIOL 324	Microbial Biosecurity and Quality Control	1
BIOL 330	Immunology	3
BIOL 336	Microbial Physiology and Genetics	4
BIOL 383	Food Microbiology	3
BIOL 423	Parasitology	3
BIOL 425	Virology	3
BIOL 400	Microbiology Internship	1

Electives		3
UNRE 201	Undergraduate Research	3

Bachelor of Science in Biotechnology

120 Credits	Credits
General Education	33
Professional Educational Component	56
Major Courses	28
Elective	3

General Education Component		33
ENGL 110 or ENGL 115 or ENGL 125	Basic oral, reading, and writing in English I College Reading & Writing I Advanced English I	3
ENGL 111 or ENGL 116 or ENGL 126	Basic oral, reading, and writing in English II College Reading & Writing II Advanced English II	3
MATH 120	Introduction to Algebra	3
HUMA 228	Puerto Rico and its contribution to the Caribbean and the World	3
BIOL 255	Environmental Science	3
SPAN 111 or SPAN 115 or SPAN 125	Basic reading and writing in Spanish I Reading, writing and oral communication in Spanish I Advanced Spanish I	3
SPAN 112 or SPAN 116 or SPAN 126	Basic reading and writing in Spanish II Reading, writing and oral communication in Spanish II Advanced Spanish II	3
HIST 255	Analysis of the Puerto Rican Historical Process	3
SOSC 113	Analysis of Cultural and Historical Process	3
SOSC 242	Socio Economic and Political Principles of Globalization	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Educational Component		56
BIOL 203	General Biology I	4
BIOL 204	General Biology II	4
CHEM 203	General Chemistry I	4
CHEM 204	General Chemistry II	4
CHEM 323	Analytical Chemistry	4
MATH 130	Pre-Calculus I	3
MATH 131	Pre-Calculus II	3
MATH 221	Analytical Geometry and Calculus I	4
MATH 304	Introduction to Biostatistics	3
CHEM 351	Organic Chemistry I	4
CHEM 352	Organic Chemistry II	4

CHEM 385	Biochemistry	4
PHSC 203	General Physics I	4
PHSC 204	General Physics II	4
UNRE 201	Undergraduate Research	3

Major Courses		28
BIOL 206	General Microbiology	4
BIOL 240	Modern Genetics	3
BIOL 330	Immunology	3
BIOL 395	Laboratory Techniques in Biotechnology	3
BIOL 398	Cellular and Molecular Biology	4
BIOL 440	Environmental, Agricultural and Industrial Biotechnology	3
BIOL 450	Pharmaceutical and Medical Biotechnology	3
BIOL 460	Recombinant DNA Technology	3
BIOL 470	Seminar in Biotechnology	1
BIOL 490	Biotechnology Internship	1

Electives		3
	Free Elective	3

COURSE DESCRIPTIONS

Biology

BIOL 103 Anatomy and Physiology I

4 Credits

This course studies the fundamental concepts of Human Anatomy and Physiology. It emphasizes the structure-function relationship of all systems in the human body with a clear understanding of how these systems integrate to achieve homeostasis. Pathological conditions, diagnosis, testing and treatment will also be discussed to enhance understanding of normal body functions. This course covers basic principles of cellular biology and biochemistry as well as the following systems: integumentary, skeletal, muscular, and nervous (including special organs and senses), and endocrine. One semester, 3 hours of lecture and 3 hours of laboratory per week.

BIOL 104 Anatomy and Physiology II

4 Credits

This course studies the fundamental concepts of Human Anatomy and Physiology. It emphasizes the structure-function relationship of all systems in the human body with a clear understanding of how these systems integrate to achieve homeostasis. Pathological conditions, diagnosis, testing and treatment will also be discussed to enhance understanding of normal body functions. This course covers basic principles of cellular biology and biochemistry as well as the following systems: Circulatory (cardiovascular and lymphatic), respiratory, immune, excretory, digestive and reproductive. One semester, 3 hours of lecture and 3 hours of laboratory per week.

BIOL 106 Compendium of Human Biology

3 Credits

This course allows the student to construct a valid scientific knowledge of anatomical structures, basic physiological processes and human pathology. By means of an active learning environment, the student is guided towards: the identification of corporal structures; the analysis of interrelationships between human systems structures and their functions; the knowledge to analyze the origins and symptoms of some pathologies associated with the different human corporal systems; the use of constructed knowledge for personal, ethical and social decision making; the use of scientific and technical vocabulary associated with anatomy and physiology, and the use and interpretation of tables and graphs that show data and process of the human physiology and pathology. One semester, 3 hours of lecture per week and 2 hours of laboratory per week.

BIOL 115 Introduction to Human Biology

3 Credits

Study of anatomical structures and physiological processes in the human organism. Analyses of structure-function relationships in human physiology. Understanding of the human organism as a whole. Evaluation of relevant pathological conditions associated with different organ systems. Use of computer software to aid in the understanding of physiological phenomena and to enhance group discussions. Critical evaluation, development and appreciation of those practices that promote health to individuals and populations. Teaching strategies include, case presentations, research tasks, written reports, cooperative work and "in-classroom" laboratory exercises. One Semester, 3 hours of lecture per week.

BIOL 203 General Biology I**4 Credits**

First part of the general biology introductory course. Study of living organisms: characteristics, organization, and diversity. Emphasis is drawn upon specializations, adaptations, biochemical, and metabolic features at different organizational levels. Evolution is worked out as the unifying principle of biology. Inquiry, science processes' implementation, case studies, field trips, investigative laboratories, cooperative learning, and reflective discussions, among others, help in the development of students' attitudes and skills for taking personal, ethical and social decisions. Several modalities of students' assessment and evaluation will secure a holistic student's learning estimate. One semester, six hours of integrated lecture and laboratory per week.

BIOL 204 General Biology II**4 Credits**

Second part of the general biology course. This course gives the student the opportunity to: a) construct biological concepts that they will need in advanced courses and in their daily life; and their interconnections such as: biodiversity, tissue, organs and animal and plants systems specialization and adaptation, extinction, conservation and factors that determine evolution (natural selection and heritage), b) examine their beliefs and prejudices about biological concepts, c) research where evolution occurred, who is affected, d) be aware of the historical development of some biological ideas, e) develop scientific values and skills, and g) make personal, ethical, and social decisions. One semester, six hours of integrated lecture and laboratory per week.

BIOL 206 General Microbiology**4 Credits**

This course studies the microorganism diversity that includes the Kingdoms Monera, Protists, and Fungi. Emphasis is given to the anatomy, metabolism and reproduction of microorganisms. In a general way the importance of microorganisms in the different areas of microbiology are also studied. Those areas include: industrial, medical, food, ecological and water microbiology, also virology and biotechnology. In the laboratory, there will be practices in aseptic techniques, different methods of isolating microorganisms and obtaining qualitative and quantitative information. Also, the identification of microorganisms through biochemical tests is practiced. One semester, 3 hours of lecture per week and 3 hours of laboratory per week.

BIOL 208 Microbial Ecology and Diversity**3 Credits**

This course studies the interactions between the microbial biodiversity and the environment. It focuses on the activities of the diverse microbial populations on natural ecosystems, including those interactions between biotic and abiotic factors of such ecosystems. Includes practical experiences involving sampling, microbial collection and the measurement of physiological activities that allows the characterization of water, soil and air microflora. One semester, 2 hours of lecture per week, and 2 hours of laboratory per week.

BIOL 228 Introduction to Ecology**3 Credits**

An introduction to the general principles of ecology. Special focus will be on evolution and systems, and their applications to conservation of natural resources and human ecology. Special attention is also given to islands, bringing out examples in Puerto Rico. Emphasis will be given to the interrelation of different resources to species and communities. One semester, 3 hours of lecture per week.

BIOL 231 Cross Sectional Anatomy I**3 Credits**

This course is a general survey of Human Cross-Sectional Anatomy with emphasis on organs of the body amenable to Diagnostic Ultrasound. The course includes transverse, longitudinal and coronal planes of the anatomy of: interior abdominal wall & peritoneum, pelvic organs and cavities, abdominal planes, inguinal region and scrotum, soft tissue and vasculature of neck, general abdominal vasculature, gastrointestinal tract, liver, gallbladder, pancreas, spleen, kidney and retroperitoneal space. One semester, four hours of integrated lecture and laboratory per week.

BIOL 232 Cross Sectional Anatomy II**3 Credits**

This course is a general survey of Human Cross-Sectional Anatomy with emphasis on organs of the body amenable to Diagnostic Ultrasound. The course emphasizes pelvic cavity, pelvic vasculature & viscera, perineum and external genitalia and fetal anatomy and development. One semester, four hours of integrated lecture and laboratory per week.

BIOL 240 Modern Genetics**3 Credits**

Study of the physiological and chemical concepts of heredity. Modern evolutionary principles will be analyzed through the study of Mendelian, molecular and population genetics. The student will (1) learn the structure and organization of the gene, (2) study the genetic behavior in populations and (3) become familiar with the concepts of genetic linkage and control of metabolism and growth. The course is developed through lectures, guided discussions, case studies and oral presentations, among others. During the laboratory the student will learn the basic methodologies that can be used to study, at the gene level, the heredity in organisms and populations. One semester, 2 hours of lecture and 2 hours of laboratory per week.

BIOL 255 Environmental Science**3 Credits**

This course discusses and applies the basic concepts and principles of environmental sciences and sustainable development of natural resources. Anthropogenic actions and their impact in the water, air, ground and energy resources will be analyzed. The course promotes the skills for the development of critical thinking through case discussions and the presentation of models and strategies directed to the prevention and solution of environmental problems, based on ethics and environmental justice promoted under sustainable development. Emphasis will be given to the environmental situation in Puerto Rico and by means of the "*laboratory without walls*" field trips to places of environmental interest, related to subjects discussed in class. One semester, 3 hours of lecture per week.

BIOL 260 Bacteriology**3 Credits**

In this course, the students will gain the necessary knowledge to successfully classify and differentiate between pathogenic microorganisms responsible for the highest morbidity and mortality rates in humans. Moreover, the students will learn which are the main virulence and pathogenic factors in microorganisms and study the infectious processes of major diseases. The laboratory experiences will allow the student to obtain the basic tool for disease diagnosis. The course will be offered during a regular semester with a two hours lecture and two hours laboratory every week.

BIOL 301 The Human Being as a Biological Entity

3 Credits

Analysis of the human organism as an integrated system of structures and functions. Application of scientific methodologies in the study of pathological conditions and their treatments. The course emphasizes locally prevalent pathological conditions affecting infants, children, teens, adults and the elderly. Critical and ethical analyses of practices that promote organismal homeostasis and improve quality of life. The course emphasizes the development of assessment and analysis skills. Teaching strategies include case studies, responsible multimedia use, presentations and research activities. One semester, 3 hours of lecture per week.

BIOL 303 Human Biology I

4 Credits

Human Biology I provides support the student's construction of accurate scientific knowledge regarding structural and functional composition of the human body while simultaneously developing scientific cognitive and scientific skills. Students are guided to utilize anatomical and physiological terminology to identify and describe macroscopic and microscopic structures of the integumentary, skeletal, muscular, nervous and endocrine system, and their relationships. The course facilitates the understanding of the most relevant concepts of those systems functioning, and gives the opportunity to analyze causes and symptoms of some pathologies associated with them. Emphasis is given to the relationship among basic concepts at the chemical, cellular and tissular level, to graphs, concept maps and table utilization and interpretation, and to the application of knowledge to solve problems and to make informed individual, social and ethical choices. One semester, 3 hours of lecture and 3 hours of laboratory per week.

BIOL 304 Human Biology II

4 Credits

Human Biology II supports student's construction of accurate scientific knowledge regarding structural and functional composition of the human body while simultaneously develops scientific cognitive and scientific skills, creativity and positive attitudes toward science and social team working skills. Students are guided to describe macroscopic and microscopic structures of the cardiovascular, lymphatic, immunologic, respiratory digestive, urinary, and reproductive system, and the relations among these and other body systems functioning and allows students analysis of causes and symptoms of some pathologies associated with them. Emphasis is given to the relationship among basic concepts at the chemical, cellular and tissular level, to graphs, concept maps and table utilization and interpretation, and to the application of knowledge to solve problems and to make informed individual, social and ethic choices. One semester, 3 hours of lecture and 3 hours of laboratory per week.

BIOL 308 General Mycology

3 Credits

A study of the morphology, physiology, distribution and taxonomy of the five (5) principal divisions of the mycota kingdom: zygomycetes, myxomycetes, basidiomycetes, ascomycets and deuderomycetes. Use and implications of the commercial application of fungi is explored. Laboratory experiences include the different methods of isolation, management, characterization or classification and control of fungi. One semester, 2 hours per week, 2 hours of laboratory per week.

BIOL 324 Microbial Safety and Quality Control**1 Credit**

This course studies the determinant factors and appropriate practices to ensure quality control in microbiological laboratories in general, including clinical, pharmaceutical and food industry microbiological laboratories. The course describes techniques and methods for the prevention and management of microbiological contamination. It also studies the properties related to microbiological quality of products and all relevant processes involved in daily operations and production. It includes safety aspects related to personnel, internal laboratory environment, as well as external environments. It explores recommendations and regulations established by relevant agencies including: Food and Drug Administration (FDA), Environmental Protection Agency (EPA), International Organization for Standardization (ISO) and Occupational Safety and Health Administration (OSHA), and guidelines such as Good Laboratory Practices (GLP), Good Manufacturing Practices (GMP), and Biosafety in Microbiological and Biomedical Laboratories (BMBL, 5th Ed.). One semester, 1 hour of lecture per week.

BIOL 325 General Botany**4 Credits**

This course is an introduction to the fundamental structure and function of plants, including the plant cell, photosynthesis, respiration, genetics, and regulation of growth by hormones as well as external factors. An overview will be presented on major plant groups, including algae, fungi, bryophytes, ferns, gymnosperms and angiosperms. The course will focus on the angiosperms; their structure, development and the relation between their reproduction and movement of water and minerals. One semester, 3 hours of lecture per week and 3 hours of laboratory per week.

BIOL 330 Immunology**3 Credits**

This course provides the students a general background in terms of the components and basic principles of the immune system and an immunology vocabulary and language. Also, this course integrates basic knowledge of defense against infection, innate and adaptive response, immune-related pathology, immunodeficiency and immunological barriers against drafts. In addition, familiarizes the student with the benefits of vaccination and other immunotherapies to modulate the immune response. Several activities are carried out in the classroom, such as group discussions, cases discussion and interactive computer search, which takes place during one semester, on a period of three (3) hours per week.

BIOL 331 Developmental Biology**4 Credits**

Study of the developmental patterns from the molecular level to the multicellular level. Special emphasis will be given to animal development. One semester, 3 hours of lecture and 3 hours of laboratory per week.

BIOL 335 Advanced Cardiovascular Anatomy and Physiology**2 Credits**

The course is an in-depth study of cardiovascular anatomy and physiology, with emphasis on venous and arterial hemodynamics. This course also includes discussion of the pathophysiological basis of cardiovascular disease. One semester, 2 hours of lecture and 1 hour of laboratory per week.

BIOL 336 Microbial Physiology and Genetics**4 Credits**

The course will offer the students the general concepts related to cell structure and function, metabolism and gene regulation in bacteria. These concepts include transport systems, catabolism and anabolism, cell division, photosynthesis, genome structure, extra-chromosomal DNA elements, DNA mutation, and gene expression control. The laboratory experiences will focus on (1) the study of substrate utilization during catabolism in bacteria, (2) natural and artificial competency to acquired foreign DNA and (3) strategies for cloning so that the students learn how to manipulate DNA and study gene regulation and expression in vitro. The course will be offered during a regular semester with three hours of lecture and three hours of laboratory every week.

BIOL 345 Evolution**3 Credits**

The study of the mechanisms and pathways of evolution focusing on the ways in which genetic changes in populations lead to adaptation, speciation, and hereditary variation. The course includes discussions on the origin of life and humankind. One semester, 3 hours of lecture per week.

BIOL 383 Food Microbiology**3 Credits**

In this course the students will learn which microorganisms comprise the indigenous flora or are classified as contaminating agents in foods and the types of infections and intoxications that they may cause. Emphasis will also be given to microorganisms that are commonly used for preparation and preservations of food products that are for human consumption. The course will include revision of laws and regulations from agencies related to the food industry like the Food and Drug Administration (FDA) and the Food Safety and Inspection Service (FSIS). The laboratory experiences will include the most relevant microbiological techniques use during food quality control. The student will also gain experience in sampling methodology. Moreover, the students will use the biochemical tests learn in General Microbiology to characterize the indigenous microflora in foods. One semester, 3 hours of lecture per week.

BIOL 395 Laboratory Techniques in Biotechnology**3 Credits**

Introduction to biotechnology techniques and their practical applications in microbiology. Analysis of the principles of molecular biotechnology in prokaryotes and eukaryotes and applications for organism identification, bio-pharmaceutical products, biotransformation and bioremediation. Study of practical applications in industrial, agricultural, environmental, legal and clinical biotechnology through case study and laboratory exercises. Specific examples illustrate different techniques used in applied microbiology. These examples include, but are not limited to: restriction endonuclease analysis of DNA, DNA sequencing, cloning and expression, nucleic acid hybridization, gel electrophoresis and protein product isolation and purification. Emphasis on public perception and ethical issues in biotechnology as well as current perspectives. Combined conferences and “in-classroom” laboratory exercises and specific technique demos. One semester, 2 hours of lecture per week and 2 hours of laboratory per week.

BIOL 398 Cellular and Molecular Biology**4 Credits**

Studies the function and molecular organization of eukaryote and prokaryote cells. The course covers and describes the fundamental concepts of the structure and interaction of the biological molecules.

An in-depth analysis is undertaken in order to understand the processes of storage, transcription and regulation of gene expression. The lab experience includes techniques of protein analysis and purification and the application of nucleic acids in the process of recombinant DNA. One semester, 3 hours per week, 3 hours of laboratory per week.

BIOL 400 Internship/Seminar in Applied Microbiology II

2 Credit

Continue supervised application of knowledge acquired during course work in the microbiology program as it applies to the different work scenarios. Emphasis is placed in modeling the appropriate performance of a professional microbiologist. Includes conferences, seminars and workshops pertaining to initiative, creativity, decision-making, conflict management, problem solving and topics relative to ethics, organizational behavior, and human relations. One semester, one hundred and sixty (160) hours per semester.

BIOL 410 Public Health and Risk Assessment of Foodborne Disease

3 Credits

The course is designed so that students can acknowledge the relationship between foodborne diseases and risk factors in the population. Emphasis will be given to the identification of foodborne infectious diseases of major concerns in the U.S. and Puerto Rico. Other diseases like cancer are directly related to toxins and chemicals present in foods or water used to prepare foods. Therefore, the students will learn how to establish surveillance and warning mechanisms with the purpose of preventing short and long range incidence of food borne diseases. The course will be offered during one semester with 3 lecture contact hours every week.

BIOL 420 Microbial Hazards in Food Safety and Quality Control

3 Credits

In this course, the students will identify the factors associated with microbiological contamination and learn the quality control techniques commonly used in food-related industries. Current methodologies including handling of microbiological hazards and standard strains will be discussed. Moreover, the students will learn the properties associated with quality control measures and the daily process and production in the food industry. Students will become familiarize with the most common laws and regulations related to the food industry from agencies like the Occupational Safety and Health Administration (OSHA), Food and Drug Administration (FDA), International Organization for Standardization (ISO) and the Environmental Protection Agency (EPA). The course will be offered during one semester with 3 lecture contact hours every week.

BIOL 423 Parasitology

3 Credits

Study of the general principles surrounding the biology, evolution and ecology of the relationships between parasites and their hosts. The course focuses on those parasites that cause diseases to humans on a global scale, emphasizing their life cycles, pathology, morphology, diagnoses, treatment, and control mechanisms. The course covers protozoa, helminthes and arthropods. Particular attention will be paid to those groups of parasites of medical, veterinary and socioeconomical interests. The laboratory portion will provide the students with the opportunity to identify several stages on the life cycle of parasites of medical and/or veterinary importance, as well as the form that parasite infections act against animal hosts.

BIOL 425**Virology****3 Credits**

This course includes the general study of viruses that infect animals, plants and humans. It also covers topics related to phages, viroids and prions. Students will learn specific areas of virology including the structure, life cycle and replication, genetic recombination, viral evolution, virus-host interactions, pathogenesis, clinical manifestations, immunity, epidemiology and control. Implementation of the virus in medicine and biotechnology are also presented. The main viruses' families are discussed individually. Several activities are undertaken in the classroom, such as group discussion, case presentations and interactive computer search. This course takes place during one semester, three contact hours per week.

BIOL 430**Zoology****4 Credits**

Study of animal development and diversity through the analysis and discussion of the main evolutionary tendencies seen on this group of organisms. Examples of relationships between taxa are presented considering the concepts structure-function, and the solution provided by each taxon to the relationship between the animal and its environment. The biological mechanisms responsible animal development, life cycles and diversity will be discussed and the importance of its conservation will be stressed. This course relates the study of zoology to ethical problems of environmental conservation and emphasizes the importance of citizens knowing about the native fauna when making responsible decisions in their daily chores. The course will be developed through conferences, case studies, and student contribution to the knowledge of Puerto Rican and Caribbean fauna through seminars and workshops. The course includes laboratory experiences, field trips, and the use of technological resources (internet and interactive CD's). One semester, 3 hours of lecture and 3 hours laboratory weekly.

BIOL 440**Environmental, Agricultural and Industrial Biotechnology****3 Credits**

Study of applications in molecular biology, synthesis, sequencing and amplification of DNA and RNA, restriction endonucleases and protein synthesis, bioremediation and industrial biotechnology (excluding pharmaceutical industries). The course will examine new technologies that have revolutionized the manufacture, synthesis, and biological and engineering processes of biotechnology products using microorganisms, plant and animal cells. Use of biotechnology applications in agriculture including genetic engineering in plants, bacteria that promote plant growth, microbial insecticides, production of agricultural feedstock; and environmental applications including contaminant treatment and the use of biosensors for detecting environmental contaminants will also be examined. Legislations, rules and regulations (including patent requirements) relevant to genetically modified organisms will be discussed. Ethical aspects associated to these processes will be reflected upon. The course is developed through lectures, guided discussions, case studies and oral presentations, among others. One semester, 3 hours of lecture per week.

BIOL 450**Pharmaceutical and Medical Biotechnology****3 Credits**

Study of the production of drug delivery devices and shipping and handling of pharmaceutical products using microorganisms, virus, and plant and animal cells, for treatment of humans and diagnostic tests. The course will discuss the use of genetic engineering to produce transgenic and "knockout" mice, molecular diagnosis, production of monoclonal antibodies, vaccine vectors, antibiotics and human hormones. Novel discoveries and delivery devices of anti-viral drugs, human

molecular genetics, genetic therapy, small molecule drugs, cell and tissue therapy, stem cell therapy, genetic bioengineering of organs and tissue, and virotherapy, among others. Ethical aspects associated to these processes will be reflected upon. The course is developed through lectures, guided discussions, case studies and oral presentations, among others. One semester, 3 hours of lecture per week.

BIOL 460 Recombinant DNA Technology

3 Credits

Introduction to the principles underlying medical and industrial applications of recombinant DNA. The study of genetics is now facilitated by a collection of recombinant DNA techniques designed for direct manipulation and chemical analysis of the genetic material that controls the cell. Selected examples are used to highlight the techniques in production, diagnosis and research. These include but are not limited to the following: specific cleavage of DNA with restriction endonucleases, DNA cloning, nucleic acid hybridization, gel electrophoresis, gene expression and protein purification. Emphasis is placed on ethical issues and public perception of the technology as well as the scientific issues. Lectures are combined with in-classroom laboratory exercises and demos of specific techniques. One semester, 3 hours of lecture per week.

BIOL 470 Seminar in Biotechnology

1 Credit

Development of communication skills needed by professionals in the field of biotechnology through student oral presentations and facilitated discussion. Topics include current scientific advances in biotechnology and the social impact of biotechnology. Biotechnology is a rapidly expanding field in which new information, discoveries and applications are reported each and every day. As with many areas of science, the most current information can only be found in journals or presented at scientific conferences and meetings; by the time textbooks are written, edited and published, much of the cutting edge information may be outdated. This seminar course is designed to provide practice in the critical reading of research articles from scientific journals, and in the oral and visual presentation of scientific information to your colleagues. Because the use of genetically-engineered organisms in modern biotechnology has given rise to social, ethical and legal considerations, we will examine these issues as well. One semester, 1 hour of seminar per week.

BIOL 480 Principles of Bio Pharmacology and Bio Toxicology

3 Credits

This course is designed to introduce the student to the principles of pharmacology and toxicology applied to biotechnology. The first component of the course will present the principles of the entry, distribution, metabolism and removal of drugs from the body. The second component will present the principles of drug interaction with the body systems and the mechanism of action of principal representatives of the drug classes. The third component will present the mechanisms of toxicity and toxicity testing. This course is designed to assist in the preparation of graduates for employment in the pharmaceutical industry or to pursue post-graduate study and research in the discipline. The syllabus will be developed through lectures, computerized tutorials, case studies and written reports. One semester, 3 hours of lecture per week.

BIOL 490 Biotechnology Internship

1 Credit

The internship will consist of a period of observation, experimentation and job training in a biotechnology laboratory within industry or academia. The student will work under the guidance of a

mentor to gain expertise in the manipulation of living organisms and the applications of basic technologies such as fermentation, molecular genetics and product manufacture. The internship provides an opportunity to improve intellectual and technical skills in research, safety practices, analysis and documentation. The student will master the theory, concepts and skills involving tools, materials, equipment and procedures. They will also master regulations such as Food and Drug Administration (FDA), Environmental Protection Agency (EPA), Occupational Safety & Health Act (OSHA); and Good Manufacturing Procedures (GMP) associated with the particular occupation of the industry or research laboratory. One semester, one-hundred and sixty (160) hours per semester.

Chemistry

CHEM 121 Basic Concepts in Chemistry

3 Credits

A study and analysis of the basis concepts of chemistry. Emphasis is placed on the atomic nature of matter, its properties and states. One semester, 3 hours per week.

CHEM 122 Chemistry for Health Sciences

4 Credits

Study of the composition and properties of the states of matter, the diverse types of chemical reactions, and energy transformations related to these reactions for inorganic and organic compounds, and biomolecules. The course emphasizes basic concepts of general, organic and biochemistry applicable to the different scenarios of patient healthcare through case studies, search of information through the internet and oral presentations using multimedia, among others. One semester, 3 hours of lecture and 3 hours of laboratory per week.

CHEM 203 General Chemistry I

4 Credits

First part of the introductory course of fundamental concepts in chemistry. Study of matter, its composition, properties, physical changes, and energy transformations related to these physical changes. Analysis of relevant environmental issues related to chemistry concepts. Promotion of decision-making on controversial issues involving chemistry and ethics. Investigative activities that promote the development of higher thinking process and hands-on experience on doing science. One semester, 3 hours of lecture, and 3 hours of laboratory per week.

CHEM 204 General Chemistry II

4 Credits

Second part of the introductory course of fundamental concepts in chemistry. Study of matter, its composition, properties, chemical reactions, and energy transformations related to these reactions. Analysis of relevant environmental issues related to the chemistry concepts studied. Promotion of decision-making on controversial issues involving chemistry and ethics. Investigative activities that promote the development of higher thinking processes and hand-on doing science. One semester, 3 hours of lecture, and 3 hours of laboratory per week.

CHEM 323 Analytical Chemistry

4 Credits

Introduction to the fundamental theory and practice of analytical chemistry. The course focuses on the study of chemical equilibrium of acid-base systems, complex formation and electrochemistry through the use of case studies and problem-solving strategies. In addition, basic statistics applied to

analytical data and sampling techniques are presented. The course is developed through lectures, interactive demos, problem solving and oral presentations, among others. Gravimetric, volumetric and spectrophotometric methods of analysis are studied and applied in the laboratory. One semester, 3 hours of lecture and 4 hours of laboratory per week.

CHEM 351 Organic Chemistry I

4 Credits

Applies quantum mechanics concepts to explain the electronic structure of the carbon atom. Includes the molecular orbit theory, which explains the formation of the covalent bonds in organic molecules. Describes the structural isomerism and the stereochemistry, which provide for the chemical properties of the organic molecules. Nomenclature, structure and reactions of hydrocarbons, alkyl halides, alcohol, ethers and other aromatic compounds are described in this course. Determination of the organic structures using spectroscopy is performed. Laboratory practices include techniques required to analyze the chemical properties of organic molecules, reactions, and synthesis. One semester, 3 hours of lecture, and 3 hours of laboratory per week.

CHEM 352 Organic Chemistry II

4 Credits

Study of the chemical and physical properties of organic compounds as continued from the first part of the course. Groups of compounds such as aromatics, aldehydes, carboxylic acids and derivatives, amines and carbohydrates will be emphasized. Structure, reactions properties and synthesis of the various compounds will be analyzed. Applications and important uses of the compounds will be described using literature. The course is developed through lectures, interactive demos, problem solving and oral presentations, among others. Properties, reactions and synthesis of the compounds will be established through a series of laboratories. One semester, 3 hours of lecture and 3 hours in the laboratory per week.

CHEM 385 Biochemistry

4 Credits

A study of the biomolecules and organelles that conform the cell to explain their biological function. Describes biomolecules, such as: proteins, carbohydrates, lipids, nucleic acids and vitamins. Includes the study of the cell structure and the thermodynamic principles that describe the intracellular metabolic processes; biosynthesis and metabolic reactions of biomolecules with emphasis on nucleic acids and processes, such as, replication, transcription and protein biosynthesis. Laboratory practices include techniques, which help to analyze physical and chemical properties of biomolecules. One semester, 3 hours of lecture, and 3 hours of laboratory per week.

CHEM 400 Food Safety Toxicology

3 Credits

This course provides a general overview of how food can become contaminated with chemicals at any stage of production. Fundamental concepts covered are relationship between doses and response, absorption of food contaminants, distribution and storage of toxic substances, biotransformation and elimination of toxic substances, toxicity of organs, mutagenesis, carcinogenesis, food allergens, and risk management. The course will cover and analyze those chemicals used in food production such as pesticides and veterinary drugs, natural chemicals such as heavy metals, natural toxins y pesticides. Also how they can be detected through standard procedures and regulations that apply to them. One semester, 3 hours of lecture per week

Food, Agriculture and Environment

FAES 425 Good Manufacturing Practices - GMP

3 Credits

This course includes the study of basic aspects of food processing, packaging, storage and distribution and the implementation of the measures of good manufacturing practices (GMP) in order to prevent them from becoming source of spread of diseases. The course emphasizes the requirements of biotic and abiotic environments surrounding the food production, from receiving raw materials to final product distribution. Teaching strategies include case studies, cooperative learning, reflective discussions and Socratic dialogs, incorporation of interactive resources and information "software" and Internet, conferences, data and articles analysis among others. One semester, 3 hours of lecture per week.

FAES 435 Pre- and Post- Harvest Food Safety

3 Credits

This course includes the study of all the important systems in the pre and postharvest stages for the production of animal and plant – based foods, and the relation of these stages with food safety. Pre harvest-related topics include government regulations of food products, the use of antimicrobials in the food animal production, human pathogens, its epidemiology and the control of these pathogens. In addition, studies the natural and chemical hazards in foods derived from plants and the application of biotechnology in food production. The relation between the handling of food products with their safety during postharvest stages is discussed. Several teaching strategies are used, including case studies, cooperative learning, reflective discussions and Socratic dialogs, incorporation of interactive resources and information "software" and Internet, conferences, data and articles analysis among others. One semester, 3 hours of lecture per week.

FAES 440 Food Safety and Protection (HACCP)

3 Credits

The course consists of the study of basic aspects of food preparation and handling in order to prevent them from becoming a public health hazard. It includes elements of microbiology and microbial ecology, chemical and physical contaminants, personal hygiene, cleaning and sanitizing, pest control, laws and regulations, and the preventive system Hazard Analysis and Critical Control Point (HACCP). The course is develop by the analysis, evaluation and discussion of cases, cooperative learning, conferences, lectures and the preparation of food contamination preventive plans. One semester, 3 hours of lecture per week.

FAES 445 Special Topics in Food Safety Seminar

1 Credit

This course provides a forum for presentations and discussion of scientific articles related to special topics in food safety. The student gets experience in searching, reading and discussion of recently published articles in peer-reviewed scientific journals. This course enables the student to develop scientific communication skills through the preparation and presentation of a lecture using technology resources. It provides students with necessary tools to carry out its successful literary research for analysis and interpretation of results and for the oral presentation. In addition, the student attends and evaluates oral presentations of their peers in a responsible and objective way. Learning / teaching strategies include incorporation of interactive resources and information ("software" and the Internet), workshops, objective and thoughtful discussion of scientific articles, analysis and

interpretation of scientific data, among others. The course takes place during one semester and consists of one (1) weekly contact hour.

Engineering Technology

AETP 202 Aircraft Digital Electronics

3 Credits

Study and analysis of different kinds of flying instruments and their relationship with some numerical systems. Boolean algebra and Karnaugh Maps will be used to analyze, design and construct logic circuits, logic gates, combinational circuits, flip-flops, sequential circuits, counters, registers, multiplexers, memory interfaces, microprocessors and computer software designed for use in aircrafts. The course will be conducted through demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. One semester, 1 hour of lecture per week and 2 hour of lab per week.

AETP 203 Aircraft Communication Systems

3 Credits

This course will provide to the students the ability to develop, construct and analyze different functions of electronic communication systems. The student will distinguish the concepts of AM, FM and Single Side Band in oscillator circuits, tuning circuits, detectors, radio frequency amplifiers, transmission lines and antennas. The students will analyze and probe the characteristics of the concepts of very high frequency (VHF) and transreceivers of analog, digital and satellite communication. The course will be conducted through demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. One semester, 1 hour of lecture per week and 2 hour of lab per week.

AETP 204 Aircraft Navigation Systems

3 Credits

This course introduce the study and analysis of different kinds of navigation instruments like the very high frequency navigation receiver, the very high frequency omnidirectional range (VOR), the glideslope and marker beacon receivers. The students will analyze the functions of the long range navigation system, the inertial navigation system and the global positioning system (GPS). The course will be conducted through demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. One semester, 1 hour of lecture per week and 2 hour of lab per week.

AETP 205 Aircraft Pulse Systems

3 Credits

This course emphasizes the study and analysis of transponders used in air traffic control and distance measure equipment. The students will analyze and design circuits that include encoding, decoding, pulse transmission, reception and signal processing. The course will be conducted through demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. One semester, 1 hour of lecture per week and 2 hour of lab per week.

AETP 206 Radar Systems

3 Credits

This course emphasizes the study and analysis of pulse and microwave circuits fundamentals typically applied and used in Radar Systems. The students will analyze the radar systems functions in areas of

weather and search. Elements like transmitters, modulators, and receivers, signal processing and other circuits will be focus of study and verification by the students. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis and laboratory practice. The student will do presentations, written reports, solve assign problems and will complete written and practical tests. One semester, 3 hours of lecture.

AETP 207 FCC License Review

1 Credits

This course provides to the students the review of learned concepts and its correspondent application with the objective to be certified by the Federal Communication Commission (FCC) with the General Radio-Telephone Operator and Radar Endorsement Licenses (Elements 1, 3 and 8). It will use the pool of questions available in the FCC web page and the equivalent test using the same scales of passing used by the Federal Agency. To be a graduation candidate, the students must pass this course. One semester, 1 hour of lecture.

ENGI 100 Introduction to Engineering

3 Credits

Introductory required course for all first year engineering students. Introduction to the various specialties within the engineering profession will be emphasized. The students will be introduced to basic concepts of engineering design, project management and technical communication, laws and ethics of the engineering profession. This course will be based on demonstrations, lecture, case analysis, and responsible use of technology. The student will do presentations, written reports, solve assigned problems, and complete written and practical tests. One semester, 3 hours of lecture per week.

ENGI 160 Introduction to Engineering Graphics

3 Credits

Course that includes principles of engineering drawing utilizing manual drafting methods, sketching and computer graphics with an introduction to descriptive geometry. The fundamentals of orthographic projection, auxiliary projections, sectioning, dimensioning and tolerances are presented. Isometric and oblique pictorials methods are covered as well as principles of interpretation of engineering drawings, symbols, types of views, and textural symbols. This course will be based on demonstrations, lecture, case analysis, and responsible use of technology. The student will do presentations, written reports, solve assigned problems, and complete written and practical tests. One semester, 1 hour of lecture and 2 hours of lab.

EETP 202 Circuit Analysis I (DC)

3 Credits

This course covers the analysis of passive DC circuits using Ohm's and Kirchhoff's Laws, network theorems, and branch/mesh/nodal analysis. It will include transient analysis of R-C and R-L circuits along with concepts of energy, power, and efficiency. This course will direct the student through each new concept by utilizing a balanced approach of theory and computer simulation lab projects. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. The student will do presentations, written reports, solve assigned problems, and complete written and practical tests. One semester, 1 hour of lecture and 2 hours of lab.

EETP 203 Circuit Analysis II (AC)**4 Credits**

This course covers the analysis of alternating current circuits and electromagnetism using Ohm's Law, network theorems, and branch/mesh/nodal analysis. It will include transient analysis of R-C, R-L and RLC circuits along with concepts of energy, power, efficiency and filters. This course will direct the student through each new concept by utilizing a balanced approach of theory and computer simulation lab projects. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. The student will do presentations, written reports, solve assigned problems, and complete written and practical tests. One semester, 2 hour of lecture and 2 hour of lab.

EETP 210 Microprocessors**3 Credits**

This course includes an introduction to microprocessors and microprocessor-based systems. The student will learn machine and assembly language programming as well as understand the functions of interrupts and DOS entry points. The physical structure, architecture, and operation of the PC and its various peripheral attachments will be covered as well as PC troubleshooting techniques, board upgrades, and use of diagnostic software. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. The student will do presentations, written reports, solve assigned problems, and complete written and practical tests. One semester, 1 hour of lecture and 2 hours of lab.

EETP 211 Electronic Communication Systems**4 Credits**

This course covers the fundamentals of electronic communication systems. It focus a discussion of AM, FM, single side band and digital communications, oscillators, tuning circuits, detectors, radio frequency amplifiers, transmission lines and antennas. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. The student will do presentations, written reports, solve assign problems, will complete written and practical tests. One semester, 2 hours of lecture and 2 hours of lab.

EETP 212 Electronic Technician License Review**1 Credits**

This course covers the fundamental topics of the test offered by the Board of Examiners of Electronics Technicians. Included is a discussion of the most relevant concepts in mathematics, physics, regulatory laws, circuits and safety. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis and computer generated tests similar to the offered by the Board of Examiners of Electronics Technicians. The student will do presentations, written reports, solve assigned problems and complete written tests. One semester, 1 hour of lecture.

EETP 215 Digital Circuits**4 Credits**

Analysis and design combinational logic and integrated circuits using Boolean Algebra, Karnaugh maps and logic diagrams. The student will study number systems, binary codes and code conversions along with flip-flops, multivibrators, decoders, encoders, multiplexers, ADCs, DACs, RAM, ROM and its applications. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis and laboratory practice and responsible use of technology. One semester, 2 hour of lecture per week and 2 hour of lab per week.

EETP 216 Electronic Circuits**5 Credits**

Analysis and design of solid-state semiconductor electronic devices; including diodes, bipolar and MOS transistors, zener diode regulators, clippers, clampers, amplifiers, comparators, power supplies and oscillators. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis and laboratory practice and responsible use of technology. One semester, 2.5 hour of lecture per week and 2.5 hour of lab per week.

NETP 202 Networking Basics-CCNA1**3 Credits**

Networking Basics-CCNA1 introduces Cisco Networking Academy Program students to the networking field. Emphasis in develop basic knowledge and skills on networks terminology and protocols, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, routers programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Networking Basics-CCNA1 is the first of the four courses leading to the CISCO Certified Network Associate (CCNA) certification. One semester, 1 hour of lecture and 2 hours of lab.

NETP 203 Routers and Routing Basics-CCNA2**4 Credits**

The study of routers equipment configuration and basics routing techniques. Skill development on how to configure a router, manage CISCO IOS Software, configure routing protocols, and create access lists controlling access to the router. Emphasis is given to initial router configuration, CISCO IOS Software management, routing protocol configuration, TCP/IP, and access control list (ACLs). Routers and Routing Basics-CCNA2 is the second of four CCNA courses leading to the CISCO Certified Network Associate (CCNA) certification. One semester, 2 hour of lecture and 2 hours of lab.

NETP 204 Switching Basics and Intermediate Routing-CCNA3**4 Credits**

The analysis and study of switching basics and intermediate routing concepts. The students will develop skills on IP addressing techniques, Variable Length Subnet Masking (VLSM), command-line interface configuration of switches, Ethernet switching, and intermediate routing configuration. Topics relative to intermediate routing protocols (RIP v2, single-area, OSPF, EIGRP), Virtual LANs (VLANs), Spanning Tree Protocol (STP), and VLAN Trunking Protocol (VTP), are also discussed. Switching Basics and Intermediate Routing-CCNA3 is the third of four courses leading to the CISCO Certified Network Associate (CCNA) certification. One semester, 2 hour of lecture and 2 hour of lab.

NETP 205 WAN Technologies-CCNA4**3 Credits**

Study and analysis of Wide Area Networks Technologies, configuration and troubleshooting. Students will acquire intensive skills development on advance IP addressing techniques and knowledge of Network Address Translation (NAT), Port Address Translation (PAT), and DHCP. Topics relative to WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking, are also discussed. WAN Technologies-CCNA4 is the last of four courses leading to the CISCO Certified Network Associate (CCNA) certification. One semester, 1 hour of lecture and 2 hour of lab.

NETP 208 Computer and Network Operating Systems**3 Credits**

This course covers an introduction to the study of basic concepts, functions and commands of the various operating systems used on computers and networks. The students will develop skills in installation, operation, security management, configuration, fault finding, documentation, and basic "hardware" applied to the operating systems used in computers and servers. Among the operating systems used are Windows, Linux and Mac OS among others. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. The student will make presentations, written reports, solve assigned problems and will complete written and practical tests. One semester, 1 hour of lecture and 2 hour of lab.

NETP 209 CCNA Security**3 Credits**

Cisco Certified Network Associate (CCNA) Security emphasizes in security technologies, installation, troubleshooting, and monitoring for possible vulnerabilities and attacks in the various network devices to maintain the integrity, confidentiality and availability of data. This course will provide students to demonstrate mastery of the technologies that Cisco uses in its security infrastructure. The topics covered in this course enable the student to be certified as CCNA Security. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of technology. The student will do presentations, written reports, solve assigned problems, will complete written and practical tests. One semester, 1 hour of lecture and 2 hour of lab.

ETAP 300 Engineering Technology Application Project**1 Credit**

The focus of the course is an application project-oriented course for the Electronic Engineering and Networking Technology Program. This is a team oriented project course. The students will select a real-world industrial or technical service project; forms teams as determined by the instructor, apply the knowledge and skills developed through the courses taken earlier in the program study for solving the project problem, and formally present their proposal to the class. Industrial plant visit will be an integral part of the class. One semester, 1 hour of lecture.

Environmental Science**ENTE 101 Environmental Science Technology****3 Credits**

Study of basic concepts and principles of the environmental sciences and the sustainable development. It will discuss the ecosystems functioning, and the water, air, soil and energy resources. Also offer the examination of critical issues of environmental degradation in global and local systems related to: air and water pollution, soil erosion, deforestation, over dependence on fossil fuels and improper management of toxic and other wastes. By means of the discussion of cases are presented model and strategies to prevent and solve environmental problems, taking as bases the environmental ethics. One semester, 3 hours of lecture per week.

ENTE 200 Policy and Environmental Law**3 Credits**

Discussion of the origin of the environmental policy and its principles of ethics and justice. It analyzed the major laws and rules related to contamination control and conservation of the natural resources

that applied to United States and Puerto Rico. Moreover they are studied the role of the principal order agencies and the communities in the implementation of this legal resources. The course is developed through lectures, case studies, search of information through the internet, and oral presentations, among others. One semester, 3 hours of lecture per week.

ENTE 250 Air and Atmospheric Pollution Technology

4 Credits

Study of the structure, properties and basic characteristic of the atmosphere, as well as the principal meteorological phenomena. It's discussed the sources of atmospheric pollution and its effects to the environment and the human health. It gives emphasis to the models and strategies applicable in Puerto Rico for the prevention and control of the atmospheric pollution. The course is developed through lectures, case studies and problem solving, among others. The course includes practical laboratory experiences and field studies. One semester, 3 hours of lecture and 3 hours of laboratory per week.

ENTE 310 Soil Conservation and Management Technology

3 Credits

Study of soils as natural ecosystems, their forming factors as well as their physical, chemical, biological and hydro characteristics. In addition, the impact of human activities such as agriculture, urbanism, and mining on the planning, management and conservation of this resource is discussed. Puerto Rico's soil problems will be analyzed and alternatives will be presented within the scope of sustainable development. Field visits will be conducted. One semester, 3 hours of lecture per week.

**ENTE 320 Solid Waste and Hazardous Waste Management and Disposal
Technology**

3 Credits

Study of the nature of hazardous solid wastes as well as sources of production, storage and collection of solid and hazards waste. Alternatives for waste reduction and disposal as well as public policy and waste management will also be discussed within the scope of sustainable development. The course is developed through lectures, case studies, field trips, and oral presentations, among others. One semester, 3 hours of lecture per week.

ENTE 330 Water Environment

3 Credits

Study of the structure and functioning of the aquatic ecosystems, particularly those of Puerto Rico; as well as their chemical, physical and biological characteristics. It analyzes the availability of water in our planet and their principal uses, doing emphasis in the handling strategies and conservation of the same in the frame of the sustainable development. This course complements with laboratory practice and field studies. One semester, 3 hours of lecture and 3 hours of laboratory per week.

ENTE 331 Water Pollution and Treatment

4 Credits

Analysis of the principal sources of contamination in the aquatic environment, it's effects to the ecosystem as to the human beings and the control methods of the same. It also studies the treatment of the wastewaters and the waters appointed to public use, doing emphasis in the particular situation of Puerto Rico. The course requires laboratory practice and field studies. One semester, 3 hours of lecture and 3 hours of laboratory per week.

ENTE 410 Environmental Health Technology**3 Credits**

Study of the principles and processes by which the environment affects human health. Presents topics from a public health perspective that include toxicological, biological, physical, and chemical hazards, risk analysis, acceptability and assessment, community health and occupational health. This course includes a field investigation of an environmental health problem in Puerto Rico and will conclude with student group presentation of selected investigation topic. One semester, 3 hours of lecture per week.

ENTE 420 Sustainable Development and Appropriate Technology**4 Credits**

Practical course, designed using the concept of hands-on experience. Sustainable development and appropriate technology principles are applied to energy production, solid wastes management, food production and soil restoration. Sustainable models applicable to Puerto Rico will be discussed. The course includes four (4) hours per week of practical experiences, both in a laboratory and field visits. Laboratory experiences will be conducted in a “laboratory without walls”, where the aforementioned principles and concepts will be integrated. One semester, 3 hours of lecture and 4 hours of laboratory per week.

ENTE 490 Environmental Technology Internship**1 Credit**

Provides a structured, formal work experience at an agency or company, public or private, where students carry out tasks related to the practice of environmental science. The student must complete a minimum of 160 hours under the direction, supervision and evaluation of an assigned mentor at the internship site, in coordination with the professor responsible for the course. Application must be approved in the semester preceding the one in which the practicum must be taken, and the site must be approved by the School and the Professor responsible for the coordination of this experience. One semester, one-hundred and sixty (160) hours per semester.

Physics**PHSC 101 Introduction to the Study of Physical Sciences I****3 Credits**

This course intends that students increase conceptual understanding of physical sciences topics in sequential and interdisciplinary approach through use of concrete laboratory experiences, estimations, analogies, integration among concepts, problem solving and multi-contextual evaluation. Connections between physics and chemistry and some applications in astronomy and biology are also included. This way this course intends to contribute to acquire scientific literacy in an era of rapid scientific and technological advances. One semester, 3 hours of lecture per week.

PHSC 102 Introduction to the Study of Physical Sciences II**3 Credits**

This course is a continuation of PHSC 101 and intends that students increase conceptual understanding of physical sciences topics in a sequential and interdisciplinary approach through use of concrete laboratory experiences, estimations, analogies, integration among concepts, problem solving and multi-contextual evaluation. Connections between physics and chemistry and some applications in astronomy and biology are also included. This way this course intends to contribute to acquire

scientific literacy in an era of rapid scientific and technological advances. One semester, 3 hours of lecture per week.

PHSC 110 General Physics Survey

3 Credits

The course introduces basic subjects of general physics, such as: the study of measurement systems, dynamics, energy saving and work, heat and temperature, fluids, light and sound waves, electricity and magnetism. The course focus is primarily directed to physics concepts, although it includes numerical problems and simple application exercises. One semester, 3 hours of lecture per week.

PHSC 203 General Physics I

4 Credits

Course developed from concrete sequential experiences, use of analogies and problem solving to contribute to increase the scientific literacy in the students. This course seeks conceptual understanding by integration among concepts and disciplines and multi-contextual evaluation. The key concepts of this course are the force and its relation with movement, "spatial" (work) and "time"(impulse) effects and how these concepts reveal the conservation of physical quantities like energy, among others. The concepts of field and potential and the analogy of the gravitational field with the electric field are also studied. One semester, six hours of integrated lecture and laboratory per week.

PHSC 204 General Physics II

4 Credits

This course studies the dynamics of distinct entities such as: fluids, heat, electric charges, and waves; the behavior of matter and its energetic character at atomic level are also studied. Emphasis is given on studying analog systems to provide students the opportunity to recognize similar patterns among the above mentioned dynamics; concrete experiences are used in a classroom-lab environment but emphasis is given on abstraction in order for the student to refine this skill. This course also intends to contribute to increase scientific literacy in the students and that they perceive Physics as a tool to interpret the world. One semester, six hours of integrated lecture and laboratory per week.

PHSC 205 Engineering Physics I

4 Credits

The course examines the basic laws of physics and their application. A calculus-based course emphasizing the principles and applications of mechanics. Topics include: motion in one, two and three dimensions, Newton's law, work and energy, rotation, static equilibrium of a rigid body, particles and conservation of momentum. One semester, 2.5 hours of lecture and 2.5 hours of laboratory per week.

PHSC 206 Engineering Physics II

4 Credits

This course covers the fundamental principles of electricity, electromagnetism and optics. A calculus-based course emphasizing the principles and applications of electrostatics, current electricity circuits, magnetism induction, generation of electricity, electromagnetic oscillations, alternating currents, and Maxwell's equations. Conceptual development and problem solving have equal emphasis. Laboratory work presents methods of experimental analysis. This course will be based on demonstrations, lecture and interpretation of schematics, case analysis, laboratory practice and responsible use of

technology. The student will do presentations, written reports, solve assign problems, will complete written and practical tests.

PHSC 208 Physical Science Compendium

3 Credits

Study of the laws of motion and their relationship with energy conservation, energy transfer mechanisms, composition and physical properties of matter, and technological applications of modern materials. Application of fundamental concepts of electricity and magnetism as a means to understanding electrical circuits. Integration of chemical and physical concepts in the study of phenomena related to the formation and death of solar systems. These concepts will be applied in a sequential and interdisciplinary manner through the use of case studies, interactive demonstrations, problem solving and research projects. Technology will be used responsibly in the course applications. One semester, 3 hours of lecture per week.

Mathematics

MATH 120 Introduction to Algebra

3 Credits

This course presents topics such as: the set of real numbers, percentage, algebraic expressions, linear equations, linear inequalities, polynomials and its basic operations. Emphasize in application and comprehension skills. Develop the course concepts with responsible use of technology, cooperative learning, problem solving and different assessment techniques. One semester, 3 hours of lecture per week.

MATH 130 Pre-Calculus I

3 Credits

Study of relations and functions, graphs, polynomial, rational and inverse functions, linear direct and inverse variation and the binomial theorem. Emphasis is made in applications in biology, chemistry, physics, and engineering, and the use of technology tools to develop mathematical concepts and problems solving. One semester, 3 hours of lecture per week.

MATH 131 Pre-Calculus II

3 Credits

Study of exponential, logarithmic and trigonometric functions, including analytic trigonometry. It also includes topics in analytic geometry such as conic sections and polar coordinates. Emphasis is made in applications in biology, chemistry, physics, and engineering, and the use of technology tools to develop mathematical concepts and problems solving. One semester, 3 hours of lecture per week.

MATH 221 Analytic Geometry and Calculus I

4 Credits

This course covers the following advanced mathematic principles: the limit of a function, theorem of limit, continuity, the derivative, differentiation of algebraic, trigonometric and logarithmic functions, applications to physics, fundamental theorem of differential calculus, Rolle theorem, mean value theorem, applications of the derivative to the drawing of curves, assumptions and primitive functions, the properties of Cauchy and Riemann additions, gravity, inertia and pressure centers, Lévesque integral and integration methods. One semester, five hours of lecture per week.

MATH 304 Introduction to Biostatistics**4 Credits**

Study of theory, sampling methods, summarization and graphic representation of data. Measures of central tendencies, location and spread will be determined. Application of probability, combinations and permutations, probability distributions and the central limit theorem. Study of hypothesis testing, confidence intervals, T or Z test, correlations, linear regressions, Chi-square test, and variance analysis through cooperative learning, research projects, concept mapping, and oral presentations. One semester, 4 hours of lecture per week.

Undergraduate Research**UNRE 201 Undergraduate Research Methodologies****3 Credits**

Application of the scientific method to the development of research project. It provides an introduction to the processes such as formulating hypothesis, specific mains, experimental design and statistical analysis. The students will have experience to reading, analyses and discuss articles from scientific journals. Students are required to write a research proposal on a subject of interest. One semester, 3 hours of lecture per week.

UNRE 202 Undergraduate Research II**1 Credit**

This course consists of practical research experiences. Each student develops their own research project based on their research proposal developed in UNRE 201. The student will go through all the steps necessary for carrying out a research project. One semester, 3 hours per week.

UNRE 203 Undergraduate Research III**1 Credit**

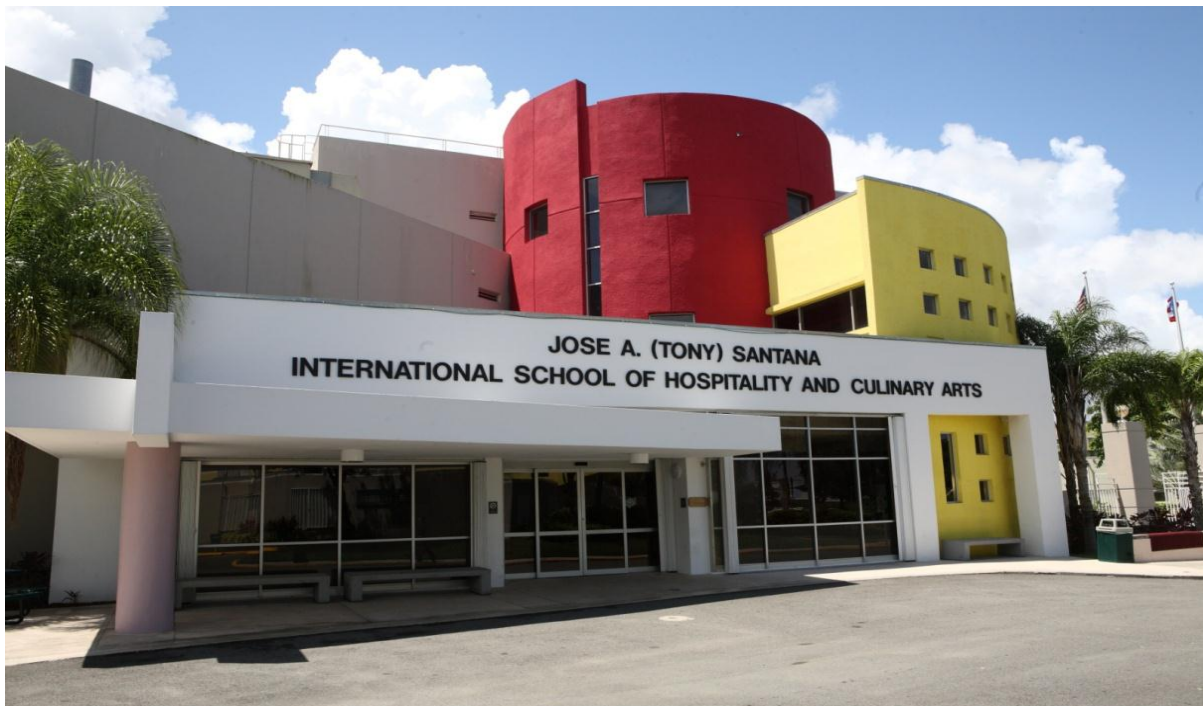
This course consists of practical research experiences. Each student develops their own research project based on their research proposal developed in UNRE 201. The student will go through all the steps necessary for carrying out a research project. This course provides the student a continuation of his research activities from UNRE 202. Students are required to make presentations to the community. One semester, 3 hours per week.

UNRE 204 Undergraduate Research IV**1 Credit**

This course consists of practical research experiences. Each student develops their own research project based on their research proposal developed in UNRE 201. The student will go through all the steps necessary for carrying out a research project. This course provides the student a continuation of his research activities from UNRE 203. Students are required to make presentations to the community. One semester, 3 hours per week.

UNIVERSIDAD DEL ESTE

JOSE A. (TONY) SANTANA INTERNATIONAL SCHOOL OF HOSPITALITY and CULINARY ARTS [ISHCA]



UNDERGRADUATE CATALOG 2013 – 2014

JOSÉ A. (TONY) SANTANA INTERNATIONAL SCHOOL OF HOSPITALITY and CULINARY ARTS [ISHCA]

The José A. (Tony) Santana International School of Hospitality and Culinary Arts [ISHCA] offers Certificates, Associate Degrees and Bachelor Degrees. The International School of Hospitality and Culinary Arts has state-of-the-art culinary and bartending laboratory facilities, seven (7) classrooms with data-show and Internet access, a computer laboratory with data-show and smart board, and experienced and dedicated faculty and staff that will provide the highest level of quality and service excellence. The school is committed to develop students individually and professionally. Universidad del Este recognizes the need to develop successful professionals through the integration of course theory, laboratories and industry internships in Puerto Rico, the United States and other countries. The José A. (Tony) Santana International School of Hospitality and Culinary Arts has been recognized as one of the Leading Hotel Schools of the World.

The José A. (Tony) Santana International School of Hospitality and Culinary Arts [ISHCA] is located in Carolina, Puerto Rico, Universidad del Este's main campus and is part of the Ana G. Mendez University System. ISHCA provides a full menu of hospitality programs ranging from certificates to bachelor degree level studies. Through international agreements and strategic partnerships with governmental tourism departments, professional tourism and hospitality associations, and quality colleges and universities, ISHCA and its faculty have developed a global focus for their hospitality & culinary arts students. All professional and concentration courses, of the Hospitality Programs are offered in English. The general component portion of the curriculum is offered in Spanish.

Both Programs (Hospitality and Culinary Arts) are fully accredited by Middle States Commission on Higher Education, as well as specialized accreditations; the American Culinary Federation Education Foundation (ACFEF) for the Culinary Arts Program and the Accreditation Commission for Programs in Hospitality Administration (ACPHA) for the Hospitality Programs; Hotel Management, Events & Conventions Planning.

MISSION:

Provide highly qualified professionals for the global hospitality industry through excellence in education, training, and research.

VISION:

To become the leading educational institution for the hospitality industry in the Caribbean.

FACULTY

Hospitality Faculty:

LaFontaine Madeira, Luz, Associate Professor
MS, Higher Education Administration, New York University

Pagán Parrilla, Omar J., Associate Professor
PhD, Human Sciences with Hospitality Administration, Oklahoma State University
MS, Hotel & Food Service Management, Florida International University

Puig González, Iván O., Assistant Professor and Dean
MBA, Human Resources Management, Interamerican University
BS, Hotel & Restaurant Management, Universidad de Puerto Rico

Santiago Font, Zoe, Assistant Professor
MTA, Event Management, George Washington University

Culinary Arts Faculty:

Escobar Contreras, Patricio, Instructor
MBA, Management & Strategic Leadership, Universidad del Este
BS, Culinary Management, Universidad del Este
AOS, Culinary Arts, Culinary Institute of America'

Gomez Betancourt, Raul N., Instructor
MS, Hotel & Food Service Management, Florida International University
BS, International Tourism & Hospitality Management, Universidad del Este
CERT, Culinary Arts Universidad del Este

López Rivera, Francisco, Instructor
MBA, Management & Strategic Leadership, Universidad del Este
BS, Culinary Management, Universidad del Este
AOS, Culinary Arts, Culinary Institute of America'

Mendez López, Nannette, Instructor
MBA, Marketing & International Commerce, Metropolitan University
BS, Hotel & Restaurant Management, Universidad de Puerto Rico
AS, Baking & Pastry, Johnson & Wales University

Ñeco, Rene, Instructor / Program Coordinator Cabo Rojo Campus
BSBA Marketing & Human Resources, University of Puerto Rico
AS Culinary Arts, Culinary Institute of America

Rivera Medina, Christian, Assistant Professor
MBA, Management & Strategic Leadership, Universidad del Este
BS, Culinary Nutrition, Johnson & Wales University

AS, Culinary Arts, Johnson & Wales University
Rivera Mendez, Alicia, Instructor
MS, Education and Supervision, University of Phoenix
BS, Nutrition, Universidad de Puerto Rico

Rodríguez Caban, Marcos A., Instructor
MS, Hotel & Food Service Management, Florida International University
BS, Culinary Management, Universidad del Este
AS, Culinary Arts, Johnson & Wales University

Soto Rodríguez, Daina, Instructor
BA, Humanities & Modern Languages, Universidad de Puerto Rico
AS, Culinary Arts, Johnson & Wales University

Vicente, José, Instructor
BS Culinary Management, Universidad del Este
-minor: Food & Beverage Operations, Universidad del Este

ADMINISTRATIVE STAFF:

Puig González, Iván O., Dean and Assistant Professor
MBA, Human Resources Management, Interamerican University
BS, Hotel & Restaurant Management, Universidad de Puerto Rico

Corrada, Ramón A., Associate Dean
MTA, Sports Management and Event Management, The George Washington University
BBA, Marketing, Universidad de Puerto Rico

González Pizarro, Ana M., Academic Programs Director
MEd, Universidad Metropolitana
BA, Pre-School, Universidad de Puerto Rico

Mendez López, Nannette, Culinary Arts Program Coordinator & Instructor
MBA, Marketing & International Commerce, Metropolitan University
BS, Hotel & Restaurant Management, Universidad de Puerto Rico
AS, Baking & Pastry, Johnson & Wales University

Tapia, Stanley, Hospitality Program Coordinator & Conference Professor
MBA, (MCL) Business Administration Management Universidad del Turabo
BBA, Management, Universidad del Este

Torres-Muñoz, Ricardo L., Director of Administration
Ed.D, Instructional Technology and Distance Education, Nova Southeastern University
MS, International Health Management, Economics and Policy, SDA Bocconi University
JD, Universidad de Puerto Rico Law School
BA, Psychology and Spanish, Coe College

Balado Rivera, Marie L., Practicum Coordinator
MBA, Human Resources, Universidad del Turabo
BS, Restaurant and Hotel Management, Universidad de Puerto Rico
AS, Hotel Management, Universidad de Puerto Rico

Montañez, Melissa , Practicum Coordinator
BS, Restaurant Management, Florida International University, FL
AOS, Culinary Arts, Johnson & Wales University

Galarza Vázquez, Zoraida, Student Affairs Coordinator
MBA, Administration, Universidad del Turabo
BA, Business Administration, Universidad Metropolitana

Ramos, Carolina, Student Affairs Coordinator
AOS, Culinary Arts, Johnson & Wales University

Diaz Laura Larissa, Activities Coordinator
BS, Marketing, Universidad Interamericana

Tapia, María N., Administrative Affairs Coordinator
MBA, Human Resources, Universidad del Turabo
BA, Office Administration, Universidad del Este
AS, Physical Education, Universidad de Puerto Rico

Bartemes Miranda, Michael E., Kitchen Manager
BA, Hotel & Restaurant Management, Universidad de Puerto Rico

González, Carlos, Warehouse Supervisor
MBA, Human Resources, Universidad del Turabo
BA, Management, Universidad del Turabo

Figueroa Pérez, Joel A., Warehouse
3rd year-in BBA, Administration, Universidad del Este
General Education, Esc. Adolfina Irizarry de Puig, Toa Alta

González, Ada E., Administrative Assistant
BA, Office Administration, Universidad del Este

Lopez, Tanya, Receptionist
Certificate Degree, Computers, Instituto de Banca & Comercio

Rivera Godoy, Luis, Warehouse
AOS, Culinary Arts, Universidad del Este
Certificate Degree, Memorial Home Administrator, Antilles School

Tanco, Joel, Activities
Certificate Degree, Computers, Instituto de Banca y Comercio

PROGRAM DESCRIPTIONS

The José A. (Tony) Santana International School of Hospitality & Culinary Arts [ISHCA] offers Bachelor Degrees in Hotel Management, Event and Conventions Planning, and Culinary Management. We also offer associate degrees in Hotel Operations and Culinary Arts and a certificate in Culinary Arts.

All professional and concentration courses in the hospitality program (Hotel and Events) are taught in English. Additional international opportunities are added to the curriculum, allowing students to take internships, student exchange programs and other activities around the globe.

Certificate in Culinary Arts

This three semester program was designed to provide students with the knowledge and skills to become a professional in the field of food production and preparation. It prepares students for entry-level service careers in the food service industry. Our kitchen laboratories are the means in which the students will obtain their hands on experience. Students use our culinary arts laboratories to practice, create, and innovate with hands-on experience. A Practicum experience of 300 hours is required in a restaurant or hotel setting.

Associate in Science in Culinary Arts

The Associate Degree program in Science in Culinary Arts combines a supervisory base with professional courses, Garde Manger, Baking and Pastry, Cooking Methods and International Cuisine. Emphasis is placed on hands-on practice and the development of specialized skills for work in the field. This program offers options that prepare the student for advancement into entry-level management positions. A Practicum experience of 500 hours is required in a restaurant, convention centers or hotel setting.

Associate in Science in Hotel Operations

The Associate Degree in Hotel Operations is a four semester major designed to prepare students for entry-level managerial positions in the hospitality industry. The curriculum places heavy reliance on experience acquired through a 500 hour Internship in a lodging property. Students who achieve outstanding records may, upon completing this program, apply for admission to the Bachelor degree major in our School.

Bachelor of Science in Culinary Management

This bachelor program is ideal for those students who want to manage its own business, restaurant or kitchen. This program will combine the professional and concentration courses of culinary arts and the managerial function required to operate and manage a kitchen or restaurant. Emphasis is given in cost control and increasing profits. A Practicum experience of 800 hours is required in a restaurant, convention centers or hotel setting.

Bachelor of Science in International Hospitality Management

The Bachelor program is designed to prepare students for direct entry into the hospitality management field. The curriculum reflects world trends in hospitality management through core and specialization courses. This program requires two Internship opportunities for a total of 500 hours of field experience to enhance the student's education. Our Bachelor degree prepares students with the expertise, commitment and skills for management, operational and support positions in the ever-changing hospitality industry. Students have the option of choosing among three majors to pursue specialized hospitality and tourism studies.

Major in Hotel Management

Students learn to perform management functions through related coursework in Rooms Division Management, Revenue Management, Accounting, Hospitality Sales and Marketing, and Casino Operations, among others.

Major in Event and Convention Planning

Students learn to perform management functions through related coursework in Special Events Management, Convention Sales, Exhibits and Trade Show Management, Convention and Events Planning Logistics, and Catering Sales and Operations, among others.

ADMISSIONS REQUIREMENTS

These are in addition to the general admissions requirement at UNE.

- High School grade point average of 2.0 for Certificate programs
- High School grade point average of 2.5 for Associate programs
- High School grade point average of 2.75 for Bachelor programs
- Bachelor Degrees have an additional requirement:
 - College Board results of at least 450 in each area: Spanish, English, and Mathematics

GRADUATION REQUIREMENTS

Grade point average of 2.00 or greater at the end of the program
Completion of all credits of enrolled program curriculum and academic level
Completion of all practicum hours of specific program and level

If in the Culinary Arts Program, a valid ServSafe certificate

ASSOCIATE'S DEGREES

Associate of Science in Culinary Arts
Revised August 2012

Classification Code (CIP Code): 52.0904

64 Credits	Credits
Education Component	15
Professional Component	15
Major Component	34

Education Component		15
ENGL 110+ or ENGL 115+ or ENGL 125	Basic Oral, Reading, And Writing In English I College Reading & Writing I Advanced English I	3
ENGL 111+ or ENGL 116+ or ENGL 126	Basic Oral, Reading, And Writing In English II College Reading & Writing II Advanced English II	3
SPAN 111+ or SPAN 115+	Reading and Writing I Reading, Writing and Oral Communications I	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3

Professional Component		15
CHEF 116	Culinary Arts Basic Components	3
	ServSafe (Seminar)	0
HMNG 220	Purchasing And Menu Development	3
HMNG 201	Food And Beverage Management	3
HMNG 207	Basic Wines, Beers And Spirits	3
HMNG 211	Hospitality Ethics	3

Major Component		34
CHEF 104	Meat Cutting (Lab)	2
CHEF 105	Food Preparation I (Lab)	3
CHEF 107	Food Preparation II (Lab)	5
CHEF 200	Baking I (Lab)	4
CHEF 202	Garde Manger & Buffet Presentation	5
CHEF 204	Culinary Nutrition	3
CHEF 206	Baking II (Lab)	4
CHEF 213	International Cuisine (Lab) I	3
CHEF 214	International Cuisine (Lab) II	4
CHEP 231	Culinary Practicum (500 Hours)	1

- + Course with laboratory
- Students taking ENGL 110+ o 115+ o 125, MATH 120 o 130, SPAN 111+ o 115+ o 125, ENGL 111+ o 116+ o 126, SPAN 112+ o 116+ o 126 will be placed in accordance with the College Board Results or its equivalent.
- All the HMNG and CHEF courses have a final minimum grade of C. The practicum and internships must be approved with a minimum grade of B.
- To comply with graduation requirements the student must complete the ServSafe Certification. The certification must be approved in order to enroll in the practicum.
- All students must maintain a minimum grade point average of 2.00 to graduate
- Transfer students from other institutions must comply with UNE residency policy.

Associate of Science in Hotel Operations
Revised August 2012

Classification Code (CIP Code): 12.0503

73 Credits	Credits
General Education	21
Professional Component	30
Major Component	12

General Component		21
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
ENGL 110+ or ENGL 115+ or ENGL 125	Basic Oral, Reading, And Writing In English I College Reading & Writing I Advanced English I	3
ENGL 111+ or ENGL 116+ or ENGL 126	Basic Oral, Reading, And Writing In English II College Reading & Writing II Advanced English II	3
ENGL 246	Conversational English	3
SPAN 111+ or SPAN 115+ or SPAN 125	Reading and Writing I Reading, Writing and Oral Communications I Language, Reading and Writing I	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
HIST 255	Analysis of the Cultural Processes in Puerto Rico	3

Professional Component		30
HMNG 101	Introduction To Hospitality Industry	3
HMNG 201	Food And Beverage Management	3
HMNG 207	Basic Wines, Beers And Spirits	3
HMNG 211	Hospitality Ethics	3
HMNG 259	Hospitality Accounting	3
HMNG 280	Guest Services	3
HMNG 290	Spreadsheet & Database Applications	3
HMNG 347	Hospitality Human Resources Management	3
HMNG 370	Hospitality Sales & Marketing	3
HM ELECTIVE	(Hotel / Events / Culinary)	3

Major Component		12
HMHM 300	Rooms Division I	3
HMHM 301	Rooms Division II	3
HMHM 306	Casino Operations	3
HMHM 390	Practicum In Hotel Management (500 Hours)	3

- + Course with laboratory
- Students taking ENGL 110+ o 115+ o 125, MATH 120 o 130, SPAN 111+ o 115+ o 125, ENGL 111+ o 116+ o 126, SPAN 112+ o 116+ o 126 will be placed in accordance with the College Board Results or its equivalent.
- All the HMNG, HMHM/HMPS courses have a final minimum grade of C. The practicum and internships must be approved with a minimum grade of B.
- All students must maintain a minimum grade point average of 2.00 to graduate
- Transfer students from other institutions must comply with UNE residency policy.

BACHELOR'S DEGREES

Bachelor of Science in International Hospitality Management

Major: Hotel Management

Revised August 2012

Classification Code (CIP Code): 52.0907

117 Credits	Credits
General Education	33
Professional Component	48
Major Component	36

General Component		33
SOSC 112	The Human Being and his Social Environment	3
SOSC 113	Analysis of the Cultural Processes and History	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
ENGL 110+ or ENGL 115+ or ENGL 125	Basic Oral, Reading, And Writing In English I College Reading & Writing I Advanced English I	3
ENGL 111+ or ENGL 116+ or ENGL 126	Basic Oral, Reading, And Writing In English II College Reading & Writing II Advanced English II	3
SOSC 242	Political and Socio Economics Principles of Globalization	3
SPAN 111+ or SPAN 115+ or SPAN 125	Reading and Writing I Reading, Writing and Oral Communications I Language, Reading and Writing I	3
SPAN 112 +or SPAN 116+ SPAN 126	Reading and writing II Reading, Writing and Oral Communications II Language, Reading and Writing II	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
HIST 255	Analysis of the Cultural Processes in Puerto Rico	3
UNRE 101	Concepts and Principles of Investigation	3

Professional Component		48
HMNG 101	Introduction To Hospitality Industry	3
HMNG 201	Food And Beverage Management	3
HMNG 207	Basic Wines, Beers And Spirits	3
HMNG 211	Hospitality Ethics	3
HMNG 220	Purchasing And Menu Development	3
HMNG 259	Hospitality Accounting	3
HMNG 280	Guest Services	3
HMNG 290	Spreadsheet & Database Applications	3

Professional Component		48
HMNG 347	Hospitality Human Resources Management	3
HMNG 350	Cost Control For Hospitality	3
HMNG 360	Hospitality Finance	3
HMNG 365	Hospitality Law	3
HMNG 370	Hospitality Sales & Marketing	3
HMNG 380	Restaurant & Catering Concept Development	3
COMM 205	Effective Presentations	3
ENGL 246	Conversational English	3

Major Component		36
HMPS 235	Professional Etiquette For The Hospitality Industry	3
HMHM 300	Rooms Division I	3
HMHM 301	Rooms Division II	3
HMHM 306	Casino Operations	3
HMHM 390	Practicum In Hotel Management (500 Hours)	3
HMHM 400	Revenue Management	3
CAPH 460	Hotel Management Capstone	6
HM ELECTIVE	Select only from the Elective Courses Menu	12

Electives Courses Menu		12
Area 1: Student must complete 12 credits	Student would choose 12 elective credits from the Major Components of the Culinary Management and/or the Events and Convention Planning programs	12
Area 2: Sustainable Tourism Entrepreneurship	HSUS 381: Sustainable Tourism/Hospitality Business Planning and Development – 3 credits	12
	HSUS 385: Environmental Management Systems & Leadership Principles – 3 credits	
	HSUS 390: Sustainable Tourism/Hospitality Entrepreneurial Project Development – 6 credits	
Area 3: Hospitality Internship Abroad	HINT 250 Hospitality Internship Abroad *The Internship has to be outside Puerto Rico and complete a minimum of 1,000 consecutive work hours in hospitality (6 months)	12

- + Course with laboratory
- Students taking ENGL 110+ o 115+ o 125, MATH 120 o 130, SPAN 111+ o 115+ o 125, ENGL 111+ o 116+ o 126, SPAN 112+ o 116+ o 126 will be placed in accordance with the College Board Results or its equivalent.
- All the HMNG, HMHM, HMPS, HSUS, and CAPH courses have a final minimum grade of C. The practicum and internships must be approved with a minimum grade of B.
- All students must maintain a minimum grade point average of 2.00 to graduate
- Students from 2nd year and above must obtain an academic evaluation from the Students Coordinator before selecting courses in each semester.
- Transfer students from other institutions must comply with UNE residency policy.

Bachelor of Science in International Hospitality Management**Major: Event & Convention Planning****Revised August 2012****Classification Code (CIP Code): 52.0907**

117 Credits	Credits
General Education	33
Professional Component	48
Major Component	36

General Component		33
SOSC 112	The Human Being and his Social Environment	3
SOSC 113	Analysis of the Cultural Processes and History	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
ENGL 110+ or ENGL 115+ or ENGL 125	Basic Oral, Reading, And Writing In English I College Reading & Writing I Advanced English I	3
ENGL 111+ or ENGL 116+ or ENGL 126	Basic Oral, Reading, And Writing In English II College Reading & Writing II Advanced English II	3
SOSC 242	Political and Socio Economics Principles of Globalization	3
SPAN 111+ or SPAN 115+ or SPAN 125	Reading and Writing I Reading, Writing and Oral Communications I Language, Reading and Writing I	3
SPAN 112 +or SPAN 116+ SPAN 126	Reading and writing II Reading, Writing and Oral Communications II Language, Reading and Writing II	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
HIST 255	Analysis of the Cultural Processes in Puerto Rico	3
UNRE 101	Concepts and Principles of Investigation	3

Professional Component		48
HMNG 101	Introduction To Hospitality Industry	3
HMNG 201	Food And Beverage Management	3
HMNG 207	Basic Wines, Beers And Spirits	3
HMNG 211	Hospitality Ethics	3
HMNG 220	Purchasing And Menu Development	3
HMNG 259	Hospitality Accounting	3
HMNG 280	Guest Services	3
HMNG 290	Spreadsheet & Database Applications	3
HMNG 347	Hospitality Human Resources Management	3
HMNG 350	Cost Control For Hospitality	3

Professional Component		48
HMNG 360	Hospitality Finance	3
HMNG 365	Hospitality Law	3
HMNG 370	Hospitality Sales & Marketing	3
HMNG 380	Restaurant & Catering Concept Development	3
COMM 205	Effective Presentations	3
ENGL 246	Conversational English	3

Major Component		36
HMPS 235	Professional Etiquette For The Hospitality Industry	3
HMEV 302	Introduction to the Event & Convention Industry	3
HMEV 310	Convention Sales	3
HMEV 315	Exhibit & Trade Show Management	3
CAPE 404	Convention & Event Planning Logistics Capstone	6
HMEV 406	Special Event Management	3
HMEV 455	Practicum In Event & Conventions (500 Hours)	3
HM ELECTIVE	Select only from the Elective Courses Menu	12

Electives Courses Menu		12
Area 1: Student must complete 12 credits	Student would choose 12 elective credits from the Major Components of the Culinary Management and/or the Hotel Management programs	12
Area 2: Sustainable Tourism Entrepreneurship	HSUS 381: Sustainable Tourism/Hospitality Business Planning and Development – 3 credits	12
	HSUS 385: Environmental Management Systems & Leadership Principles – 3 credits	
	HSUS 390: Sustainable Tourism/Hospitality Entrepreneurial Project Development – 6 credits	
Area 3: Hospitality Internship Abroad	HINT 250 Hospitality Internship Abroad *The Internship has to be outside Puerto Rico and complete a minimum of 1,000 consecutive work hours in hospitality (6 months)	12

- + Course with laboratory
- Students taking ENGL 110+ o 115+ o 125, MATH 120 o 130, SPAN 111+ o 115+ o 125, ENGL 111+ o 116+ o 126, SPAN 112+ o 116+ o 126 will be placed in accordance with the Collage Board Results.
- All the HMNG, HMEV, HMPS, HSUS, and CAPE courses have a final minimum grade of C. The practicum and internships must be approved with a minimum grade of B.
- All students must maintain a minimum grade point average of 2.00 to graduate
- Students from 2nd year and above must obtain an academic evaluation from the Students Coordinator before selecting courses in each semester.
- Transfer students from other institutions must comply with UNE residency policy.
- The elective courses must be selected from the Elective Courses Menu

Bachelor of Science in Culinary Management
Major: Culinary Management
Revised August 2012

Classification Code (CIP Code): 12.0504

127 Credits	Credits
General Education	33
Professional Component	48
Major Component	46

General Component		33
SOSC 112	The Human Being and his Social Environment	3
SOSC 113	Analysis of the Cultural Processes and History	3
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
ENGL 110+ or ENGL 115+ or ENGL 125	Basic Oral, Reading, And Writing In English I College Reading & Writing I Advanced English I	3
ENGL 111+ or ENGL 116+ or ENGL 126	Basic Oral, Reading, And Writing In English II College Reading & Writing II Advanced English II	3
SOSC 242	Political and Socio Economics Principles of Globalization	3
SPAN 111+ or SPAN 115+ or SPAN 125	Reading and Writing I Reading, Writing and Oral Communications I Language, Reading and Writing I	3
SPAN 112 +or SPAN 116+ SPAN 126	Reading and writing II Reading, Writing and Oral Communications II Language, Reading and Writing II	3
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I	3
HIST 255	Analysis of the Cultural Processes in Puerto Rico	3
UNRE 101	Concepts and Principles of Investigation	3

Professional Component		48
HMNG 101	Introduction To Hospitality Industry	3
HMNG 201	Food And Beverage Management	3
HMNG 207	Basic Wines, Beers And Spirits	3
HMNG 211	Hospitality Ethics	3
HMNG 220	Purchasing And Menu Development	3
HMNG 259	Hospitality Accounting	3
HMNG 280	Guest Services	3
HMNG 290	Spreadsheet & Database Applications	3
HMNG 347	Hospitality Human Resources Management	3

Professional Component		48
HMNG 350	Cost Control For Hospitality	3
HMNG 360	Hospitality Finance	3
HMNG 365	Hospitality Law	3
HMNG 370	Hospitality Sales & Marketing	3
HMNG 380	Restaurant & Catering Concept Development	3
COMM 205	Effective Presentations	3
ENGL 246	Conversational English	3

Major Component		36
CHEF 104	Meat Cutting (Lab)	2
CHEF 105	Food Preparation I (Lab)	3
CHEF 107	Food Preparation II (Lab)	5
CHEF 116	Culinary Arts Basic Concepts	3
	ServSafe (Seminar)	0
CHEF 200	Baking I (LAB)	4
CHEF 202	Garde Manger & Buffet Presentation	5
CHEF 204	Culinary Nutrition	3
CHEF 206	Baking II (LAB)	4
CHEF 213	International Cuisine I	3
CHEF 214	International Cuisine II	4
CHEP 231	Culinary Practicum (500 Hours)	1
HFBP 450	Practicum In Food & Beverage Management (300 Hours)	3
CAPC 452	Restaurant Management Capstone	6

- + Course with laboratory
- Students taking ENGL 110+ o 115+ o 125, MATH 120 o 130, SPAN 111+ o 115+ o 125, ENGL 111+ o 116+ o 126, SPAN 112+ o 116+ o 126 will be placed in accordance with the Collage Board Results.
- All the HMNG, CHEF, and HFBP courses have a final minimum grade of C. The practicum and internships must be approved with a minimum grade of B.
- It is a graduation requirement to have the ServSafe Certification. The certification must be approved to enroll in the practicum.
- All students must maintain a minimum grade point average of 2.00 to graduate
- Students from 2nd year and above must obtain an academic evaluation from the Students Coordinator before selecting courses in each semester.
- Transfer students from other institutions must comply with UNE residency policy.

MINORS

A Student from another School that opts for a MINOR with ISHCA must comply with the following requirements: Complete 18 credit hours of the minor courses for Hotel Management, and Events & Convention Planning. Complete 22 credit hours for the minor courses for Culinary Management. Complete 23 credit hours for the minor courses for Food & Beverage Management.

Minor in Hotel Management		18
HMNG 101	Introduction to the Hospitality Industry	3
HMNG 280	Guest Services	3
HMHM 300	Rooms Division Management I	3
HMHM 301	Rooms Division Management II	3
HMHM 306	Casino Operations Management	3
HMNG 201	Food and Beverage Management	3

Minor in Events and Convention Planning		18
HMNG 101	Introduction to the Hospitality Industry	3
HMNG 280	Guest Services	3
HMEV 302	Introduction to the Event and Convention Industry	3
HMEV 310	Convention Sales	3
HMNG 370	Hospitality Sales & Marketing	3
HMEV 406	Special Events Management	3

Minor in Culinary Management		22
CHEF 116	Culinary Arts Basic Concepts	3
CHEF 104	Meat Cutting (Lab)	2
CHEF 105	Food Preparation I (Lab)	3
CHEF 107	Food Preparation II (Lab)	5
CHEF 200	Baking I (Lab)	4
CHEF 202	Garde Manger & Buffet Presentation	5

Minor in Food and Beverage Management		23
HMNG 101	Introduction to the Hospitality Industry	3
HMNG 280	Guest Services	3
HMNG 201	Food and Beverage Management	3
CHEF 105	Food Preparation I (Lab)	3
CHEF 107	Food Preparation II (Lab)	5
HMNG 350	Cost Controls for Hospitality	3
HMNG 207	Basics of Wine, Beers & Spirits	3

COURSE DESCRIPTIONS

HMNG 101

Introduction to the Hospitality Industry

3 Credits

This course introduces the student to the most important areas within the Hospitality Industry, the professional career options within the industry and the management functions associated with each area. Special importance will be given to Lodging, Food and Beverage, and the Meeting industries. Case studies, group dynamics, teamwork, and class discussions will introduce students to effective management styles, the use of the decision making process to resolve managerial situations and the development of strategic management thinking skills. Guest speakers from the industry will share their experiences with students. The course will use the Internet as a research tool, e-mail and Blackboard as means of communication, and MS Word and PowerPoint for projects and presentations. Pre-requisite: None

CHEF 104

Meat Cutting

2 Credits

Overview of the butcher's field and meat fabrication for foodservice operations. Identification will involve primary, secondary and commercial cuts. The student will learn the fundamental techniques for fabricating cuts for professional kitchens by handling the proper tools. Emphasis the food exposure to hygiene and sanitation practices and prevention of food borne illnesses. Theoretical presentations and lab sessions are used to develop the course. The course will use the Internet as a research tool and MS Words for paper and projects. Email will be use for communication purposes. Pre-requisite CHEF 116 in progress.

CHEF 105

Food Preparation I

3 Credits

Demonstration of proper use and safely handling of different types of knives. Emphasis will also be placed on vegetable cuts and production of stocks, broths, glazes, thickening agents and sauces. The course will use the Internet as a research tool, the Email as a means of communication and MS Word for papers and projects. Theoretical presentations, demonstrations and extensive participation in lab sessions are used to develop the course. Pre-requisite CHEF 116 in progress.

CHEF 107

Food Preparation II

5 Credits

Introduction to fundamental cooking theories and techniques in food preparation. Application of cooking methods will emphasize on sautéing, poaching, steaming, roasting, braising, baking, broiling and frying. The students will learn cooking techniques used as for fish, meats, poultries, vegetables, soups and starches. Sauce derivatives, breakfast cookery, plate development, knife skills and proper sanitation practices are also applied in this course. Theoretical presentations, demonstrations and extensive participation in lab sessions are used to develop the course. The course will use the Internet as a research tool and MS Words for paper and projects. Pre-requisite CHEF 116, CHEF 104, CHEF 105.

HMNG 109

International Travel Destination

3 credits

Study of the international tourism destinations and its application in the globalization of the hospitality industry. Emphasis in the description of the most visited tourism attractions in the world, the cultural diversity and the internationalization of the hotel and gastronomic industries. The course

the Internet as a research tool, MS Words for paper and projects and emails as means of communication. Pre-requisite: MATH 120/130

CHEF 202 Garde Manger & Buffet Presentation

5 Credits

The course will introduce the student to the vocabulary, techniques, methods and history of the Garde Manger kitchen. The course will initiate with the production of dressings, salads and sandwiches. As an intermediated component will be the production of cheese, fruits and crudité platters, vegetables carving and caviar presentation. Students will learn styles of presenting food and buffets through the preparation of hot and cold hors-d'oeuvre, forcemeats, sausages, pates, terrines, galantines and roulades, curing and smoking techniques, Theoretical presentations, demonstration and extensive participation in lab session are used to develop this course. The student will be responsible of planning, organize and present a Grand Buffet using techniques of food styling. The course will use the internet as a research tool, MS Words for paper and projects and emails as means of communication. Pre-requisite CHEF 107.

CHEF 204 Culinary Nutrition

3 Credits

The course exposes students to basic nutritional concepts, analysis, and implementation, such as calories, carbohydrates, lipids, proteins, minerals, water, vitamins and their functions. This includes basic preparation of soups, salads, vegetables, poultry, meats, fish and healthy cooking methods. Students will also be exposed general nutritional baking concepts, skills and execution. The course is held with presentations, demonstrations, case studies and experience in the laboratory. This course will require the use of Internet as a research tool, MS Word as the basis for the presentation of works and special projects. Prerequisites: CHEF 107, CHEF 200, CHEF 202.

CHEF 206 Baking II

4 Credits

The course ITHM 206 focuses on the development of techniques previously learned in the course ITHM 200. Emphasis will be given to the production of complex pastry products such as: chocolate candy, cookies, mousses and Bavarians fillings, frozen desserts, ice cream, silver desserts, cakes and classical international desserts international. The theory is based on the methods and techniques to create more elaborate pastries. Prerequisite CHEF 200

HMNG 207 Basics of Wine, Beers, & Spirits

3 Credits

This course explores the history, classification, methods of production and uses of wines, beers, and spirits. Sensory analysis, product knowledge, basic principles of food and wine pairing, service techniques and alcohol service related to the hospitality industry will be discussed. The course will use the Internet among other research tools, e-mail as means of communication and MS Word and Power Point for papers and projects. Pre-requisite: None

HMNG 211 Hospitality Ethics

3 Credits

Debates of the ethical dilemmas commonly encounter by the hospitality employees. Discussion of overbooking regulations, breach of contract, sexual harassment, professional and personal relationships with peers and supervisors, abuse of power, schedule assignation and lies. Emphasis will be placed in the understanding of morale and its implication. The course will be developing through

the analysis of case studies, readings, and day-today situations. The course will finalize with the development of a Code of Ethics. It will use the Internet among others research tools, Email as means of communication and MS Word for papers. Pre-requisite: None

CHEF 213 International Cuisine I

3 Credits

Exposure to specific gastronomic cultures of Europe through seminars, conferences, demonstrations, menu discussions, investigative research, and recipe preparation and development. Emphasis is placed in traditional and contemporary European dishes of France, Spain, and Italy. Class activities include discussions of historic information about regional traditions, ingredients, cooking techniques, religion, and food and service protocol. The course will use the Internet as a research tool. The course will use the Internet as a research tool, MS Words for paper and projects, Email as means of communication and Power Point for presentation. Pre-requisites: CHEF 200, 202

CHEF 214 International Cuisine II

4 Credits

Exposure to the diverse gastronomic cultures from around the world through seminars, conferences, demonstrations, menus discussions, investigative research and recipes preparation and development. Emphasis is placed in traditional and contemporary dishes of Germany, Austria, England, Greece, Russia, Africa, Middle East, India, Japan, China, Indochina, Korea, US, Mexico, South America and the Caribbean. Class activities include discussions of historic information about regional traditions, ingredients, cooking techniques, religion, and food and service protocol. The course will use the Internet as a research tool. The course will use the Internet as a research tool, MS Words for paper and projects, Email as means of communication and Power Point for presentation. Pre-requisites: CHEF 200, 202

HMNG 220 Purchasing and Menu Development

3 Credits

Comprehensive study of the principles involved in the purchasing process and menu development in a quality food and beverage service operation. It includes the understanding of the overall concept of purchasing and receiving practices, to apply knowledge of quality standards and regulations governing food products to the purchasing function and to receive and store food and non-food items properly. Menu planning and development is also covered since one function is dependent upon the other. Topics to be covered include basic concepts of art and graphic design for menus, cost analysis, market trends, nutritional considerations and the persuasive and effective use of language for plate descriptions. The course will use the Internet as a research tool, the Email as a means of communications and MS Word for papers and projects. Pre-requisite: HMNG 201, MATH 120/130

CHEP 231 **Culinary Practicum**

1 Credit

Practicum in a commercial foodservice or hospitality establishment approved by the school. The practicum location will be selected from a list of approved centers by the student and practicum coordinator. The coordinator will impart students with a seminar in which they will discuss the different aspects of the practicum, the calendar, resume and professional etiquette, among other topics. The students will apply their theory and practical knowledge under the supervision of a certified chef. Work under pressure, judge accurately flavors and seasoning and application of hygiene and sanitation procedures will be emphasized. This practicum will help in the development of the student's practical and cognitive skills in the planning, preparation and presentation of entire

meals. Internship CHEP 231 requires 500 working hours. Two evaluations will be required by the supervisor assigned to each of the two areas to rotate: Pastry and Baking, Hot Food and Cold Food, according to school standards. Pre-requisite CHEF 200, 202, 206 & 213 approved; Valid ServSafe Certificate

HMPS 235

Professional Etiquette for the Hospitality Industry

3 Credits

In this course students will work on their visual and vocal image to develop their ability to address individuals and groups in a professional and dynamic way. They will also be guided to develop a professional image that fits the hospitality industry standards without losing their own identity. Special emphasis will be given to improving the students' vocal range (including projection, diction, pacing, and pitch) and body language (including facial expressions, gestures, posture, and purposeful movement) through hands-on training. This course will help students understand how others form impressions of them based on their voice and body language, learn how to develop and manage their physical appearance and tone to create the desired image, and learn how to control these factors so that they can respond to situations while maintaining a positive attitude. The course will use the Internet as a research tool, the Email as a means of communications and MS Word for papers and projects. Pre-requisite: HMNG 280; COMM 205

HIAB250

Hospitality Internship Abroad

12 Credits

Students will have the opportunity to apply the acquired skills of previous courses and work experiences in a real-life scenario (hotel, restaurant or event management facilities) working for a minimum of 1000 hours or six months, traveling outside Puerto Rico and living in a foreign country. A customized internship plan will be developed by the Internship location and approved by the School to ensure maximization of the experience and objectives accomplishments. This experience will also develop the necessary soft skills in the students, not only interpersonal and leadership skills but also the application of decision making skills while gaining a broader understanding of diversity and globalization. More importantly, students will acquire solid operational and managerial knowledge, building their resumes with strong hospitality experiences and skills. Moreover, students will be immersing to a non-Spanish language, increasing the opportunities to improve their English proficiency or depending on the destination, other foreign languages.

HMNG 259

Hospitality Accounting

3 Credits

Course provides students with the basic accounting concepts and principles in the hospitality industry; hospitality financial data, and the flow of financial information during the complete accounting cycle. Students will have the opportunity to produce and interpret financial statements. Topics covered will include aspects of the restaurant accounting and hotel accounting, among others. The course will use the Internet as a research tool, the Email as a means of communications and MS Word for papers and projects. Pre-requisite: MATH 120/130

HMNG 280

Guest Services

3 Credits

The exploration of the role of service in a successful hospitality operation. Topics discussed encompass: handling difficult guests, dealing with complaints, developing listening skills, and improving guest satisfaction. Introduction to the service philosophy. The course will use the Internet

among others research tools, Email as means of communication and MS Word and Power Point for papers and projects.. Pre-requisite: HMNG 101

Spreadsheets and Database Applications

3 Credits

Introduction to tourism business related computerized software applications including spreadsheet, database, presentation and graphics packages. Students will learn how to use the software (Excel, Access, Word, and Power Point) to organize, interpret and present information. The course uses real life situations to prepare and analyze financial information using Excel. Special emphasis is placed on database management and the use of MS Access to create tables, queries and reports of information such as Customers and Employee Database, Accounts Payable, Accounts Receivable, and Inventories. The course will use lectures and assigned laboratory material.

Rooms Division Management I

3 Credits

This course presents the functions of the major components of the rooms division within a hotel. The interaction with this division and the other areas of the hotel are explored in relationship to customer service. The course will use the Internet as a research tool, Fidelio software, and e-mail as means of communication and MS Word and Excel for papers and projects. Prerequisite: HMNG 101

Rooms Division Management II

3 Credits

This course presents the student with an in-depth analysis and study of the major components of the rooms division within a hotel at a managerial level. Emphasis is placed on the administration of the housekeeping and front office areas. Current topics in the division are explored, such as safety and security, as well as elements of facilities management. The course will use the Internet as a research tool, Fidelio software, and email as means of communication and MS Word, Power Point, and Excel for papers, projects and presentations. Pre-requisite: HMHM 300

Introduction to the Event and Convention Industry

3 Credits

Analysis of the impact of meetings, events, expositions, and conventions in the hospitality Industry. Study of the history, trends, terminology, types of events, and the planning process. Emphasis will be given to the process of planning an event from the meeting planner's perspective. The course will be developed through the analysis of readings, presentations, research, and field trips. The course will use the Internet among other research tools, email and Blackboard as means of communication and MS Word and Power Point for papers and projects. Pre-requisites: None

Casino Operations Management

3 Credits

This course explores the casino composition, its history, types of operation, security, marketing and playing techniques of the table games and slot machines. It will focus on the organizational structure, the rules, and basic operation procedures. The course will be developed with situational analysis, problem solution, theme discussions and simulations. Pre requisite: HMNG 101

HMEV 310 Convention Sales**3 Credits**

Explanation of the specialized sales skills required for the event and convention industry. Study of the vocabulary relative to the hotel sales office, the organization of a sales office, the importance of the marketing plan, an in-depth study of each meeting market segment, the audiovisual components, and the roles and responsibilities of convention sales and service managers. The course will feature the process of selling and managing an event from the facility's perspective. Special attention will be given to create successful sales techniques, booking strategies, as well as the review and negotiation of contracts. The course will be developed through presentations, class discussion, and guest speakers. The course will use the Internet among others research tools, email and Blackboard as means of communication and MS Word and Power Point for papers and projects. Pre-requisites: HMNG 101

ITHM 312 College Program Practicum**3 Credits**

Opportunity to learn the concepts inherent in business communication and apply them in the workplace. Participants begin by defining the elements of communications, exploring methods people use to process information, identifying basic listening skills, and recognizing inclusive communication approaches. Emphasis is place on listening techniques and preparation and delivery techniques for public speaking. Pre-requisite: None

ITHM 313 Disney Experiential Learning**3 Credits**

Combines academic classroom education with on-site learning opportunities across the Walt Disney World Resort property. Classroom instruction centers on theories of adult education, experiential learning, and the role of learning in corporations and the importance of intellectual capital. They will be exposed to a number of situations and experiences. In each case, the participants will hear, see and experience learning opportunities that augment classroom learning. Pre-requisite: None

ITHM 314 Disney Communication**3 Credits**

Opportunity to learn the concepts inherent in business communication and apply them in the workplace. Participants begin by defining the elements of communications, exploring methods people use to process information, identifying basic listening skills, and recognizing inclusive communication approaches. Emphasis is place on listening techniques and preparation and delivery techniques for public speaking. Pre-requisite: None

HMEV 315 Exhibit & Trade Show Management**3 Credits**

Study of the exhibit and trade show management industry. It provides practical information for designing, marketing, and managing trade shows and expositions. Provides detailed information regarding the exhibit manager role. Pre-requisite: HMEV 302, HMNG 370

HMNG 347 Hospitality Human Resources Management**3 Credits**

Comprehensive study of human resources, personnel supervision and effective communication as applied to Human Resources Management techniques within hotels, restaurants, events and other hospitality workplaces will be presented. The role, characteristics and skills of a supervisor and the principles of planning, recruitment, selection, staffing and organizing, training, performance

management, coaching, counseling and discipline, controlling, delegation and decision making are topics of study. Other topics will include how to resolve conflicts, organizational behavior theories applied to the strategic management of a successful hospitality operation, important behavioral modification factors such as management styles, motivation, job satisfaction, employee empowerment, organizational culture, leadership, team-work, power structure and organizational change, will be discussed and analyzed. The course will use the Internet as a research tool, the Email as a means of communications and MS Word for papers and projects. Pre-requisite: HMNG 101, 211, 280

HMNG 350 **Cost Control for Hospitality**
3 Credits

Course provides students with information on the basic principles of effective cost control in food production and service management, accounting systems and budgetary allocations in the hospitality industry. Study and analysis of cost control systems and methods in the areas of purchasing, receiving, storing, issuing and par stock within the Hospitality Industry. Techniques in controlling wages and sales, assessment and reporting on food and beverage control. The focus of the course is on food and beverage cost control concepts and processes including purchasing and receiving control, storing and issuing control, portions and quantities, inventory and daily food cost, actual and standard food costs, menu engineering and analysis, sales control, beverage control and labor control. This course uses basic mathematics and spreadsheet applications on a regular basis. Pre-requisites: HMNG 259

HMNG 360 **Hospitality Finance**
3 Credits

Course provides students with the principles, methods and concepts of hospitality finance, cash management and its importance; the investment decisions regarding hospitality projects and capital expenditures; cash control during the various stages of operations; statement of cash flow; an introduction to feasibility studies, financial ratios analysis and working capital. The course will use the Internet as a research tool, the Email as a means of communications and MS Word for papers and projects. Pre-requisites: HMNG 259

HMNG 365 **Hospitality Law**
3 Credits

This course focuses on elements of business law, mostly torts (negligence), and property law and the effects thereof on the hospitality and tourism industries. It is intended to help the student to develop a practical managerial perspective on how the law applies generally to: the hospitality/tourism company's policies and practices, minimize the negative impact of the legal environment on the company, and foster an attitude of compliance and prevention. The course emphasizes in US Federal law, recognizing that also Puerto Rico law applies to hospitality companies. Students will examine relevant federal and state cases and statutes. The overall objective is to enable students to recognize, analyze, and evaluate legal issues for the purpose managing preventatively and apply appropriate decisions in the workplace. Prerequisites: HMNG101.

HMNG 370 **Hospitality Sales & Marketing**
3 Credits

This course immerses the students into the functions and principles of hospitality sales and marketing. Students will learn the essential sales and marketing functions. The course incorporates the development of a marketing plan with emphasis on sales and marketing techniques, target marketing,

advertising, public relations, and market study and analysis. The course uses the Internet among other research tools, email as means of communication, and MS Word, Excel and Power Point for projects and presentations. Prerequisites: HMNG 101

HMNG 380 Restaurant & Catering Concept Development

3 Credits

Discussion and conceptualization of the process to open a restaurant or a catering service. It includes financial aspects, marketing analysis and strategies, legal responsibilities, permit process and financial backing to operate. The class requires the preparation of a food and beverage business plan. The course will take place through lectures, presentations and written analysis. It includes integration of technology, use of Internet for research, use of email as a communication tool and software such as Word and PowerPoint. Prerequisites: HMNG 201, 220, 360, 370; COMM 205

HSUS 381 Sustainable Tourism/Hospitality Business Planning and Development

3 Credits

This course introduces the student to the fundamental changes that impact business institutions and managerial attitudes towards more sustainable natural resources management. Examines the philosophy, concepts and attitudes prevalent in practices of sustainable tourism in local and global destinations. Emphasis is given to regulations, policies, best practices and certifications in sustainable business planning and development. Guest speakers, field visits, case studies and group projects will be used as learning methodology. The course will use the Internet as a research tool, e-mail and Blackboard as means of communication, and MS Word and PowerPoint for projects and presentations. Prerequisites: HMNG 101

HSUS 385 Environmental Management Systems and Leadership Principles

3 Credits

This course examines the leadership role in the implementation of environmental management systems in a tourism/hospitality operation. Provides the tools to audit resources consumption and discusses strategies for environment conservation. Emphasis is given to the human resources, promotion-marketing and financial factors of a sustainable business operation. Actual resources consumption audit will be performed as part of course requirements. Field visits, case studies and group projects will be used as learning methodology. The course will use the Internet as a research tool, e-mail and Blackboard as means of communication, and MS Word and PowerPoint for projects and presentations. Prerequisites: HSUS 381

HSUS 390 Sustainable Tourism/Hospitality Entrepreneurial Project Development

6 Credits

This course leads the student to apply the knowledge acquired in previous courses to the development of a tourism/hospitality business that complies with all the characteristics, regulations and certification standards of a sustainable operation. The first phase of the project will include visits to local or international destinations to benchmark sustainable business and evaluate applicable best practices. The second phase will be the actual development of a business plan for a tourism/hospitality enterprise that will be presented to a financing entity. Course evaluations will be based on project financial approval. The course will use the Internet as a research tool, e-mail and Blackboard as means of communication, and MS Word and PowerPoint for projects and presentations. Prerequisites: HSUS 381, 385

HMHM 390 Practicum in Hotel Management**3 Credits**

Practicum in a hospitality establishment. The student will work a total of 500 hours in supervision areas within the Hotel Management Area. The practicum location will be selected from the list of approved practice centers by the student and approved by the ISHCA practicum coordinator. The School Practicum Coordinator will impart students with a seminar in which they will discuss the different aspects of the practicum, the calendar, resume and professional etiquette, among other topics. The seminar will be equal a full day or approximately 8 hours of duration. The seminars are mandatory for students and failure to attend will result in the student's automatic drop from the course. Pre-requisite: HMHM 300

HMHM 400 Revenue Management for the Hospitality Industry**3 Credits**

Designed for students who are interested in higher level managerial positions in the hospitality industry, whom would be responsible for the financial performance of a hotel and formulating tactical pricing decisions to maximize revenues for hospitality organizations. The course will provide students the basic understanding of the revenue management process. Topics covered will include a review of the historical development of revenue management, reservation systems, forecasting demand, inventory control, cost analysis, pricing strategy, channel management, and revenue management tactics, i.e., overbooking, discount allocation, and demand management. Prerequisites: HMHM 300, 301

CAPE 404 Convention and Event Planning Logistics Capstone**6 Credits**

Hands-on course featuring the planning of a real fundraising special event from beginning to end. It is designed to provide students with the opportunity to apply all the knowledge acquired in previous courses from the concentration and professional components of the program. Emphasis is placed on the student's ability to conceptualize, market, and manage an event project, and their capacity to achieve goals and objectives. The Internet will be used for research. MS Word, PowerPoint, Excel, and other open source software will be used for projects, assignments and presentations. Blackboard, email, phone calls, and Box.net will be used to foster communication among stakeholders. Pre-requisites: HMEV 302, 406; HMNG 370

HMEV 406 Special Events Management**3 Credits**

This course is a step by step guide to planning a fundraising special event. The course will foster teamwork and will allow students to apply their acquired knowledge through assignments and projects. It will use the Internet, among other research tools; email and Blackboard as means of communication and MS Word, Power Point, Excel, and web development applications for papers and projects. Pre-requisite: HMEV302, 310; HMNG 370.

HFBP 450 Practicum in Food & Beverage Management**3 Credits**

Practicum in a food service establishment. The student will work a total of 300 hours within the Food and Beverage Area. The practicum location will be selected from a list of approved centers by the student and practicum coordinator. The School Practicum Coordinator will impart students with a seminar in which they will discuss the different aspects of the practicum, the calendar, resume and professional etiquette, among other topics. During the seminar the students will be handed a list of

approved practice centers, from which the student will choose 3 options. The seminar will be equal to a full day or approximately 8 hours of duration. Two evaluations will be required by the supervisor assigned to each of the two areas to rotate: front of the house, bar, banquets, purchasing, inventory, supervision, according to school standards. The seminars are mandatory for students and failure to attend will result in the student's automatic drop from the course. Pre-requisite: CHEP 231, CAPC 452

CAPC 452 Restaurant Management Capstone

6 Credits

Practical course in which the students apply acquired managerial skills and technical knowledge of all previous courses to create and manage a fully operational restaurant. All students will have the opportunity to role play as restaurant Executive Chef, Sous Chef, Restaurant Manager and Assistant Restaurant Manager, while planning and executing all related duties in the front-of-the-house and back-of-the-house of the School Restaurant Laboratory. Students will also rotate in the various duties required to run an effective operation such as waiter, cook, steward and restaurant host, among other duties and positions. Emphasis will be given to the planning and organization process, including the menu development and costing, food serving size, portion control and quality, the requisition process, methods to control all operational costs, food handling, proper etiquette and overall guest experience and satisfaction. Pre-requisites: HMNG 350, 370, 380; CHEP 231

HMEV 455 Practicum in Events & Conventions

3 Credits

Practicum in a hospitality establishment. The student will work a total of 500 hours in areas within the Convention and Event Management Area. The practicum can be in hotels, sports events planning, conventions, or entertainment. The practicum location will be selected from a list of approved centers by the student and practicum coordinator. The Coordinator will impart students with a seminar in which they will discuss the different aspects of the practicum, the calendar, resume and professional etiquette, among other topics. The seminar will be equal to a full day or approximately 8 hours of duration, these are mandatory for students and failure to attend will result in the student's automatic drop from the course. Pre-requisite: CAPE 404

CAPH 460 Hotel Management Capstone

6 Credits

Integration of learned managerial skills and strategies through the analysis of management situations in the hospitality industry. The evaluation of strategic solutions to help students review and practice their management knowledge and capabilities will be assessed through various methods. Case studies will be used to explore current trends and issues pertaining to the three areas of concentration: hotel, food and beverage and events and conventions planning. In-class discussion of current hospitality issues evaluating its impact to the hospitality industry both, locally and internationally. Emphasis is placed on the students' abilities to investigate, analyze and discuss these issues through oral and written work. Students will be guided in their effort to find a supervisory managerial level job in the hospitality industry. Pre-requisites: HMHM 301; HMNG 370; UNRE 101

CERTIFICATE PROGRAM

Certificate in Culinary Arts
Revised August 2012

Classification Code (CIP Code): 12.0500

38 Credits	Credits
Courses	38

Courses	38
ENGL 110+ or ENGL 115+ or ENGL 125	Basic Oral, Reading, And Writing In English I College Reading & Writing I Advanced English I
SPAN 111+ or SPAN 115+ or SPAN 125	Reading and Writing I Reading, Writing and Oral Communications I Language, Reading and Writing I
HMNG 201	Food And Beverage Management
	ServSafe (Seminar)
CHEF 059	Introduction To Gastronomy
CHEF 091	Sauces, Stocks And Knives Skills
CHEF 092	Meat, Poultry & Fish Id
CHEF 093	Food Production
CHEF 095	Baking
CHEF 096	The Art of Cold Kitchen
MATH 120 or MATH 130	Introduction to Algebra Pre-Calculus I
CHEF 057	Classical Cuisine
CHEP 099	Culinary Arts Practicum (500 Hours)

- + Course with laboratory
- Students taking ENGL 110+ o 115+ o 125, MATH 120 o 130, SPAN 111+ o 115+ o 125, ENGL 111+ o 116+ o 126, SPAN 112+ o 116+ o 126 will be placed in accordance with the Collage Board Results.
- All the HMNG and CHEF courses have a final minimum grade of C. The practicum and internships must be approved with a minimum grade of B.
- To meet graduation requirements student must have the ServSafe Certification. The certification must be approved to enroll in the practicum.
- All students must maintain a minimum grade point average of 2.00 to graduate
- Transfer students from other institutions must comply with UNE residency policy.

Course Descriptions

CHEF 057

Classical Cuisine

3 Credits

Exposure to specific gastronomic cultures of Europe through seminars, conferences, demonstrations, menus, discussion, investigative, research, and recipes preparation and development. Emphasis is placed in the traditional and contemporary European dishes of France, Spain, and Italy. Class activities include discussion of historic information about regional tradition, ingredients, cooking techniques, religion, and food and service protocol. The course will use the Internet as a research tool, M.S. words for paper and projects, E- mails as a means of communications and Power Point for presentations. Pre-requisites: CHEF 093, 095 approved and CHEF 096 in progress.

CHEF 058

Food Safety

Seminar

Students will explore the fundamentals of Safety, Hygiene and Sanitation .The seminar will help the student to apply critical food safety practices, look at the origins and prevention of food borne illness and the implementation of hygiene and sanitation practices. Students must pass the ServSafe test of the National Restaurant Association to fulfill the graduation requirement. Pre-requisite: None

CHEF 059

Introduction to Gastronomy

3 Credits

Introduction to the fundamental of culinary theories. Topics of study includes: gastronomy, evolution in cuisine, equipment identification, culinary terms, kitchen organization and planning, learning of cooking methods, equipment and tools identification, recipe conversion, measurements, weight and general concepts of sanitation. Theoretical presentations, demonstrations and laboratory visits are used to develop the course. The course will use the Internet as a research tool and MS Words for paper and projects. Email will be used for communication purposes. Pre-requisite: None

CHEF 091

Sauces, Stocks and Knives Skills

3 Credits

Demonstration of proper use and safely handling of different types of knives. Emphasis will also be placed on vegetable cuts and production of stocks, broths, glazes, thickening agents and sauces. The course will use the Internet as a research tool, the Email as a means of communication and MS Word for papers and projects. Theoretical presentations, demonstrations and extensive participation in lab sessions are used to develop the course. Pre-requisite: CHEF 059 in progress

CHEF092

Meat, Poultry and Fish ID

2 Credits

Overview of the butcher's field and meat fabrication for foodservice operations. Identification will involve primary, secondary and commercial cuts. The student will learn the fundamental techniques for fabricating cuts for professional kitchens by handling the proper tools. Emphasis the food exposure to hygiene and sanitation practices and prevention of food borne illnesses. Theoretical presentations and lab sessions are used to develop the course. The course will use the Internet as a research tool and MS Words for paper and projects. Email will be used for communication purposes. Pre-requisite: CHEF 059 in progress

CHEF 093**Food Production****5 Credits**

Introduction to the basic cooking techniques for meats, poultry, fish, eggs and other proteins, vegetables and starches. Topics include sautéing, roasting, broiling, grilling, poaching, stewing, frying, baking, and boiling. Emphasis will be placed on preparation and presentation of different plates, for breakfast, lunch, and dinner. Food flavor, portion control and food safety are emphasized. The course will use the Internet as a research tool, the Email as a means of communication and MS Word for papers and projects. Pre-requisites: CHEF 059, 091, 092.

CHEF 095**Baking****4 Credits**

Introduction to baking and pastry fundamentals, and its corresponding fields. Knowledge of the basic baking ingredients and their function in baking. A difference between baking and cooking will be established based on ingredients, baking methods, measurements, time, and preparation. The course will focus on the mathematical part that involves baking and its function in recipes. The course will use the Internet as a research tool, the Email as a means of communication and MS Word for papers and projects. Pre-requisites CHEF 093

CHEF 096**The Art of Cold Kitchen****5 Credits**

The course will introduce the student to the techniques, methods and history of the Garde Manger kitchen and vocabulary. The course will initiate with the production of dressings, salads, cold soups and sandwiches. As an intermediated component will be the production of cheese, fruits and crudité platters, vegetables carving and caviar presentation. Students will learn styles of presenting food and buffets through the preparation of hot and cold hors-d'oeuvre, forcemeats, sausages, pates, terrines, galantines and roulades, curing and smoking techniques. Theoretical presentations, demonstration and extensive participation in lab session are used to develop this course. The student will be responsible of planning, organize and present a Grand Buffet using techniques of food styling. The course will use the internet as a research too, MS Words for paper and projects and emails as means of communication. Pre-requisites CHEF 093

CHEP 099**Culinary Arts Practicum****1 Credit**

Practicum in restaurant, catering, banquets or a hospitality establishment. The practicum location will be selected from a list of approved centers by the student and practicum coordinator. The students will apply their theory and practical knowledge under the supervision of a professional chef certified by the school. The student will be exposed to team work, variety of food products and cooking methods while applying hygiene and sanitation procedures. After being exposed to these, the student will be able to judge accurately flavor profiles, prepare and present entire meals and maintain quality standards. The coordinator will impart students with a seminar in which they will discuss the different aspects of the practicum, the calendar, resume and professional etiquette, among other topics. Practicum CHEP 099 requires 500 working hours. Two evaluations will be required by the supervisor assigned to each of the two areas to rotate: Pastry and Baking, Hot Food and Cold Food, according to school standards. Pre-requisites: CHEF 093 approved; CHEF 096 and 057 in progress and valid ServSafe Certificate.

UNIVERSIDAD DEL ESTE
School of Professional Studies

Adult Accelerated Programs



Undergraduate Catalog
2013-2014

SCHOOL OF PROFESSIONAL STUDIES

ACCELERATED ADULT PROGRAMS (AHORA, Spanish acronym)

The Sistema Universitario Ana G. Méndez, a pioneer in educational services for adults, continues that tradition by means of the School of Professional Studies at the Universidad del Este. The School of Professional Studies provides a university environment for the professional adult where the methods of teaching, the academic and administrative services are tailored to meet the genuine needs of this population. The School features its AHORA Program, an accelerated studies program for professional adults that wish to continue their university studies.

HISTORY AND DEVELOPMENT

The School of Professional Studies was established in June 1996. The AHORA Program began classes in September of that year, becoming the first accelerated studies program in Puerto Rico. At first, AHORA was offered at our main campus and one university center. At this time, the School of Professional Studies is offered in the five University Centers, Barceloneta, Yauco, Cabo Rojo, Utuado and Santa Isabel. The School of Professional Studies also administers the AHORA Program for the other institutions of the Sistema Universitario Ana G. Méndez.

At the beginning, AHORA offered three programs leading to Bachelor degrees in the accelerated mode. Presently, it has eleven programs leading to this degree. The academic offerings of the School of Professional Studies include:

- Bachelor in Business Administration with majors in: Management, Marketing, Accounting, and Computerized Information Systems
- Bachelor in Office System with major in Administrative Secretary
- Bachelor of Arts in Education with major in Early Childhood and Primary Education
- Bachelor of Social Work
- Bachelor in Social Sciences with majors in: Criminal Justice and Psychology
- Bachelor in Public Affairs with major in Public Administration
- Bachelor of Science in Public Health with major in Health Management Services

SUAGM, through its School of Professional Studies, established branch campuses in the Metro Orlando Campus (MOC) in 2003, the South Florida Campus (SFC) in 2006, and the Tampa Bay Campus (TBC) in 2010. These campuses offer associates, bachelors and master degrees in the only accelerated Discipline Based Dual Language Immersion Program in higher education in the Nation. In January 2012, the Capital area branch campus located in Wheaton, Maryland initiated its academic offerings. These branch campuses represent the continuation of the commitment to provide quality access alternatives to a university education for Hispanic adult students through the Accelerated Dual Language Discipline Based Immersion Model, developing language skills in both Spanish and English.

VISION

We aim to become local and international leaders in accelerated education for adults. We will be recognized for the excellence and pertinence of our academic programs, integrated services, the

application of emerging technologies and the strengthening of high-level competencies that will allow students to be effective in a globalized work environment, becoming lifelong learners.

MISSION AND GOALS

The mission of the AHORA Program of the School of Professional Studies is to provide an accelerated educational process to adult students, different from traditional methods of teaching, where their professional experience is incorporated in the classroom to create an interactive, challenging and dynamic environment. Faculty members with professional experience, specially prepared to work with adults, are educational facilitators in an innovative way. AHORA is designed exclusively for the adult student, offering a professional environment, as well as integrated, personalized and individualized services.

To fulfill this mission, the School of Professional Studies intends to:

- Promote adults to value continuous learning and increase their contribution to the world of employment
- Facilitate adult students to reach their educational goals
- Create a learning community that facilitates building new knowledge based on and applicable to the professional and personal reality of adults
- Provide integrated student services of quality and easily accessible to adult students
- Recruit and develop personnel that know and effectively meet the needs of the adult student
- Integrate technology into the academic, service and administrative processes
- Develop academic offerings that respond to the present needs of the professional and business world
- Establish a continuous process of feedback and assessment of all the processes and services.

DESCRIPTION OF THE ACCELERATED PROGRAM OF STUDY

The AHORA Program is accelerated because all of its courses are offered in five or eight week sessions. During each session, classes meet once a week for four hours each week. The accelerated methodology is based on a learning process shared between the professor and the student. Each student receives a module, which serves as a study guide and indicate the assignments and activities that must be completed to prepare for class. Our faculty is specially selected and trained to work with adult students through the accelerated mode, facilitating a class environment where learning is built on experiences and the assignments performed by the students. This model of accelerated studies can be applied to the different academic programs of the institution, to new academic programs or any other academic program where adult students participate.

The courses are offered evenings, Saturdays (morning, afternoon, and evening), and Sundays (morning and afternoon). The student may take a maximum of two classes per session, completing six credits every five or eight weeks. Registration is continuous, with courses beginning fourteen times a year, and the possibility of completing up to fifty-four credits in an academic year. This way, the program provides greater flexibility for students, since they can advance their academic progress or design a class program that conforms to the variety of commitments they may have during the year.

ADMISSIONS REQUIREMENTS

To fulfill its mission and goals, the AHORA Program admits only adult students with academic and professional experience that meet the following requirements:

- ☐ 23 years of age or older
- ☐ 3 years of work experience
- ☐ 24 credits of academic work at the postsecondary level approved or attempted

GRADUATION REQUIREMENTS

All professional and major courses must be approved with a minimum final grade of **“C”** or **with the required grade point average in the major courses as required by the school that graduates the student. Detailed information about these programs is available in the section of the school of this catalog.** Practicum courses must be approved with a minimum of a **“B”**.

Graduation Requirements of all Teacher Education Programs

They must have satisfactorily completed the prescribed number of credits with a grade point average of 3.00 (B) or higher and for the major component is 3.0.

FACULTY

Rubio Negrón, Esther, Nova Southeastern University
Assistant Professor
EdD, Distance Education

Zayas-Seijo, Luis, Universidad de Puerto Rico, Rio Piedras Campus
Instructor
MA, Political Sciences

The School of Professional Studies' (SPS) faculty is specially selected through a process that certifies that they have the capacity to effectively facilitate learning in accelerated studies program. Over 1,200 professionals have been certified through this process. Faculty members have professional experience with the trends and practices of their field and have, at least, a master degree in the subject matter. The SPS has a well designed and implemented a Professional Development Faculty Plan. Faculty members received at least 20 contacts hours of professional development. Some faculty members need to be certified as Instructional Module Specialist in order to develop instructional modules. The AHORA Program is for professionals, faculty members, except for the two regular professors, are all part-time instructors that must have significant professional experience with the trends and practices of their field.

COURSE MODULES

Students receive a module one to two weeks prior to the start of every course. This module serves as a content and study-planning guide that complements the regular course textbook and materials.

Each module includes the course description and objectives, textbook and materials reference, evaluation guidelines and expectations. It also divides the course content into weekly workshops. Each workshop has its specific objectives and recommended activities to meet those objectives. It also specifies the assignments that students must do prior to every workshop. These assignments include readings, exercises, case studies and projects that prepare students for each workshop. The modules are given out and are available online prior to the first week of class-free of charge-because the student must complete a series of assignments before the first workshop. Thus, the modules structure and combine independent work outside of class by the students with guided, objectives-based in-class activities. Students average a minimum of ten hours a week of outside work, depending on the course and weekly objectives.

The faculty prepares modules after receiving specialized training on module development. In order to prepare modules, faculty must be certified as Module Developer. This thirty-two hour certification includes workshops in Constructivism, Use of Constructivist Techniques in the Classroom, Internet Resources and Search, Instructional Design, Blackboard I and II and Assessment I and II.

ASSESSMENT

The School of Professional Studies has a comprehensive Assessment Plan focuses on assessment of student learning, program effectiveness, and the student satisfaction with programs, services, and the learning environment. SPS uses the results to improve teaching, learning, and services. The plan includes school-wide assessment through the following activities: student portfolio assessment; midpoint/capstone assessment; end-of-course student evaluation; student representative meetings; and continuous assessment of program activities. Assessment activities are focused on a mission statement, unit level goals that are aligned with institutional goals, objectives, and assessment procedures.

ADMINISTRATION AND STAFF

The administrative team of the School of Professional Studies is composed of a Dean, Associate Dean for Academic Affairs, Associate Dean at Universidad del Este, Counselor, Director of Faculty, Director of Curriculum, Director of Integrated Services, Director of Administration, Director of Students Affairs, Assessment Director and a Retention Assistant Director.

- ☐ Assistant Vice President/Dean: Mildred Rivera, CQIA, MBA in Management, Universidad Metropolitana
- ☐ Associate Dean for Academic Affairs: Keila Roche León, MEd Special Education, Universidad del Turabo
- ☐ Associate Dean, at Universidad del Este: Emmanuel Hernández Agosto, DBA in Management, Universidad del Turabo
- ☐ Director of Curriculum: Johanna Vivoni Suárez, MEd Curriculum in English, Universidad de Puerto Rico

- ❑ Director of Faculty: Viviana Barrabia Terrero, MEd Educational Administration and Supervision, Universidad Metropolitana
- ❑ Director of Integrated Services: Martha Sergio Machuca, MBA in Management, Universidad Metropolitana
- ❑ Director of Administration: Deborah Marín, BBA in Management, Universidad Metropolitana
- ❑ Director of Students Affairs: Amneris Soto Soto, MEd Counselor , University of Phoenix
- ❑ Assessment Director: Brenda Burgos, MEd Educational Administration and Supervision, Universidad Metropolitana
- ❑ Retention Assistant Director: José Luis Rivera Rivera, MBA Marketing, Universidad Metropolitana
- ❑ Counselor: Gloria M. Martínez Medina MA, CPL, Universidad del Este

The AHORA Program also has an Integrated Services Coordinator on the campus and at each University Center.

INTEGRATED SERVICES

The service offered is characterized for being personalized and individual, where the student and the program representative together go through the steps from admission to registration, according to the particularity of each student. Due to the integration of the different student services, students can process their admission, preliminary validation of transfer credit for their courses, receive orientation and apply for financial aid, receive personalized academic advising, and complete registration in the offices of the AHORA Program. The AHORA Program personnel also offer orientation about other services available and serve as a liaison to other offices at the Universidad del Este.

CREDIT FOR EXPERIENCE

The School of Professional Studies recognizes that not all knowledge is acquired in a classroom. The work place is also a learning center; knowledge obtained through experience can be evaluated and validated as university credits.

Students that have extensive knowledge of the content of a course in their program of studies may obtain credit by passing **challenge exams**. They must apply for this at the offices of the AHORA Program. The student will receive a study guide prepared for each exam.

Students may also obtain credits for knowledge acquired through their experience by means of a **portfolio**. The portfolio consists of an essay that shows that the knowledge obtained through work experience is equivalent to the knowledge that would be obtained in a classroom at university level.

To prepare a portfolio, students must have approved six credits in the Program. They must then register in the EXPL 101 course that will allow them to train in techniques for preparing a portfolio. After taking this course, students can apply for credits for those portfolios they prepare. Students must be aware that they must not only evidence the years of experience, but also the knowledge obtained through that experience. The essay is evaluated by faculty specialized in the area, who will determine if the credits can be given based on the evidence presented.

The cost of a course by challenge exam or portfolio is 50% the cost per credit of the course to be approved. Each course can be taken this way only once. If the exam or portfolio is approved, a

grade of “P” (Passed) will be given and the credits corresponding to the class will be awarded. If it is not approved, the student must register in the class.

All procedures related to credit for experience closely follow the Council for Adult Experiential Learning (CAEL) guidelines and standards.

ACADEMIC PROGRAMS OFFERED IN THE ACCELERATED MODALITY ASCRIBED TO OTHER SCHOOLS

Presently, the School of Professional Studies offers accelerated studies for various programs at the Universidad del Este. **Detailed information about these programs is available in the section of the corresponding School of this catalog.**

The offerings of the School of Professional Studies are as follows:

IEN Business School

- ☐ Bachelor in Business Administration with major in:
 - Management
 - Accounting
 - Marketing
 - Computerized Information Systems
- ☐ Bachelor in Office Systems
 - Administrative Secretary

School of Education

- ☐ Bachelor of Arts in Education with major in Early Childhood and Primary Education

School of Social and Human Sciences

- ☐ Bachelor in Social Sciences with major in:
 - Criminal Justice
 - Psychology
- ☐ Bachelor in Social Work

ACADEMIC PROGRAMS ASCRIBED TO THE SCHOOL OF PROFESSIONAL STUDIES ONLY

The following bachelor degree programs **are only offered by the School of Professional Studies** to the students in the accelerated modality. The course descriptions of the major course component of the bachelor programs are included within this section.

- ☐ Bachelor of Science in Public Health with major in Health Management Services
- ☐ Bachelor in Public Affairs with major in Public Administration

PROGRAM DESCRIPTION

Health Services Management

Management in health services has to do with planning, organizing as well as evaluating the services rendered by organizations in the health care industry. The students that graduate from this program will be qualified to occupy jobs in the primary or intermediate management levels in the public or the private sector.

Public Administration

This program is geared towards individuals who are interested in working as a public servant, as well as towards those already in public service, who are interested in continuing to develop in this field. The professional in this field may assume leadership roles in different government agencies. The following specialties will be offered within Public Administration: Human Resources; Labor Relations; Introduction to Public Planning; Municipal Projects Development; Demography in the Development of Municipal Projects; Evaluation and Investigation of the State and Municipal Programs; Federal Funding Systems, and Fiscal Policy in the Public Sector.

A Seminar will analyze special topics and public issues for the public administration, as deemed necessary. During the last semester, the student broadens his/her knowledge by participating in a supervised practicum in a government agency.

Bachelor in Science in Public Health
Major in Health Services Management

117 Credits	Credits
General Education	33
Professional Educational Component	51
Major Courses	30
Electives	3

General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 115-116	Reading, Writing and Oral Communications in Spanish I-II	6
ENGL 115-116	College Reading and Writing I and II	6
MATH 120	Introduction to Algebra	3
HIST 255	Analysis of historic Processes in PR	3
UNRE 101	Concepts and Principles of Research	3
MANA 217	International relationships	3
SOSC 112	Human Being and its environment	3
HUMA 224	Contributions of the Great Civilizations of the World	3

Professional Educational Component		51
COMM 105	Effective Presentations	3
HESC 123	Health and Occupational Security	3
MANA 215	Human Behavior in the Workplace	3
STAT 104	Introduction to Basic Statistics	3
ACCO 110	Quantitative Aspects of Accounting	3
PSYC 225	Social Psychology	3
COMP 110	Introduction to Computer & Software	3
MATH 130	Pre-Calculus I	3
PUHE 101	Introduction to Public Health and Health Education	3
FINA 204	Personal Financial Planning	3
MANA 213	Personnel Administration	3
MANA 210	Management Theory	3
MANA 230	Organizational Behavior	3
ACCO 111	Elementary Accounting I	3
ECON 123	Elementary Principles and Problems of Economics	3
PUHE 201	Biostatistics	3
PUHE 210	Biological Aspects of Human Diseases	3

Major Courses		30
HESM 110	Health Management Services	3
HESM 210	Health Systems and Models	3
HESM 220	Services Planning and Evaluation	3
HESM 310	Health Economics	3
HESM 320	Basic Finances in the Health Industry	3
HESM 330	Legal Aspects in the Health Industry	3
HESM 340	Budgeting for the Health Industry	3
HESM 420	Special Topics in Health Services	3
HESM 431	Seminar in the Health Services Management	3
HESM 430	Practicum in the Health Services Management	3

Electives		3
	Free Elective	3

Bachelor in Public Affairs
Major in Public Administration

117 Credits	Credits
General Education	33
Professional Educational Component	42
Major Courses	36
Electives	6

General Education Component		33
QYLE 110	Development of Values, Attitudes and Adaptation to University Life	3
SPAN 115-116	Reading, Writing and Oral Communications in Spanish I-II	6
ENGL 115-116	College Reading and Writing I and II	6
MATH 120	Introduction to Algebra	3
HIST 255	Analysis of historic Processes in PR	3
UNRE 101	Concepts and Principles of Research	3
MANA 217	International relationships	3
SOSC 112	Human Being and its environment	3
HUMA 224	Contributions of the Great Civilizations of the World	3

Professional Educational Component		42
COMM 105	Effective Presentations	3
HESC 123	Health and Occupational Security	3
MANA 215	Human Behavior in the Workplace	3
STAT 104	Introduction to Basic Statistics	3
PSYC 225	Social Psychology	3
COMP 110	Introduction to Computer & Software	3
FINA 204	Personal Financial Planning	3
MANA 404	Labor Relations	3
SOSC 250	Statistics in Social Sciences	3
POSC 253	Political System of Puerto Rico	3
ECON 253	Economy of Puerto Rico	3
SOSC 258	Research Techniques in Social Sciences	3
SOCI 213	Social Problems of Puerto Rico	3
SOCI 335	Ethics, Morality, and Society	3

Major Courses		36
PUAF 150	Principles of Public Administration	3
PUAF 160	Psychosocial Basis of Organizational Behavior	3
PUAF 210	Administration of Human Resources in Public Service	3

PUAF 260	Introduction to Public Planning	3
PUAF 308	Evaluative research of state and municipal programs	3
PUAF 310	Labor Relations and Collective Bargaining in Public Service	3
PUAF 315	Evaluative Investigation of Municipal Programs	3
PUAF 320	Public Policy and municipal management	3
PUAF 412	Federal Funding System	3
PUAF 415	Fiscal Policy in the Public Sector	3
PUAF 420	Seminar on Special Topics or Issues	3
PUAF 450	Supervised Practice in a Public Agency or Professional Portfolio	3

Electives		6
	Free Elective	3
	Free Elective	3

HEALTH SERVICES MANAGEMENT

3 Credits

HESM 210 **Health Systems & Models**

3 Credits

HESM 220 Services Planning and Evaluation

3 Credits

HESM 310 **Economics of the Health Industry**

3 Credits

HESM 320 **Basic Finance for the Health Industry**

3 Credits

HESM 330 **Legal Aspects in the Health Industry**

3 Credits

325

HESM 340 **Budgeting for the Health Industry**
3 Credits

A study of budget models, including the corresponding programmatic plans, and budget distribution. Emphasis is placed in goals, objectives and measurable results. The course provides for the application of budget models and techniques to health services settings. Prerequisites: MATH 120, HESM 220.

HESM 420 **Special Topics in Health Services**
3 Credits

Analysis and discussion of current issues and trends in the health services industry. Emphasis is placed in critical reading and analysis of case studies. Prerequisites: HESM 110, 220, 340 Concurrent with HESM 430

HESM 430 **Practicum in the Health Services Management**
3 Credits

Application and integration to the workplace of the competencies and the concepts of health services management. The student will have the opportunity to apply the knowledge and skills acquired to a real health services setting under the supervision and guidance of a faculty member and a preceptor. The seminar session will place special attention to topics, issues and aspects relative to health services administration at the elementary and intermediate levels. A research project on a related topic is required. Prerequisites: Concurrent with HESM 420, Approval required.

HESM 431 **Seminar in the Health Services Management**
3 Credits

In this course the students apply the principles of personnel supervision and learn how to manage the problems associated with it in a department of a Health Care institution. It also emphasis in many issues of legal protection to the patient and to the institution that provide the health care services. In this course the student will practice in many departments of the health care institution. The practicum will be supervised by an institutional faculty member together with a certified health care administrator. The seminar sessions will place special attention to topics, issues and aspects related to health services administration. A research project on a related topic is required. Prerequisites: HESM 430.

PUBLIC HEALTH

PUHE 101 **Introduction to Public Health and Health Education**
3 Credits

Introduction to the different conceptions about health, as well as, the basic principles of public health and education. Analysis of the relationships that exist among the four major factors that determine health. Deals with various epidemiologic concepts about health and illness, the natural history of diseases, attention and prevention levels, specific protection measures and health promotion. Emphasis is placed on existing health education models for individual and community intervention.

PUHE 201**Introduction to Biostatistics****3 Credits**

Basic concepts and principles of statistics applied to life and health. Emphasis in the basic techniques used in scientific research, primarily in areas of health education and public health. Analysis of the major statistical concepts such as: the scientific method and the statistics method and others.

PUHE 210**Biological Aspects of Human Diseases****3 Credits**

Develops sound scientific attitudes, the concepts and the basic biological processes of diseases, such as: inflammation, immunological reactions, regeneration and growth control, fibrosis and necrosis using the scientific method as the tool. Pathogenesis is incorporated to the various perspectives of epidemiology and disease control as they relate to public health. Laboratory experiences promote the application of technology to the study of the principal human diseases and agents that cause them.

Prerequisites: PUHE 101

PUBLIC AFFAIRS**PUAF 150****Principles of Public Administration****3 Credits**

An analysis of the principles and theories that set the framework of the public administration. Emphasis is placed on the study of the concepts, models, systems and theoretical, as well as current theories. A major concern will be the guidelines that regulate the administration of municipalities and the interrelationship between these and the central government.

PUAF 160**Psychosocial Basis of Organizational Behavior****3 Credits**

A study of the influence of the social setting and the personality of individuals as manifested in organizational behavior. Human behavior within organizations, including motivation, decision making and problem solving processes. Interpersonal and organizational communication are discussed.

PUAF 210**Administration of Human Resources in Public Service****3 Credits**

A study of the origins and development of the administration of human resources. Public service is viewed as a professional career. Techniques and systems for selection, recruiting, training, classification, organizational environment, disciplinary measures and separation from service are discussed.

PUAF 260**Introduction to Public Planning****3 Credits**

Analysis and discussion of the historical development of the concept of municipalities. Territorial development during Spanish and North American governments in Puerto Rico (1898-1951) is discussed.

PUAF 308**Evaluative research of state and municipal programs****3 Credits**

This course analyzes the research, investigations, reports and statistics of the data compiled by the population census corresponding to the 1990 decade provided by the federal and state government agencies. The data related to health services, education, housing and income of the various

population groups will be studied. The impact of this statistic data will be analyzed for the planning of social projects at the municipal level.

Labor Relations and Collective Bargaining in Public Service

3 Credits

An analysis of the legal dispositions that regulate labor relations and collective bargaining. Labor problems, as well as laws, rules and regulations for recruitment, promotions, disciplinary actions, fringe benefits and retirement are discussed.

Evaluative Investigation of Municipal Programs

3 Credits

The objective of the evaluative investigation is to measure the effects of a given program in comparison to the proposed goals it wanted to achieve for the purpose of making decisions about future programming. Emphasis will be given to the use of evaluative techniques of cost-benefit and clientele analysis. The importance of assessment productivity of governmental programs vis a vis the legal and programmatic dispositions in effect when applying, receiving, and administering assigned funds will also be studied.

Public Policy and municipal management

3 Credits

Scientific analysis of public policy models. These are going to be applied to the concepts and ideas of planning across regional and metropolitan areas. Municipal consortiums, their importance and development will be discussed.

Federal Funding System

3 Credits

A study of the effects of federal funds in the economy of Puerto Rico, including their impact on the formulation of the state and local budgeting process. Guidelines in the use of federal funds are analyzed.

Fiscal Policy in the Public Sector

3 Credits

An analysis of laws and procedures that regulate good public administration including record keeping and budget and property administration. The functions and activities of the comptroller, mainly within municipalities, are reviewed.

Seminar on Special Topics or Issues

3 Credits

An analysis of special topics and public issues, relevant to state and local governments, as they become important for public administration and public service. The contents will be revised and updated periodically for relevancy and pertinence. Press coverage, public demonstrations and opinions, as well as the viewpoints of the private sector, and the constituency are researched.

Supervised Practice in a Public Agency

3 Credits

The course enables the students to obtain experience of public service within a state or local government, as they apply the knowledge and skills acquired in the field. Periodic meetings with the

professor will provide opportunities of discussion of the variety of situations that arise during the practicum.