

# General Catalog

2018 - 2019

#### CATALOG DISCLAIMER

Notwithstanding anything contained in this Catalog, National University College (NUC), reserves the right, wherever it deems advisable: (1) to change or modify its tuition and fees, (2) to withdraw, cancel, reschedule or modify any course, program of study, degree or any requirements in connection with the foregoing, and (3) to change or modify any academic or other policy. Please be advised that due to printing deadlines, information in this Catalog may be updated. Changes in information in this Catalog and new academic regulations will be published each term as applicable. It is the responsibility of each student to ascertain current information that pertains to the individuals program particularly with regard to satisfaction of degree requirements, through frequent reference to registration bulletins, the webpage www.nuc.edu, and by consultation with the student's advisor, the Vice President of Academic Affairs, and other appropriate offices such as the Registrar or Student Financial Aid. In preparing this catalog, efforts are made to provide pertinent and accurate information; however, NUC assumes no responsibility for Catalog errors or omissions.

Information provided on the school website and in the school catalog may be translated to Spanish upon request to Ms. Mileya Berríos, Academic Affairs Coordinator at miberrios@nuc.edu

©Copyright 2018, National University College

GENERAL INFORMATION	
HISTORY	
MISSION	
VISION	
INSTITUTIONAL PRIORITIES	
INSTITUTIONAL LEARNING GOALS	
ACCREDITATION, LICENSING AND ASSOCIATIONS	
Programmatic Accreditations:	
GOVERNANCE	
EXECUTIVE COMMITTEE	
ORGANIZATIONAL CHARTS	
INSTITUTIONAL ORGANIZATIONAL CHART	
ORGANIZATIONAL CHART BAYAMÓN MAIN CAMPUS	
ORGANIZATIONAL CHART ARECIBO BRANCH CAMPUS	
ORGANIZATIONAL CHART RÍO GRANDE BRANCH CAMPUS	
ORGANIZATIONAL CHART PONCE BRANCH CAMPUS	
ORGANIZATIONAL CHART CAGUAS BRANCH CAMPUS	
ORGANIZATIONAL CHART MAYAGÜEZ BRANCH CAMPUS	
NURSING PROGRAM ORGANIZATIONAL CHART	
INSTITUTIONAL ORGANIZATION	
NATIONAL UNIVERSITY COLLEGE ADMINISTRATION	
INSTITUTIONAL ADMINISTRATION	
BAYAMÓN MAIN CAMPUS ADMINISTRATION	
DISTANCE EDUCATION DEPARTMENT ADMINISTRATION	
BAYAMÓN MAIN CAMPUS FACULTY	
DISTANCE EDUCATION DEPARTMENT FACULTY	
ARECIBO BRANCH CAMPUS ADMINISTRATION	
ARECIBO BRANCH CAMPUS FACULTY	
RÍO GRANDE BRANCH CAMPUS ADMINISTRATION	44
RÍO GRANDE BRANCH CAMPUS FACULTY	47
PONCE BRANCH CAMPUS ADMINISTRATION	
PONCE BRANCH CAMPUS FACULTY	
CAGUAS BRANCH CAMPUS ADMINISTRATION	

# TABLE OF CONTENTS

CAGUAS BRANCH CAMPUS FACULTY	59
MAYAGÜEZ BRANCH CAMPUS ADMINISTRATION	61
MAYAGÜEZ BRANCH CAMPUS FACULTY	63
LOCATION AND FACILITIES	64
SPECIAL FACILITIES AND SERVICES AVAILABLE TO DISABLED STUDENTS	64
PARKING	64
HOUSING AND TRANSPORTATION	64
EDUCATIONAL RESOURCES	64
EDUCATIONAL RESOURCES CENTERS	64
STUDENT AFFAIRS	65
SPECIAL PROJECTS	65
COUNSELING AND GUIDANCE	65
STUDENT ASSOCIATIONS	65
PLACEMENT COUNSELING SERVICE	65
STUDENT ACTIVITIES, SPORTS AND STUDENT CENTER	65
OTHER STUDENT SERVICES OFFICES	66
ADMISSIONS	66
ADMISSION REQUIREMENTS FOR UNDERGRADUATE PROGRAMS	66
ADMISSION AND TRANSFER REQUIREMENTS FOR UNDERGRADUATE PROC	GRAMS.68
TRANSFER STUDENTS	69
Undergraduate Transfer Students	69
Undergraduate Transfer Students	
Admission Requirements	69
TRANSFER COURSES PROCEDURE FOR UNDERGRADUATE STUDENTS	69
SPECIAL STUDENTS (NON-DEGREE SEEKING-NDS) POLICY	71
FINANCIAL AID OFFICE	72
Federal Pell Grant Program	72
Federal Direct Loan Program	72
Federal Work Study (FWS) Program	72
Federal Supplemental Educational	73
Opportunity Grant (FSEOG) Program	73
PRCE Programs/State Grants Program	73
RED Técnica Universitaria Scholarship Program Fund	
Creemos en Ti Institutional Grant	
ACADEMIC YEAR	74

CLASS ATTENDANCE	74
Online Division Programs and Courses	74
Attendance Policy	74
CLASS SCHEDULE	75
Credit Hours	75
Out-of-Class Work	75
ADVANCED PLACEMENT	75
NATIONAL EXAMS FOR COLLEGE CREDIT	75
ARMED FORCES CREDIT	76
VETERANS AND OTHER BENEFICIARIES	76
Standards of Academic Progress for VA Students	76
Veteran's Credit for Previous Education or Training	76
STUDENTS GRIEVANCE POLICY	76
INTERNAL GRIEVANCE POLICY	76
NON DISCRIMINATION POLICY	77
REGISTRAR'S OFFICE	78
Registration Process	78
Enrollment Status	78
Student Records	78
Notification / Grades Changes	78
Certifications and Transcripts	78
Change of Address	79
National University College Withdrawal Policy	79
Official Withdrawals	79
Written Confirmation of Future Attendance – Only for Programs Offered in Modules	79
Unofficial Withdrawals	80
Reinstallation after Withdrawal	
Satisfactory Academic Progress Effect of Withdrawals	80
Date of Determination and Withdrawal Date	80
Deadlines	80
Financial Aid	80
Administrative Withdrawals	80
No Show (NS)	81
Transfer Credits (TC)	
Repeating Courses	81

COMPETENCY EXAMS	81
UNIVERSITY ENVIRONMENT SEMINAR	
GRADING SYSTEM	82
RE-ADMISSIONS	82
PROCEDURE FOR RE-ADMISSION	82
ELECTIVES	82
ACADEMIC INTEGRITY POLICY	83
STANDARDS OF SATISFACTORY ACADEMIC PROGRESS (SAP)	83
STANDARDS OF SATISFACTORY ACADEMIC PROGRESS TABLES	87
Associate's Degrees	87
Bachelor's Degrees	88
Master's Degrees	
INSTITUTIONAL POLICY REGARDING WITHDRAWALS, INCOMPLETES, LEAVES OF ABSENCE, AND OTHERS	
Withdrawals	91
Incompletes (I)	91
Program changes	91
Leave of absence (LOA)	91
Repeating a course	91
Re-admission	92
Transfer Credit	92
Pass-No Pass Grades	92
Remedial Courses	92
Grade Points and Grade Point Averages	92
Course Prerequisites	92
AVERAGE LENGTH OF DEGREE PROGRAMS	93
GUARANTEE OF DEGREE COMPLETION IN ACADEMIC PROGRAMS WHICH THE INSTITUTION PROPOSES TO TERMINATE OR PLACE ON MORATORIUM STATUS	93
GRADUATION REQUIREMENTS	93
Graduation with Honors	93
Graduation Ceremony	94
Graduation Requirements Table for Undergraduate Programs	94
FINANCIAL INFORMATION	95
Tuition and Fees – On ground students	95
Tuition and Fees - Online Students	96
Tuition and Fees - Graduate Students (On ground and Online Student)	97

Payment Policy	99
Add/Drop Period	100
Institutional Refund Policy	100
Return of Title IV Funds Policy	101
ADMINISTRATIVE AND ACADEMIC REGULATIONS	. 101
INSTITUTIONAL RULES AND REGULATIONS	102
EXPLANATION OF COURSE NUMBERING SYSTEM	. 102
ACADEMIC OFFERING BY LOCATIONS	. 103
National University College - Bayamón Main Campus	. 103
National University College - Bayamón Main Campus	.104
National University College - Arecibo Branch Campus	. 105
National University College - Río Grande Branch Campus	. 106
National University College - Ponce Branch Campus	. 107
National University College - Caguas Branch Campus	. 108
National University College - Mayagüez Branch Campus	. 109
DISTANCE EDUCATION TECHNICAL REQUIREMENTS INFORMATION	. 110
GRADUATE ACADEMIC PROGRAMS	. 112
MASTER'S DEGREE IN BUSINESS ADMINISTRATION	.113
MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN DIGITAL MARKETING	.114
MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN HUMAN RESOURCES	
MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN PLANNING AND	
STRATEGY	
MASTER'S DEGREE IN EDUCATION IN ASSESSMENT AND EFFECTIVENESS	
MASTER'S DEGREE IN EDUCATION IN CURRICULUM	.118
MASTER'S DEGREE IN EDUCATION WITH MAJOR IN EDUCATIONAL LEADERSHIP	. 119
MASTER'S DEGREE IN SCIENCE IN NURSING IN EDUCATION	. 121
MASTER'S DEGREE IN SCIENCE IN NURSING IN	. 122
MEDICAL-SURGICAL AND ROLE IN EDUCATION <sup>1</sup>	.122
MASTER'S DEGREE PROGRAMS ADMISSION REQUIREMENTS	. 123
GRADUATE TRANSFER STUDENTS	. 123
TRANSFER COURSES PROCEDURE FOR GRADUATE STUDENTS	. 123
Admission and Transfer Requirements Table for Graduate Programs	. 124
GRADUATION REQUIREMENTS	. 125
Graduation Requirements Table for Graduate Programs	125
Graduation Ceremony	. 125

Graduation with Honors	125
STANDARDS OF SATISFACTORY ACADEMIC PROGRESS (SAP)	126
FOR ACADEMIC GRADUATE PROGRAMS	126
FINANCIAL INFORMATION	127
GRADUATE PROGRAMS	129
COURSE DESCRIPTIONS	129
UNDERGRADUATE	140
PROGRAMS	140
ALLIED HEALTH SCIENCES DEPARTMENT	141
ASSOCIATE'S DEGREE IN DENTAL ASSISTANT WITH EXPANDED FUNCTIONS	142
ASSOCIATE'S DEGREE IN APPLIED SCIENCES IN CARDIORESPIRATORY CARE	144
ASSOCIATE'S DEGREE IN APPLIED SCIENCES IN CLINICAL SONOGRAPHY	146
ASSOCIATE'S DEGREE IN APPLIED SCIENCES IN RADIOLOGY TECHNOLOGY	148
ASSOCIATE'S DEGREE IN MEDICAL BILLING AND CODING	150
ASSOCIATE'S DEGREE IN PHARMACY TECHNICIAN	151
ASSOCIATE'S DEGREE IN PHYSICAL THERAPIST ASSISTANT**	153
NURSING DEPARTMENT	155
BACHELOR'S DEGREE IN SCIENCE IN NURSING	156
BACHELOR'S DEGREE IN SCIENCE IN NURSING (RN TO BSN)	158
ASSOCIATE'S DEGREE IN NURSING	160
BUSINESS ADMINISTRATION AND TECHNOLOGY DEPARTMENT	162
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN ACCOUNTING	163
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN BUSINESS INTELLIGENCE	165
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN GENERAL BUSINESS	167
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN HUMAN RESOURCES	169
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN HEALTHCARE MANAGEMENT	171
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN INTERNATION. BUSINESS	
BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN MANAGEMENT	Г.175
BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY	177
BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY WITH MAJOR IN INFORMATION ASSURANCE AND SECURITY	

BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY WITH MAJOR IN NETWORK ADMINISTRATION	181
BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY WITH MAJOR IN SOFTWARE ANALYSIS AND DEVELOPMENT	
BACHELOR'S DEGREE IN NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT	185
BACHELOR'S DEGREE IN OFFICE SYSTEMS ADMINISTRATION	187
ASSOCIATE'S DEGREE IN BUSINESS ADMINISTRATION	189
ASSOCIATE'S DEGREE IN ACCOUNTING	190
ASSOCIATE'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN ENTREPRENEURSHIP	191
ASSOCIATE'S DEGREE IN ELECTRICAL ENGINEERING TECHNOLOGY WITH RENEWABI ENERGY	
ASSOCIATE'S DEGRE IN ELECTRONICS ENGINEERING TECHNOLOGY IN TELECOMMUNICATIONS	194
ASSOCIATE'S DEGREE IN NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT	196
ASSOCIATE'S DEGREE IN INSTRUMENTATION	197
ASSOCIATE'S DEGREE IN OFFICE SYSTEMS WITH MAJOR IN MEDICAL SECRETARY	199
EDUCATION DEPARTMENT	201
BACHELOR'S DEGREE IN EDUCATION WITH MAJOR IN HEALTH EDUCATION	202
BACHELOR'S DEGREE IN EDUCATION WITH MAJOR IN PRESCHOOL EDUCATION	204
GENERAL EDUCATION DEPARTMENT	206
BACHELOR'S DEGREE IN CRIMINAL JUSTICE	208
BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN CYBER CRIMES	210
BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN FORENSIC INVESTIGATION	212
BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN HOMELAND SECURITY	214
BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN HUMAN SERVICES	216
ASSOCIATE'S DEGREE IN CRIMINAL JUSTICE	218
UNDERGRADUATE	219
COURSE DESCRIPTIONS	219
ACADEMIC CALENDARS	293
CERTIFICATION	294

# **GENERAL INFORMATION**

#### HISTORY

National University College (NUC) is a private institution of higher education dedicated mainly to offer associate degree programs in the health, business and technology fields as well as bachelor's degree programs in Education, Nursing, Business and Office Systems, among others. The Institution also offers several Master's Degree Programs. It was incorporated under the laws of the Commonwealth of Puerto Rico on September 8, 1982, file number 52,584, under the name of National College of Business and Technology. It began its educational programs in Bayamón in July 1982. In 1984 it opened the Arecibo Branch Campus in Arecibo, Puerto Rico, and in 2003 the Río Grande Branch Campus in Río Grande, Puerto Rico. In September 2007 NUC opened a learning site at San Cristóbal Hospital in Ponce, Puerto Rico. In July 10, 2009 it was converted to the Ponce Branch Campus. In January 2011, NUC opened an additional location in Caguas, Puerto Rico. In June 2014, it was reclassificated to the Caguas Branch Campus.

A Steering Committee organized by Mr. Jesús Siverio Orta, Esq., in 1980, worked on the planning and organization of the institution. On April 1st, 1982, National University College began its educational operations in Bayamón and, in June of the same year, the Committee acquired the Polytechnical Community College. At the same time, the Institution obtained from the Puerto Rico Department of Education its operating license with the same rights, privileges and obligations as the predecessor Institution.

The initial programs offered were Pharmacy Assistant and Secretarial Sciences. The first group of students from these two programs graduated in July, 1983.

National University College initiated its educational program with four classrooms on the third floor of the Ramos Building located in the city of Bayamón. To complement the educational programs offered at that time, the facilities also included a Typing Laboratory, Pharmacy Laboratory and a Library.

In a short period of time the Institution won the confidence and the respect of the Bayamón and Arecibo communities which facilitated its accelerated and constant development.

The National University College buildings at each of the locations are easily accessible from different areas in Bayamón, Arecibo, Río Grande, Ponce and Caguas, Puerto Rico as from adjacent towns. Each location is at a short distance from the city's main roads. This is in accordance with the Institution's objective of ensuring educational services are accessible for the socioeconomically disadvantaged population within our society. Each site's strategic location and the ease with which transportation is available offers the students a real alternative to study.

The combined facilities for educational development consist of appropriate and sufficient classrooms and modern laboratories for computer instruction, electronic technology, dental assistant, pharmacy technician, nursing, and multidisciplinary laboratories of science which offer service to the various health and sciences courses. The Library has a combined area that includes a computer station with various computers for use by students as well as a multiple purposes room. In addition to the habitual paper bound collection it also includes electronic data bases, video collection, periodicals, Internet, and other resources which are continuously being developed and updated. It also has adequate offices for administrative personnel as well as independent study facilities for students. The facilities and programs vary according to each location.

#### MISSION

At National University College our goal is to develop educated and enterprising individuals, competent in their professional field, with an attitude to continue learning throughout their whole life, proud of belonging to National and capable of inserting themselves successfully in the labor market to contribute effectively to the economic, social and political progress of their environment.

#### VISION

To be recognized as a university community where students receive an education of excellence which promotes their continuous, integral development through innovative and diverse learning modalities.

#### **INSTITUTIONAL PRIORITIES**

- 1. Academic Quality reaffirms the importance of academic quality through systematic assessment and the continuous improvement of the institution's academic offerings. Also, to provide academic offerings based on learning outcomes and the personal values directly tied to the labor market. Student services complement the learning process, contribute to the development of student's experiences and NUC's focus on service demonstrates its commitment to quality student services that support the teaching-learning process and foster educational excellence.
- 2. Service, Development and Student Experience Provide a college experience centered on student experiences, development and services, which prepares graduates to lead and excel in the local or global geographic area where they decide to live.
- 3. Organizational Development Fostering a service-oriented organizational culture of the highest quality to all customers. It is characterized by an attitude towards collaboration, participation and a sense of commitment from all participants. Toward this end, all administrative staff that occupy key positions and faculty comply with all the competency and performance requirements.
- 4. Strengthening and Positioning of the NUC Brand The NUC brand (institutional identity) must be recognized in the market as one of the top private universities in PR, FL and through distance education.
- 5. Financial Strength Achievement of key financial metrics levels established in each year's annual budget.

#### INSTITUTIONAL LEARNING GOALS

National University College supports its student body and prepares them for the effective achievement of their academic goals. NUC identifies the following basic competencies that are necessary to build a solid foundation for the academic experience at the non-degree, under graduate as well as graduate levels and assures that the students develop the necessary skills, knowledge and attitudes for future employment, to continue graduate studies, responsible citizenship, and a commitment for continuous learning throughout their whole life. These competencies are aligned with the mission, values, and institutional goals, as well as with all the academic offerings of National University College.

Among the expected outcomes for student learning, are the following basic competencies:

#### 1. Professional competency and technical skills

Capacity to apply creatively the knowledge and skills of their respective field of studies and inserting themselves successfully in the labor market, contributing effectively to the economic, social and political progress of their environment.

#### 2. Communication skills

Capacity to express and exchange ideas effectively through listening, speaking, reading, writing and other appropriate modes of interpersonal expression and workforce vocabulary.

#### 3. Critical and Creative Thinking

Capacity to analyze, apply critically and creatively their professional or technical competencies in the management of complex situations, decision making, problem solving, understanding, adapting, and generating changes, while at the same time managing them effectively.

#### 4. Logical reasoning

Capacity to utilize quantitative and qualitative information in logical the decision making and problem solving process.

#### 5. Information Literacy and Technological Competency

Capacity to apply in an ethical and critical manner the knowledge and skills related to the development and processes in information and technological environments in an effective and efficient way, considering the personal, professional, technical, and citizen dimensions.

#### 6. Ethical and moral behavior

Capacity to reason ethically and morally when facing complex situations, making informed decisions, and solving problems, showing respect towards laws and persons, intellectual honesty, social responsibility, ethical judgment, respect to life and environment conservation.

#### 7. Respect to diversity

Capacity to recognize and value the richness of human experiences, understanding the multicultural, gender, political, and other social differences, the needs of people with functional diversity and the capacities that enrich living together respecting the human experience in a globalized world.

#### ACCREDITATION, LICENSING AND ASSOCIATIONS

National University College is licensed by the Puerto Rico Council of Education to offer Master's, Bachelor's and Associate's Degrees. The Institution is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267)284-5000. The Middle States Commission on Higher Education is a regional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The Institution is certified by the United States Department of Education as an eligible institution to administer Title IV federal funds. The Institution is also approved for veterans training.

The Institution is a member of the Puerto Rico Association of Private Education, the Career Education Colleges and Universities (CECU) and the College Board. Membership is also maintained in the National

Association of Student Financial Aid Administrators, the Puerto Rico Association of Student Financial Aid Administrators, and the American Association of Collegiate Registrars and Admissions Officers.

Enrolled and prospective students interested in filing a complaint with the institution's accreditor and/or its State licensing entity should first reference the institution's internal grievance policy on page 76 of the institutional catalog located at www.nuc.edu for information regarding the procedure to file a complaint. Information is provided with regard to filing an internal grievance at NUC. If after having filed an internal grievance with NUC the student is not satisfied with the determination made, the student may file a complaint with the Puerto Council of Education (PRCE) as stipulated in the PRCE's regulations, Chapter VII, Article 53. The offices of the PRCE are located at 268 Ponce de Leon Avenue, Hato Rey Center Building, 15th Floor, Hato Rey, PR 00918. In addition, the student can file a complaint with the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267) 284-5000.

Please reference the Internal Grievance Policy section of the catalog (page 76) available at www.nuc.edu/index.php/conocenos/catalogo for information about how to file complaints or make other contact with applicable regulatory agencies. National University College is not regulated in Texas under Chapter 132 of the Texas Education Code.

Residents of South Carolina may access a complaint form through the web site of the Commission <u>http://www.che.sc.gov/CHE\_Docs/AcademicAffairs/License/Complaint\_procedures\_and\_form.pdf.</u>

The form must be completed, signed, and notarized. It may be submitted with the required documentation to <u>reshleman@che.sc.gov</u> or sent to Postsecondary Institution Licensing, South Carolina Commission on Higher Education, 1122 Lady Street, Suite 300, Columbia, SC 29201.

National University College (NUC) is registered with the Maryland Higher Education Commission (MHEC) to enroll Maryland students in its fully online distance education programs. Residents of Maryland should reference the Internal Grievance policy section of the NUC catalog available on the institution's website for information about how to file a complaint.

Online programs are exempt from authorization under AS 14.48 and 20 AAC 17.015 because the programs are online and do not have a physical presence in the State of Alaska.

#### **Programmatic Accreditations:**

"National University College's nursing education program (Bachelor's Degree in Science in Nursing; Associate's Degree in Nursing) is accredited by the Accreditation Commission for Education in Nursing" (ACEN), 3343 Peachtree Road NE, Suite 850 Atlanta, GA. 30326;(404) 975-5000.

The Master's Degree in Education with major in Educational Leadership is accredited by the Teacher Education Accreditation Council (TEAC) / Council for the Accreditation of Educator Preparation (CAEP). http://www.teac.org/membership/teac-members/?Sort=2&Ref=2

The Physical Therapist Assistant Program at National University College's Bayamon Campus is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111North Fairfax Street Alejandria, Virginia 22314; telephone: 703-706-3245; email: <u>accreditation@apta.org</u>; website: <u>http://www.capteonline.org</u>. If needing to contact the program / institution directly, please call 787-780-5134 Ext. 4111 or email: <u>mtorres2@nuc.edu</u>.

#### GOVERNANCE

The governance of National University College is carried out by a Board of Directors and a Board of Trustees. These boards have the primary responsibility for ensuring that the Institution achieves its mission and purpose and maintains its academic integrity. Currently, these Boards are composed of the following members:

#### **BOARD OF DIRECTORS (CORPORATE BOARD)**

Michael Bannett	·····	Director
Kevin Malone		Director
Scott VanHoy		Director

#### **BOARD OF TRUSTEES**

Alberto Estrella, Esq.	 Chairman
Antonio Ginorio, CPA	 Member
Dr. Gloria E. Baquero	 Member
Dr. Carmen Z. Claudio	 Member
Dr. Sylvette Rivera	 Member
Minerva Rivera, Esq	 Member
Marcos Vidal	 Member
Josué Medina	 Member

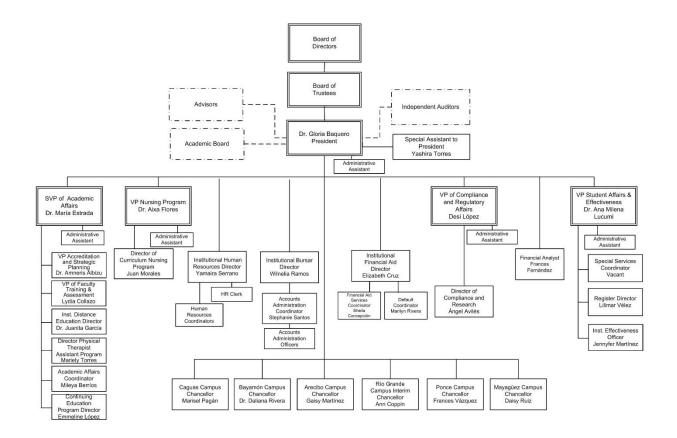
At the same time, the day to day operations are in charge of an Executive Committee of the Institution which is composed of the following members:

#### **EXECUTIVE COMMITTEE**

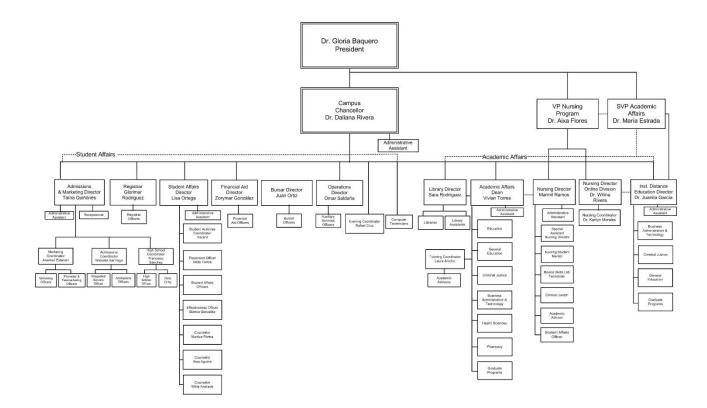
Gloria E. Baquero, Ed.D.		President	
Josué Medina		Senior Vice President of Finance, NUC-Corporate	
Konrad Wittenberg		Facilities Management, NUC-Corporate	
Desi López		Vice President of Compliance & Regulatory Affairs	
María Estrada, Ed.D.		Senior Vice President of Academic Affairs	
Ana Milena Lucumi, Ed.D.		Vice President of Student Affairs and Effectiveness	
Aixa Flores, Ed.D.		Vice President of the Nursing Program	
Daliana Rivera, DBA		Chancellor of Bayamón Campus	
Gaysi Martínez		Chancellor of Arecibo Campus	
Ann Coppin		Interim Chancellor of Río Grande Campus	
Frances Vázquez		Chancellor of Ponce Campus	
Marisel Pagán		Chancellor of Caguas Campus	
Daisy Ruiz		Chancellor of Mayaguez Campus	
Ángel Avilés		Director of Compliance and Research	
Yelitza Gutierrez		Senior Marketing Manager, NUC-Corporate	

# **ORGANIZATIONAL CHARTS**

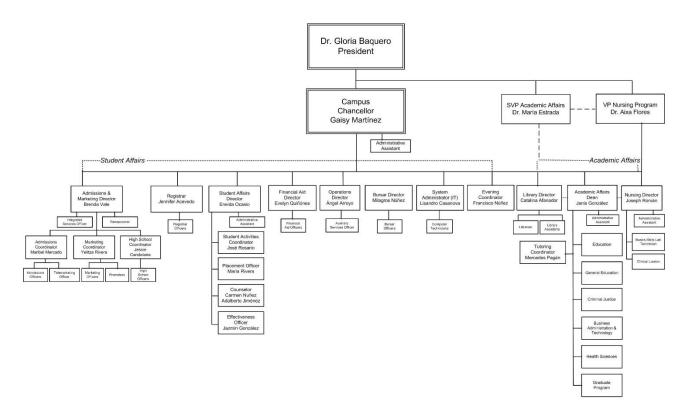
#### INSTITUTIONAL ORGANIZATIONAL CHART



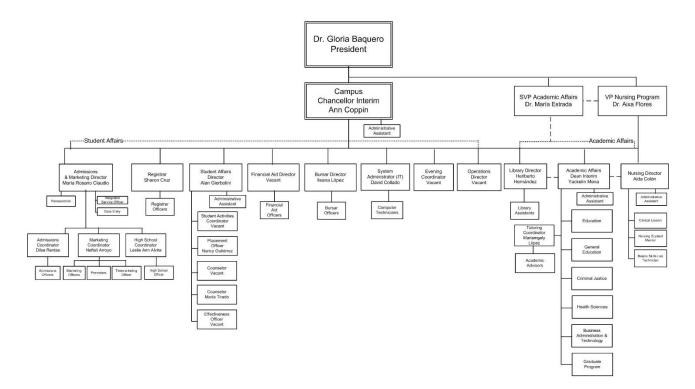
# ORGANIZATIONAL CHART BAYAMÓN MAIN CAMPUS



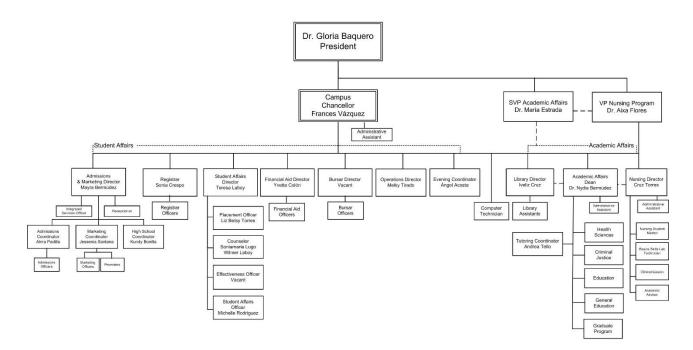
#### ORGANIZATIONAL CHART ARECIBO BRANCH CAMPUS



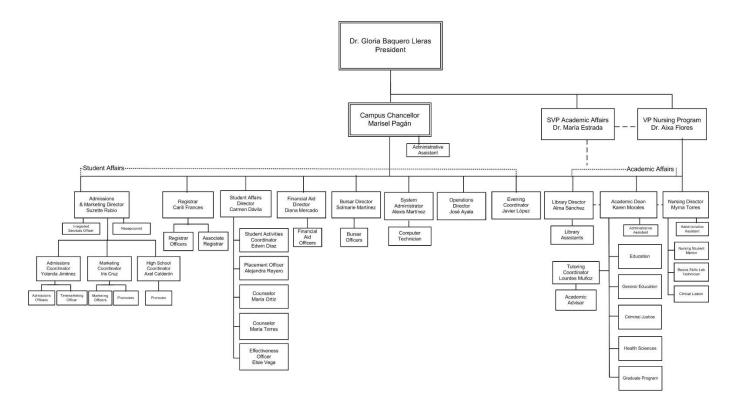
ORGANIZATIONAL CHART RÍO GRANDE BRANCH CAMPUS



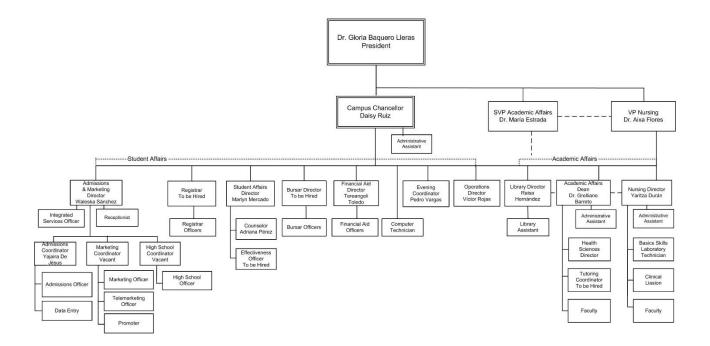
#### ORGANIZATIONAL CHART PONCE BRANCH CAMPUS



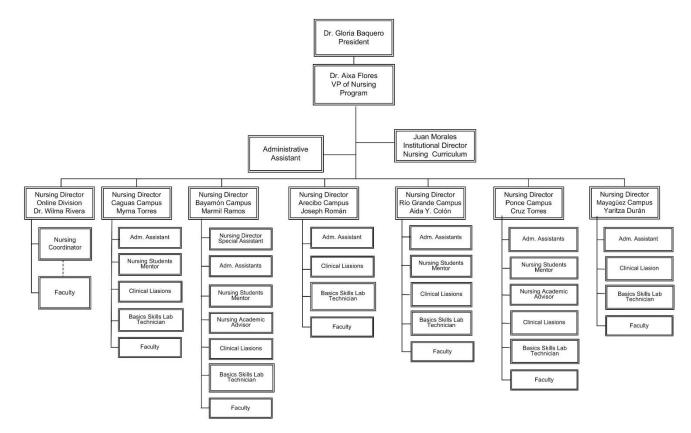
#### ORGANIZATIONAL CHART CAGUAS BRANCH CAMPUS



### ORGANIZATIONAL CHART MAYAGÜEZ BRANCH CAMPUS



#### NURSING PROGRAM ORGANIZATIONAL CHART



INSTITUTIONAL ORGANIZATION

#### NATIONAL UNIVERSITY COLLEGE ADMINISTRATION

<b>BAQUERO-LLERAS, GLORIA E.</b> Ed.D., 1997, University of Puerto Rico MA, 1978, University of Puerto Rico BA, 1969, University of Puerto Rico	 PRESIDENT
<b>LÓPEZ-PADILLA, DESI</b> MA, 1974, Montclair State College, New Jersey BA, 1973, City College of New York	 VP OF COMPLIANCE & REGULATORY AFFAIRS
<b>ESTRADA-PEÑA, MARÍA</b> Ed.D., 2005, Interamerican University of Puerto Rico MAE, 1988, University of Phoenix BAE, 1974, University of Puerto Rico	 SVP OF ACADEMIC AFFAIRS
<b>FLORES-PÉREZ, AIXA M.</b> Ed.D., 2016, Interamerican University of Puerto Rico MSN, 1998, University of Puerto Rico BSN, 1983, University of Puerto Rico AD, 1981, University of Puerto Rico	 VP OF THE NURSING PROGRAM
<b>LUCUMI-OROSTEGUI, ANA MILENA</b> Ed.D., 2017, Nova Southeastern University MAE, 1996, Sacred Heart University BS, 1992, Universidad del Valle	 VP OF STUDENT AFFAIRS AND EFFECTIVENESS
AVILÉS-CASTAÑÓN, ÁNGEL MS, 1994, Carlos Albizu University MA, 1986, Pontifical Catholic University of PR BA, 1984, Pontifical Catholic University of PR	 DIRECTOR OF COMPLIANCE AND RESEARCH

#### INSTITUTIONAL ADMINISTRATION

<b>ALBIZU-RIVERA, ANNERIS</b> Ed.D. 2008, Interamerican University of Puerto Rico MA, 1997, Interamerican University of Puerto Rico BA, 1993, Interamerican University of Puerto Rico	VP OF ACCREDITATION AND STRATEGIC PLANNING
ALVARADO-RIVERA, SHEILA BA, 1994, Interamericana de Puerto Rico	INSTITUTIONAL COORDINATOR OF INTERAGENCY LIAISON
<b>BERRÍOS-AGOSTO, MILEYA</b> MEd., 2015, National University College BEd, 2003, National University College	 ACADEMIC AFFAIRS COORDINATOR
<b>COLLAZO-BENCÓN, LYDIA M.</b> MA, 1997, Interamerican University of Puerto Rico BA, 1987, University of Puerto Rico	 VP OF FACULTY TRAINING & ASSESSMENT
<b>CONCEPCIÓN-MARTÍNEZ, SHEILA</b> BA, 2004, University of Puerto Rico	 FINANCIAL AID SERVICES COORDINATOR
<b>CRUZ-RIVERA, ELIZABETH</b> BBA, 2015, National University College	 INSTITUTIONAL FINANCIAL AID DIRECTOR
<b>DÁVILA-ORTEGA, SONIA</b> BA, 1994, Caribbean University	 ADMINISTRATIVE ASSISTANT
FERNÁNDEZ-TORRES, FRANCES MBA, 2008, University of Phoenix BBA, 2004, University of Puerto Rico	 FINANCIAL ANALYST
FIGUEROA-VILLANUEVA, MIZAI BOS, 2016, University of Puerto Rico	 HUMAN RESOURCES CLERK
<b>GONZÁLEZ-FLORES, LIZBETTE</b> BA, 2013, Turabo University	 ACCOUNTS ADMINISTRATION OFFICE
GONZÁLEZ-MONTES, AZARIA BBA, 2012, National University College	 ACCOUNTS ADMINISTRATION OFFICER
HALLMAN-NAVARRO, VANESSA BBA, 2017, National University College	 ADMINISTRATIVE ASSISTANT
LÓPEZ-GARCÍA, YAILEEN MBA, 2018, National University College BOS, 2016, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
<b>LÓPEZ-SANTIAGO, EMMELINE K.</b> MBA, 2007, University of Phoenix BA, 2005, University of Puerto Rico	 CONTINUING EDUCATION INSTITUTIONAL DIRECTOR
MARRERO-HOYOS, JUAN MBA, 2008, University of Phoenix BBA, 2004, University of Puerto Rico	 ACCOUNTS ADMINISTRATION OFFICER

MARTÍNEZ-MELÉNDEZ, JENNYFER BA, 2006, National University College	 .INSTITUTIONAL EFFECTIVENESS OFFICER
MORALES-MERCADO, JUAN MSN, 2000, University of Puerto Rico BSN, 1987, University of Puerto Rico ASN, 1985, University of Puerto Rico	 NURSING PROGRAMS INSTITUTIONAL CURRICULUM DIRECTOR
<b>ORTIZ-NIEVES, SHAYMET Z.</b> BA, 2008, National University College	 HUMAN RESOURCES COORDINATOR
<b>PÉREZ-FONTÁNEZ, JOYSELLIE</b> BA, 2002, Universidad del Turabo	 ADMINISTRATIVE ASSISTANT
RAMOS-TORRES, WILNELIA BBA, 2015, National University College	 INSTITUTIONAL BURSAR DIRECTOR
<b>RIVERA-CASTRO, MARILYN</b> MBA, 2015, National University College BBA, 2004, Interamerican University of Puerto Rico	 DEFAULT PREVENTION COORDINATOR
<b>RIVERA-ORTIZ, DEBORA</b> BOS, 2011, National University College	 HUMAN RESOURCES COORDINATOR
RIVERA-VALENTÍN, MARIE D.	 ADMINISTRATIVE ASSISTANT
ROSARIO ZAYAS-MARIBEL	 CONTINUING EDUCATION COORDINATOR
SANTOS-MARRERO, STEPHANIE BBA, 2010, University of Puerto Rico	 ACCOUNT ADMINISTRATION COORDINATOR
<b>SERRANO-PEÑA, YAMAIRA</b> MBA, 2003, Interamerican University of Puerto Rico BA, 2000, Interamerican University of Puerto Rico	 INSTITUTIONAL HUMAN RESOURCES DIRECTOR
<b>TORRES ABREU, YASHIRA</b> MA, 2011, Universidad del Sagrado Corazón BA, 2007, University of Puerto Rico	 SPECIAL ASSISTANT TO PRESIDENT
<b>TORRES-MELÉNDEZ, MARIELY</b> MS, 2009, Ponce School of Medicine BA, 2005, Interamerican University of Puerto Rico PTA, 2002, University of Puerto Rico	 INSTITUTIONAL PHYSICAL THERAPY DIRECTOR
<b>TORRES-MORALES, VANESSA E.</b> BS, 2003, Interamerican University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
VÁZQUEZ-SANTIAGO, ELIUD MBA, 2015, National University College BA, 2007, Caribbean University	 INSTITUTIONAL BUSINESS REPORTING DIRECTOR
<b>VELÁZQUEZ-DE JESÚS, ANA</b> MBA, 2008, Universidad del Turabo BA, 1989, Interamerican University of Puerto Rico	 HUMAN RESOURCES COORDINATOR
<b>VÉLEZ-PUCHALES, LILIMAR</b> MBA, 2006, University of Phoenix BS, 2004, University of Puerto Rico	INSTITUTIONAL ADMISSIONS & REGISTER DIRECTOR

# BAYAMÓN MAIN CAMPUS ADMINISTRATION

AGUIRRE-ESQUILÍN, AIXA M.Ed., 2012, American University MA, 2006, University of Puerto Rico BA, 1998, University of Puerto Rico	 COUNSELOR
<b>AMAYA-MARTÍNEZ, KARLA M.</b> M.Ed., 2013, Universidad del Turabo BEd., 2005, National University College	 LIBRARIAN
ANDRADE-PIZARRO, WILLIE MA, 2009, University of Puerto Rico BA, 2004, University of Puerto Rico	 COUNSELOR
AROCHO-DE JESÚS, LAURA BAE, 2008, University of Puerto Rico	 TUTORING COORDINATOR
AYALA-LOZADA, ELBA	 ADMINISTRATIVE ASSISTANT
BELTRÁN-NIEVES, MARELYN	 ADMISSIONS OFFICER
<b>BERRIOS-TORRES, ORLANDO</b> BA, 2018, National University College	DATA ENTRY
<b>BURGOS-PANTOJAS, MARÍA DE L.</b> BBA, 2018, National University College	 REGISTRAR OFFICER
<b>CORE-QUIÑONES, LISA</b> BOS, 2014, National University College	 FINANCIAL AID OFFICER
<b>CORREDOR-JURADO, JESÚS</b> BA, 2016, Columbia Central University	 STUDENT AFFAIRS OFFICER
COSME-ROSARIO, DIEGO	 MARKETING OFFICER
<b>CRUZ-PAGÁN, ALICIA</b> BSN, 2015, Interamerican University of Puerto Rico	 TELEMARKETING OFFICER
<b>CRUZ-LÓPEZ, LUIS</b> BS, 2004, Interamerican University of Puerto Rico	 ACADEMIC ADVISOR
<b>CRUZ-PERALES, RAFAEL</b> MED, 2012, Universidad Metropolitana BA, 2010, Interamerican University of Puerto Rico	 EVENING COORDINATOR
<b>DÍAZ-GUZMÁN, IBELIMARY</b> BA, 2004, Interamerican University of Puerto Rico	 FINANCIAL AID OFFICER
<b>DÍAZ-VILLANUEVA, KRYSTAL</b> BA, 2016, Interamerican University of Puerto Rico	 TELEMARKETING OFFICER
<b>ESTEBAN-ROSADO, ANAMARI</b> BA, 2015, Universidad Metropolitana	 MARKETING COORDINATOR

ESTREMERA-CRESPO, WANDA	 BURSAR OFFICER
FIGUEROA-NIEVES, YAZMÍN BSN, 2015, National University College	 BASICS SKILLS LABORATORY TECHNICIAN
GARCÍA-GUZMÁN, RUTH BA, 2011, University of Puerto Rico	 ADMISSIONS OFFICER
GONZÁLEZ-RODRÍGUEZ, BLANCA BBA, 2013, National University College	 EFFECTIVENESS OFFICER
GONZÁLEZ-ROMÁN, MARIADEL BSS, 1993, American University	 ADMINISTRATIVE ASSISTANT
GONZÁLEZ-ZAMBRANA, ZORYMAR BBA, 2006, University of Puerto Rico	 FINANCIAL AID DIRECTOR
<b>GUERRIDO-PRADO, GILSETTE</b> BBA, 2015, American University	 REGISTRAR OFFICER
LEÓN-CUEVAS, CARLOS	 INTEGRATED SERVICES OFFICER
MALDONADO-GONZÁLEZ, YARITZA	 BURSAR OFFICER
MÁRQUES-WAREN, MÓNICA BBA, 2010, Interamerican University of Puerto Rico	 REGISTRAR OFFICER
MARRERO-ORTIZ, LIZMARIE MBA, Universidad Central de Bayamón MBA, Universidad Central de Bayamón BA, 2008, Interamerican University of Puerto Rico	 NURSING DIRECTOR ASSISTANT
MATOS-COTTO, LUIS A.	 ADMISSIONS OFFICER
MELÉNDEZ-AYALA, ARELYS	 ADMINISTRATIVE ASSISTANT
MORALES-ARCE, REBECA BA, 1996, University of Puerto Rico	 ACADEMIC ADVISOR
NIEVES-NEGRÓN, WILBERTO	 AUXILIARY SERVICES OFFICER
OLIVERAS-CONCEPCIÓN, LETIAN	 TELEMARKETING OFFICER
<b>ORTEGA-CRUZ, LISA M.</b> MBA, 2015, National University College BBA, 1991, University of Puerto Rico	 STUDENTS AFFAIRS DIRECTOR
<b>ORTÍZ-BELTRÁN, JUAN</b> MBA, 2014, Universidad del Turabo BA, 2012, University of Puerto Rico	 BURSAR DIRECTOR
<b>ORTIZ-NIEVES, LUIS A.</b> BA, 2013, National University College	 COMPUTER TECHNICIAN
<b>ORTIZ-ROSA, IVETTE</b> BS, 2004, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT

<b>OTERO-LÓPEZ, YELIZA</b> BBA, 2002, Interamerican University of Puerto Rico		BURSAR OFFICER
PAGÁN-CRUZ, WILMARYS		ADMINISTRATIVE ASSISTANT
<b>PEÑALBERT-ROSA, JOHEZEL</b> BBA, 2016, National University College		COMPUTER TECHNICIAN
<b>PÉREZ-SANTIAGO, MARÍA J.</b> MBA, 2008, Universidad Metropolitana BBA, 2004, National University College		ADMINISTRATIVE ASSISTANT
QUILES-RODRÍGUEZ-ILIAMAR		RECEPTIONIST
<b>QUIÑONES-ORTIZ, TAINA</b> MBA, 2013, Universidad Metropolitana BBA, 2011, Universidad Metropolitana		ADMISSIONS AND MARKETING DIRECTOR
RÍOS-GONZÁLEZ, ILEANA J.		ADMINISTRATIVE ASSISTANT
<b>RIVERA, YOMAYRA</b> BBA, 2014, National University College		ADMINISTRATIVE ASSISTANT
<b>RIVERA-CANCEL, MARITZA</b> MC, 1997, Phoenix University BA, 1979, University of Puerto Rico		COUNSELOR
<b>RIVERA-DÍAZ, LYMARIS</b> BBA, 2014, National University College		MARKETING OFFICER
<b>RIVERA-LAMBOY ELIANA</b> BA, 2005, Interamerican University of Puerto Rico		ADMINISTRATIVE ASSISTANT
<b>RIVERA-MORALES, JEAN CARLOS</b> MBA, 2016, National University College BBA, 2013, National University College		SYSTEMS ADMINISTRATOR
<b>RIVERA-RIVERA, DALIANA</b> DBA, 2018, Pontifical Catholic University of Puerto R MBA, 2002, Universidad Central de Bayamón BBA, 1991, University of Puerto Rico	ico	CHANCELLOR
RIVERA-RODRÍGUEZ, ANABEL		PROMOTER
RIVERA-RODRÍGUEZ, CARLOS		FINANCIAL AID OFFICER
<b>RIVERA-RODRÍGUEZ, JOSÉ</b> BBA, 1994, Universidad Central de Bayamón		BURSAR OFFICER
ROBLES-NIEVES, OLGA		REGISTRAR OFFICER
RODRÍGUEZ-ANDÚJAR, GLORIMAR BA, 1986, University of Puerto Rico		REGISTRAR
RODRÍGUEZ-BRACERO, ASHLEY		FINANCIAL AID OFFICE

<b>RODRÍGUEZ-ORTIZ, SARA I.</b> M.Ed., 2007, Universidad del Turabo BEd, 2005, National University College	 LIBRARY DIRECTOR
ROMÁN-NIEVES, JANELYS	 PHARMACY PRACTICES
<b>RUIZ-RIVERA, IRIS</b> BSN, 2015, National University College	 COORDINATOR NURSING STUDENT AFFAIRS OFFICER
SALDAÑA-AYALA, OMAR MBA, 2015, National University College BBA, 1998, Interamerican University of Puerto Rico	 OPERATIONS DIRECTOR
SALGADO-GARCÍA, ZAIDA MBA, 2004, Phoenix University BA, 1994, Interamerican University of Puerto Rico	 ADMISSIONS OFFICER
<b>SÁNCHEZ-LOZADA, FRANCISCO</b> MBA, 2015, National University College BA, 2000, Interamerican University of Puerto Rico	 HIGH SCHOOLS COORDINATOR
SANTIAGO-GUADALUPE, WALESKA MBA, 2017, Universidad Metropolitana BA, 2000, Universidad Sagrado Corazón	 ADMISSIONS COORDINATOR
SERRANO-CONCEPCIÓN, YARELLIZ	 HIGH SCHOOLS COORDINATOR
<b>SOTO-CÁTALA, MARIO</b> BBA, 2000, Universidad Central de Bayamón	 BURSAR OFFICER
TORRES-FONTÁNEZ, HILDA M.	 PLACEMENT OFFICER
VALDERRAMA-TORRES, JAYTZA BBA, 2016, National University College	 FINANCIAL AID OFFICER
VALDÉS-QUIROGA, ÁLVARO	 LIBRARY ASSISTANT
VÁZQUEZ-COLLAZO, XIOMARA I.	 REGISTRAR OFFICER
VÁZQUEZ-VÁZQUEZ, YAZMÍN BBA, 2006, National University College	 ADMINISTRATIVE ASSISTANT
VIRUET-RIVERA, JORGE	 COMPUTER TECHNICIAN
ZAPATA, JEAN ANDRÉS	 MARKETING OFFICER

#### DISTANCE EDUCATION DEPARTMENT ADMINISTRATION

APONTE-DEL TORO, DAVID ED, 2012, Universidad La República MA, 2003, Interamerican University of Puerto Rico	GRADUATE EDUCATION PROGRAM DIRECTOR
<b>DELIZ-CARDE, WILFREDO</b> MBA, 1999, University of Puerto Rico BBA, 1987, University of Puerto Rico AD, 1985, University of Puerto Rico	 BUSINESS ADM & TECHNOLOGY DIRECTOR
GARCÍA-REYES, JUANITA Ed.D., 2013, NOVA Southeastern University M.Ed, 2006, Cambridge College BA, 1986, University of Puerto Rico	 INSTITUTIONAL DIRECTOR OF DISTANCE EDUCATION DIVISION
<b>LÓPEZ-MARTÍNEZ, JOSÉ</b> MBA, 2003, Universidad del Turabo BBA, 2001, Columbia College	 BUSINESS ADM & TECHNOLOGY DIRECTOR
MARRERO-RODRÍGUEZ, LESLIE MA, 2015, Caribbean University BOS, 2011, Caribbean University	 ADMINISTRATIVE ASSISTANT
<b>MONTALVO-QUINTERO, LAURA</b> MA, 2009, Interamerican University of Puerto Rico BA, 2007, Sacred Heart University	 CRIMINAL JUSTICE DIRECTOR
MORALES-VELÁZQUEZ, KARILYN Ed.D., 2017, Nova Southeastern University MSN, 2005, University of Puerto Rico BSN, 2000, University of Puerto Rico	 NURSING COORDINATOR
<b>RIVERA-SOLLA, WILMA</b> Ed.D., 2015, Nova Southeastern University MSN, 2005, University of Puerto Rico BSN, 2002, University of Puerto Rico	 NURSING DIRECTOR
<b>TROCHE-FLORES, LILLE</b> DED, 2003, University of Puerto Rico	 GENERAL EDUCATION DIRECTOR

DED, 2003, University of Puerto Rico MPH, 1993, University of Puerto Rico BS, 1983, University of Puerto Rico

# BAYAMÓN MAIN CAMPUS FACULTY

<b>BONILLA-SOTO, LOURDES M.</b> MSN, 2004, University of Puerto Rico BSN, 1981, Inter – Metropolitan	 NURSING
CARABALLO-VEGA, VANESSA DMD, 2002, University of Puerto Rico BS, 1995, Pontifical Catholic University of PR	 HEALTH SCIENCES DIRECTOR
<b>CONCEPCIÓN-REYES, KAMIR</b> MEd, 2009, Universidad Metropolitana BA, 1996, University of Puerto Rico	 GENERAL EDUCATION DIRECTOR
<b>COTTO-QUILES, MARÍA</b> MSN, 2014, Caribbean University	 NURSING
<b>CRESPO-CASTRO, NEYDA</b> MSN, 2015, Columbia Central University BSN, 2003, University of Puerto Rico	 CLINICAL LIASON
<b>CRUZ-ORTIZ, GLADYS</b> MSN, 2010, Universidad Metropolitana MSN, 2009, Universidad Metropolitana	 NURSING
<b>CRUZ-REYES, ANA F.</b> MEd, 1987, University of Phoenix BEd, 1973, University of PR	 GENERAL EDUCATION
<b>CUADRO-VERA, WANDA</b> MSN, 2009, Caribbean University BSN, 2007, Universidad del Este	 NURSING
<b>EMILIANO-RUIZ, CHRISTOPHER</b> DMD, 2005, UNPHU-Santo Domingo	 DENTAL
<b>ESCOBAR-RIVERA, DORITZA</b> MS, 2008, University of Puerto Rico BS, 2006, University of Puerto Rico	 PHYSICAL THERAPY COORDINATOR
FIGUEROA-CHINEA, MARILYN BSP, 1993, University of Puerto Rico	 PHARMACY TECHNICIAN
<b>FIGUEROA-SANTIAGO, CARMEN</b> MSN, 2009, Universidad Metropolitana BSN, 1988, Caribbean University	 NURSING
<b>FRATICELLI-MERCADO, LISSETTE</b> DDM, 1995, University of Puerto Rico BS, 1990, University of Puerto Rico	 DENTAL
GALARZA-CASTRO, LUIS A. MSN, 2013, University of Puerto Rico BSN, 2005, Colegio Universitario de San Juan	 NURSING

33

<b>GONZÁLEZ-MEDINA, JAVIER</b> MSN, 2017, University of Puerto Rico BSN, 2015, University of Puerto Rico	 NURSING
HEVIA-COLÓN, WANDA I. MSN, 2005, University of Puerto Rico BSN, 2001, University of Puerto Rico	 NURSING
<b>IRIZARRY-CRUZ, HÉCTOR</b> MBA, 1989, Universidad del Turabo BS, 1982, Interamerican University of Puerto Rico	 BUSINESS ADMINISTRATION
MARRERO-PÉREZ, ANA MBA, 2008, University of Phoenix BS, 2005, Universidad Central de Bayamón	 PHARMACY
MEDIAVILLA-RAMOS, LOURDES MSN, 1995, University of Puerto Rico BSN, 1987, Universidad del Sagrado Corazón	 NURSING
MORALES-CASTRO, NELLY MA, 1985, Interamerican University of Puerto Rico BA, 1984, Interamerican University of Puerto Rico	 CRIMINAL JUSTICE COORDINATOR
NIEVES-VEGA, ÁNGEL PhD, 2011, Universidad Alas Peruanas MBA, 2004, Interamerican University of Puerto Rico BBA, 1988, Caribbean University	 BUSINESS ADMINISTRATION
OCASIO-LÁZAGA, CARLA I. MEd, 2015, Universidad Central de Bayamón BS, 1978, University of Puerto Rico AD, 2010, National University College	 PHARMACY DIRECTOR
ORTIZ-CINTRÓN, JOSUÉ PhD, 2008, Universidad Alas Peruanas MS, 1990, University of Puerto Rico BS, 1984, University of Puerto Rico	 PHARMACY
<b>ORTIZ-CRUZ, ROSALBA</b> Ed.D, 2011, Interamerican University of Puerto Rico MA, 2000, Interamerican University of Puerto Rico BA, 1989, University of Puerto Rico	 PHARMACY TECHNICIAN
<b>ORTIZ-DÁVILA, MARLA</b> MSC, 2018, Interamerican University of Puerto Rico BSN, 2015, National University College	 NURSING
<b>ORTIZ-ORTIZ, NOELIA</b> MSN, 2009, Caribbean University BSN, 2003, Caribbean University	 NURSING
<b>PÉREZ, JUANA</b> MSN, 2010, Caribbean University BSN, 2007, Dewey College	 NURSING

<b>PÉREZ-BURGOS, NELSON</b> MBA, 2002, University of Phoenix BS, 1983, University of Puerto Rico		TECHNOLOGY
<b>PIZARRO-JIMÉNEZ, LUZ</b> MSN, 2009, Universidad del Turabo BSN, 1991, Universidad de Puerto Rico		NURSING
RAMOS-MORÁN, MARMIL MSN, 2005, University of Puerto Rico BSN, 1999, University of Puerto Rico		NURSING DIRECTOR
<b>REDINGER-VEGA, ALDA</b> JD, 1989, Interamerican University of Puerto Rico BA, 1973, University of Puerto Rico		CRIMINAL JUSTICE
RIVAS-GARCÍA, PEDRO MSEd, 1991, Dowling College BS, 1985, University of Puerto Rico		NETWORK TECHNOLOGY
<b>RIVAS-GONZÁLEZ, JUAN</b> MSN, 2017, National University College BSN, 2016, National University College		NURSING
<b>RIVERA-SANTIAGO, MARÍA</b> MSEd, 1990, Dowling College BA, 1986, Interamerican University of Puerto Rico		BUSINESS ADM & TECH COORDINATOR
<b>RODRÍGUEZ-CONTRERAS, KATTY</b> MSN, 2015, Caribbean University BSN, 1989, University of Puerto Rico		NURSING
<b>RODRÍGUEZ-RAMOS, SOLMARIE</b> MSN, 2015, Universidad Metropolitana BSN, 2011, Universidad Metropolitana		NURSING
<b>ROSADO-MUÑOZ, WALESKA</b> MED, 2009, American University of PR BHS, 1995, University of Puerto Rico, Medical Science	ces Campus	DENTAL
SÁNCHEZ-CORREA, BLANCA MPA, 1986, University of Puerto Rico BA, 1984, University of Puerto Rico		BUSINESS ADMINISTRATION
SANTIAGO-RODRÍGUEZ, MIGDALIA MSN, 2011, University of Puerto Rico BSN, 2003, University of Puerto Rico		NURSING
SANTIAGO-SANTOS, MARGARITA MSN, 2014, Columbia Central University BSN, 1999, Caribbean University		NURSING
SANTIAGO-SISCO, EDMARIE BS, 2010, University of Puerto Rico		DISTANCE EDUCATION DIRECTOR

SANTOS-MARZÁN, VÍCTOR MA, 1985, City University of New York BA, 1970, University of Puerto Rico	 HUMANITIES
<b>SOLER-PÉREZ, MARÍA</b> MSN, 2015, Caribbean University MA, 2008, Universidad Central de Bayamón BSN, 1985, Interamerican University of Puerto Rico	 NURSING
<b>SOTO-RODRÍGUEZ, ANA</b> MSN, 2012, Universidad Metropolitana BSN, 1997, Universidad Metropolitana	 NURSING
SUÁREZ-RIVERA, RAFAEL MA, 1986, Phoenix University BA, 1967, University of Puerto Rico	 SPANISH
<b>TORRES-CORDERO, DIANA</b> MA, 2003, University of Puerto Rico BS, 1989, Inter – Metropolitan	 NURSING
<b>TORRES-GARCÍA, JEANNETTE</b> MAEd, 1995, Interamerican University of Puerto Rico BAE, 1988, Caribbean University BSS, 1986, Caribbean University	 OFFICE SYSTEMS
<b>TORRES-MARTÍNEZ, ENID</b> MSN, 2012, Caribbean University BSN, 2006, Colegio Universitario de San Juan	 NURSING
<b>TORRES-MILLÁN, VIVIAN</b> MA, 2006, University of Phoenix BS, 1993, Universidad Metropolitana	 ACADEMIC AFFAIRS DEAN
VALCOURT-CRUZ, JOSÉ JD, 1988, Interamerican University of Puerto Rico BA, 1985, University of Puerto Rico	 CRIMINAL JUSTICE
VALENCIA-RIVERA, NILDA MA, 1995, Interamerican University of Puerto Rico BA, 1988, University of Puerto Rico	 OFFICE SYSTEMS
VARGAS-RODRÍGUEZ, SANDRA MAEd, 1984, University of Phoenix BA, 1973, University of Puerto Rico	 MATHEMATICS
<b>VEGA-FLORES, JOSÉ</b> MBA, 2000, Universidad Metropolitana BBA, 1984, University of Puerto Rico	 BUSINESS ADMINISTRATION
VÉLEZ-SÁNCHEZ, HÉCTOR MBA, 2008, University of Phoenix BBA, 1997, American University	 NETWORK TECHNOLOGY

# DISTANCE EDUCATION DEPARTMENT FACULTY

<b>CARABALLO-LÓPEZ, KENDRA</b> MSN, 2009, Interamerican University of Puerto Rico BSN, 2003, Interamerican University of Puerto Rico	 NURSING
<b>CARRIÓN-MATOS, BRENDA LIZ</b> MSN, 2005, University of Puerto Rico BSN, 2000, University of Puerto Rico	 NURSING
<b>COLÓN-TORRES, MARIE J.</b> MaE, 1996, University of Phoenix BA, 1989, University of Puerto Rico	 GENERAL EDUCATION
FIGUEROA-AGOSTO, MANUEL DBA, 2010, Universidad del Turabo MA, 1998, Interamerican University of Puerto Rico BBA, 1993, Interamerican University of Puerto Rico	 BUSINESS ADMINISTRATION
<b>GONZÁLEZ-RAMÍREZ, ISMAEL</b> MBA, 2006, University of Phoenix BS, 1997, University of Puerto Rico	 TECHNOLOGY
<b>GONZÁLEZ-RAMOS, MARÍA I.</b> MSN, 2010, Interamerican University of Puerto Rico BSN, 2006, Interamerican University of Puerto Rico	 NURSING
HERNÁNDEZ-ORTIZ, JOSÉ MA, 2007, EDP College BA, 1986, EDP College	 TECHNOLOGY
<b>LLERANDI-FLORES, LORENA</b> MS, 2005, Pontifical Catholic University of PR BA, 2002, University of Puerto Rico	 GENERAL EDUCATION
<b>LÓPEZ-GUZMÁN, KEILA</b> D.Ed, 2015, Interamerican University of Puerto Rico MSN, 2009, Interamerican University of Puerto Rico BSN, 2000, University of Puerto Rico	 NURSING
MALDONADO-RÍOS, MIRNA J. MA, 2004, Interamerican University of Puerto Rico BA, 1998, University of Puerto Rico	 GENERAL EDUCATION
MIRANDA-ROSARIO, SOLANGEL MA, 2006, Universidad del Turabo BA, 2003, University of Puerto Rico	 GENERAL EDUCATION
NAVARRO-PIZARRO, RAFAEL MBA, 2008, Caribbean University BA, 2002, University of Puerto Rico	 BUSINESS ADMINISTRATION
<b>ORTIZ-VÁZQUEZ, RAQUEL</b> MS, 2009, Pontifical Catholic University of PR BS, 2003, Pennsylvania State University	 GENERAL EDUCATION

<b>RIVERA-CAMACHO, MARILIA</b> MSN, 2009, Caribbean University BSN, 2005, University of Puerto Rico	 NURSING
<b>RIVERA-GARCÍA, JUAN</b> MA, 2000, University of Phoenix BS, 1976, University of Puerto Rico	 GENERAL EDUCATION
<b>RIVERA-JIMÉNEZ, CINTHIA</b> MSN, 2010, Interamerican University of Puerto Rico MEd, 2005, Interamerican University of Puerto Rico BSN, 2000, Interamerican University of Puerto Rico	 NURSING
<b>RIVERA-LÓPEZ, ANGIEMARIE</b> Ed.D., 2003, Interamerican University of Puerto Rico MSED, 1990, Dowling College of Long Island BA, 1988, Notre Dame of Maryland University	 GENERAL EDUCATION
<b>ROMERO-PÉREZ, ALICE</b> MSN, 2012, Interamerican University of Puerto Rico BSN, 1999, University of Puerto Rico	 NURSING
<b>ROSARIO-CRUZ, HARRY</b> MA, 1990, Graduate School of Southern Puerto Rico BA, 1982, Interamerican University of Puerto Rico	 GENERAL EDUCATION
SÁNCHEZ-VEGA, ALEXIS JD, 2008, University of Puerto Rico BBA, 2003, Universidad del Turabo	 CRIMINAL JUSTICE
SÁNCHEZ-VEGA, ZORAYA MA, 1997, Interamerican University of Puerto Rico BA, 1994, Interamerican University of Puerto Rico	 CRIMINAL JUSTICE
<b>SOTO-GONZÁLEZ, GLADYS</b> MSN, 2009, University of Puerto Rico BSN, 2003, University of Puerto Rico	 .NURSING
<b>TORRES-ACEVEDO, JESÚS</b> MBA, 2000, University of Phoenix BBA, 1996, University of Puerto Rico CPA, 2011, Puerto Rico State Department	 BUSINESS ADMINISTRATION
<b>VELILLA-GARCÍA, CARMEN</b> Ph.D., 2005, Interamerican University of Puerto Rico MBA, 1997, Interamerican University of Puerto Rico BA, 1988, University of Puerto Rico	 BUSINESS ADMINISTRATION

# ARECIBO BRANCH CAMPUS ADMINISTRATION

ACEVEDO-SOTO, JENNIFER BA, 1999, Interamerican University of Puerto Rico	 REGISTRAR OFFICER
ACUÑA-ROMÁN, MARILYN BBA, 2006, National University College	 FINANCIAL AID OFFICER
AFANADOR-CRUZ, CATALINA M.Ed., 2008, Universidad del Turabo BBA, 2006, Universidad del Este	 LIBRARY DIRECTOR
ARROYO-PÉREZ, ÁNGEL	 TECHNOLOGICAL LAB TECHNICIAN
BELTRÁN-IRIZARRY, IRIS	 ADMINISTRATIVE ASSISTANT
<b>CANDELARIA-PORTALATÍN, JESSIE</b> BS, 2004, University of Puerto Rico	 HIGH SCHOOLS COORDINATOR
CARRIÓN-GONZÁLEZ, SONIA BA, 2014, University of Puerto Rico	 ADMISSIONS OFFICER
<b>CASANOVA-SERRANO, LISANDRO</b> BBA, 2003, American University of PR	 SYSTEMS ADMINISTRATOR
<b>CORREA-SANTIAGO, LISSETTE</b> BEd, 2004, National University College	 ADMISSIONS OFFICER
DÍAZ RAMÍREZ, CHRISTYLORRAINE	 MARKETING OFFICER
<b>ESTRADA-MELÉNDEZ, MARITZABEL</b> BBA, 2010, University of Puerto Rico	 FINANCIAL AID OFFICER
<b>FELICIANO-GONZÁLEZ, MARILYN</b> BA, 2007, National University College	 ADMINISTRATIVE ASSISTANT
<b>FLORES-CRUZ, LUIS A.</b> BEd, 2004, National University College	 COMPUTER TECHNICIAN
<b>GÓMEZ-LÓPEZ, ERIKA</b> BA, 2016, University of Puerto Rico	 BURSAR OFFICER
GONZÁLEZ-GONZÁLEZ, JAZMÍN BA, 2005, National University College	 EFFECTIVENESS OFFICER
<b>GONZÁLEZ-MALAVÉ, DIANA</b> BSN, 2004, National University College	 BASICS SKILLS LABORATORY TECHNICIAN
GONZÁLEZ-MORALES, ELIZABETH I.	 ADMINISTRATIVE ASSISTANT
<b>JIMÉNEZ-ROSARIO, ADALBERTO</b> Ph.D., 2016, Bernerlli University MA, 1999, University of Phonix BA, 1980, Millersville State College	 COUNSELOR

LÓPEZ-GONZÁLEZ, ZEIDA	 REGISTRAR OFFICER
MALDONADO-SALABERRIO, ALEX BTC, 2011, University of Puerto Rico	 ADMISSIONS OFFICER
MARTÍNEZ-JIMÉNEZ, YAHAIRA	 ADMINISTRATIVE ASSISTANT
MARTÍNEZ-PÉREZ, GAISY MAE, 1997, University of Phoenix BA, 1987, University of Puerto Rico	 CHANCELLOR
MERCADO-PÉREZ, MARIBEL BA, 2009, National University College	 ADMISSIONS COORDINATOR
<b>MORALES-FIGUEROA, EVELYN</b> BBA, 2006, National University College	 BURSAR OFFICER
NIEVES-BERMÚDEZ, LORRAINE BA, 2007, National University College	 ADMINISTRATIVE ASSISTANT
NÚÑEZ-AQUINO, FRANCISCO PhD, 2005, Pontifical Catholic University of PR MA, 1992, Interamerican University of Puerto Rico BA, 1983, University of Puerto Rico	 EVENING COORDINATOR
NÚÑEZ-AQUINO, CARMEN MA, 2002, Interamerican University of Puerto Rico BA, 1989, Interamerican University of Puerto Rico	 COUNSELOR
NÚÑEZ GONZÁLEZ, MILAGROS BA, 2007, University of Puerto Rico	 BURSAR OFFICER
<b>OCASIO-VALLE, ENEIDA</b> MA, 1991, Interamerican University of Puerto Rico BA, 1982, Interamerican University of Puerto Rico	 STUDENT AFFAIRS DIRECTOR
PAGÁN-ALEMÁN, MERCEDES MBA, 2004, Interamerican University of PR BBA, 1993, Electronic Data Processing College	 TUTORING COORDINATOR
PÉREZ-BARRIOS, BRENDA	 ADMINISTRATIVE ASSISTANT
<b>QUIÑONES-ROBLES, EVELYN</b> BBA, 1984, Interamerican University of Puerto Rico	 FINANCIAL AID DIRECTOR
<b>RIVERA-CORTÉS, PABLO</b> M.Ed., 2013, Universidad del Turabo BA, 2010, National University College	 LIBRARY ASSISTANT
<b>RIVERA-REYES, YELITZA</b> BA, 2005, Sacred Heart University	 MARKETING COORDINATOR
RIVERA-ROSARIO, JAQUELINE	 REGISTRAR OFFICER
ROMÁN-MOYA, WANDA BA, 2005, National University College	 FINANCIAL AID OFFICER

ROSARIO-CRUZ, JOSÉ A. MA, 2007, Caribbean University BA, 1993, Interamerican University of Puerto Rico	 .STUDENT ACTIVITIES AND SPORT COORDINATOR
<b>ROSARIO-RAMOS, MARITZA</b> BOS, 2010, National University College	 REGISTRAR OFFICER
SÁNCHEZ-RAMÍREZ, MARIBEL BSBA, 2003, University of Puerto Rico	 MARKETING OFFICER
SINDO-RIVERA, OMAYRA BBA, 1998, Interamerican University of Puerto Rico	 BURSAR OFFICER
<b>TORRES-BELTRÁN, ALEX</b> BEd, 2006, National University College	 INTEGRATED SERVICES OFFICER
TORRES-GONZÁLEZ, MICHAEL	 TECHNOLOGICAL LAB. TECHNICIAN
<b>TOSADO-CORDERO, STEPHANIE</b> BA, 2016, Interamerican University of Puerto Rico	 REGISTRAR OFFICER
VALE-VARGAS, BRENDA L. BBA, 2003, University of Puerto Rico	 ADMISSIONS & MARKETING DIRECTOR
VÉLEZ-GONZÁLEZ, TIFFANY BOS, 2014, National University College	 ADMINISTRATIVE ASSISTANT

# ARECIBO BRANCH CAMPUS FACULTY

ACEVEDO-VIRUET, MARÍA MBA, 2000, University of Phoenix BS, 1992, University of Puerto Rico	 NETWORK TECHNOLOGY
AQUINO-SOTO, IDALIA MSN, 2015, EDP University of Puerto Rico	 NURSING
<b>BATISTA-GONZÁLEZ, MADELINE</b> MSN, 2004, University of Puerto Rico BSN, 1989, Interamerican University of Puerto Rico	 NURSING
<b>BRAVO-RODRÍGUEZ, MARÍA DE LOS A.</b> MA, 1991, University of Puerto Rico BA, 1985, University of Puerto Rico	 SPANISH
<b>BURGOS-CURBELO, LOURDES V.</b> MSN, 2010, Interamerican University of Puerto Rico BSN, 2003, University of Puerto Rico	 NURSING
CAJIGAS-CAJIGAS, JOSÉ M. BS, 1998, University of Puerto Rico AD, 1986, University of Puerto Rico AD, 1985, University of Puerto Rico	 TECHNOLOGY
<b>CANDELARIA-MORALES, SANDRA</b> MSN, 2007, Interamerican University of Puerto Rico BSN, 1998, University of Puerto Rico	 CLINICAL LIASON
<b>COLLAZO-DÁVILA, NAYDA DE LOS A.</b> Ph.D., 2015, Inter - Metropolitan MA, 1997, Interamerican University of PR BA, 1995, Interamerican University of PR	 CRIMINAL JUSTICE
<b>GÓMEZ-SEDA, GREGORIO</b> MBA, 2001, Webster University BA, 1994, Warner Southern College AD,1976, University of Puerto Rico	 BUSINESS ADMINISTRATION AND MATHEMATICS
<b>GONZÁLEZ-LÓPEZ, JANIS</b> MS, 1999, University of Puerto Rico BAE, 1994, University of Puerto Rico	 ACADEMIC AFFAIRS DEAN
HERNÁNDEZ-CORRALIZA, LEINYN MSN, 2007, Interamerican University of Puerto Rico BSN, 2005, Interamerican University of Puerto Rico	 NURSING
MELÉNDEZ-CASTRO, IRMA Ed.D., 2018, Inter American University of Puerto Rico MBA, 1996, Sacred Heart University BS, 1985, University of Puerto Rico AS, 1983, University of Puerto Rico	 TECHNOLOGY COORDINATOR

OCASIO-REILLO, ANA MBA, 2012, Sacred Heart University BS, 1984, University of Puerto Rico	 NETWORK TECHNOLOGY
PADÍN-GUMÁ, WANDA MA, 2000, University of Phoenix BS, 1988, University of Puerto Rico	 PHARMACY
<b>PÉREZ-LUGO, ARNALDO</b> Completer of Dental Surgeon Degree1983, Autonomous University of Puebla, México	 HEALTH SCIENCES DIRECTOR
<b>QUIJANO-RIVERA, AMELIA</b> MA, 1985, Interamerican University of Puerto Rico BA, 1975, University of Puerto Rico	 ENGLISH
<b>ROBLES-ORTIZ, NILSA</b> MSN, 1987, University of Puerto Rico BSN, 1982, University of Puerto Rico	 NURSING
RODRÍGUEZ-AQUINO, ISRAEL BSPh, 1998, University of Puerto Rico	 PHARMACY
ROMÁN-SUÁREZ, JOSEPH MSN, 2003, University of Puerto Rico BSN, 1998, University of Puerto Rico ASN, 1993, Interamerican University of Puerto Rico	 NURSING DIRECTOR
SANTIAGO-GARCÍA, MARITZA MSN, 2008, Interamerican University of Puerto Rico BSN, 1997, Interamerican University of Puerto Rico	 NURSING
SANTIAGO-RIVERA, ANA MSN, 2010, Interamerican University of Puerto Rico BSN, 2004, University of Puerto Rico	 NURSING
<b>SANTIAGO-RIVERA, KARLA M.</b> MSN, 2012, Interamerican University of Puerto Rico BSN, 1989, Interamerican University of Puerto Rico	 NURSING
<b>TOLEDO-COLLET, WANDA I.</b> BSN, 2009, National University College	 .NURSING
<b>TORRES-RUIZ, SONIA</b> MEd. 2009, Caribbean University BA, 2000, Interamerican University of Puerto Rico	 GENERAL EDUCATION DIRECTOR
<b>VELÁZQUEZ-MALDONADO, YAIRA</b> MBA, 2005, Interamerican University BBA, 2001, University of Puerto Rico	 BUSINESS ADMINISTRATION COORDINATOR
VÉLEZ-NIEVES, LIZA MSN, 2002, University of Puerto Rico	 NURSING

# **RÍO GRANDE BRANCH CAMPUS ADMINISTRATION**

ALVIRA-GONZÁLEZ, LESLIE A. BBA, 2003, Interamerican University of Puerto Rico	 HIGH SCHOOLS COORDINATOR
ARROYO-RAMOS, NEFTALÍ	 MARKETING COORDINATOR
CEPEDA-ARROYO, ASHLEY	 TELEMARKETING OFFICER
<b>COLLADO-RODRÍGUEZ, DAVID</b> BIT, 2009, National University College	 SYSTEM ADMINISTRATOR
<b>COLÓN-RODRÍGUEZ, DAISY</b> BBA, 2012, University of Puerto Rico	 ADMISSIONS OFFICER
<b>COPPIN-MIRANDA, ANN</b> ME, 2000, University of Phoenix BS, 1988, University of Puerto Rico	 INTERIM CHANCELLOR
CORDERO-CORTÉS, DELSA	 ADMINISTRATIVE ASSISTANT
<b>CRUZ-FIGUEROA, VANESSA</b> BSN, 2013, National University College	 BASIC SKILLS LABORATORY TECHNICIAN
<b>CRUZ-SANTIAGO, SHARON</b> BBA, 2014, Universidad del Turabo	 REGISTRAR
DÁVILA-RIVERA, CARLOS BA, 2018, University of Puerto Rico	 MARKETING OFFICER
GIERBOLINI-BERMÚDEZ, ALAN MS, 2013, University of Phoenix	 COUNSELOR
GONZÁLEZ-MILIÁN, FRANCIS Y. BA, 2007, National University College	 ADMINISTRATIVE ASSISTANT
GUTIÉRREZ-VÁZQUEZ, NANCY	 PLACEMENT OFFICER
HERNÁNDEZ-ROMERO, HERIBERTO MA, 2017, University of Puerto Rico BA, 2015, University of Puerto Rico	 LIBRARY DIRECTOR
<b>JIMÉNEZ-VARGAS, YADIRA</b> BBA, 2003, Interamerican University of Puerto Rico	 FINANCIAL AID OFFICER
KUILAN-PALERMO, ASHLEY BBA, 2015, Universidad del Este	 MARKETING OFFICER
LASANTA-REYES, VÍCTOR M. BA, 2010, National University College	 COMPUTER TECHNICIAN
<b>LAUREANO-LEBRÓN, IVELISSE</b> MEd., 2015, National University College BOS, 2012, University of Puerto Rico	 REGISTRAR OFFICER

<b>LÓPEZ-CALO, LILLIAM</b> BA, 2007, National University College	 REGISTRAR OFFICER
LÓPEZ-GUZMÁN, MARIAMGELY BA, 2011, University of Puerto Rico	 TUTORING COORDINATOR
LÓPEZ-ROSA, ILEANA	 BURSAR OFFICER
<b>LUGO-PÉREZ, ÁNGEL</b> MBA, 2009, Universidad Metropolitana BA, 2006, University of Puerto Rico	 OPERATIONS DIRECTOR
<b>MEDERO-VEGA, MARIANGELY</b> BA, 2015, Universidad del Este	 BURSAR OFFICER
MEDINA-MELÉNDEZ, MADELEINE BA, 1994, Universidad Metropolitana	 ADMINISTRATIVE ASSISTANT
MILLÁN-QUIÑONES, JENNIFER	 ADMINISTRATIVE ASSISTANT
MOLINA-DELGADO, MARITZA BBA, 1996, University of Puerto Rico	 ADMISSIONS OFFICER
MONTERO-ARROYO, IRIS	 TELEMARKETING OFFICER
NIEVES-SANTA, DIANA BOS, 2014, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
NÚÑEZ-PÉREZ, YISELIS	 LIBRARY ASSISTANT
<b>ORTIZ-JIMÉNEZ, IRMA</b> MEd., 2016, National University College BEd., 2013, National University College	 ACADEMIC ADVISOR
<b>PÉREZ-CARRASQUILLO, LAURA</b> BS, 2010, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
QUINTANA-PIZARRO, CARMEN	 RECEPCIONIST
<b>RENTAS-CRUZ, DILSA</b> BBA, 2006, Interamerican University of Puerto Rico	 ADMISSIONS COORDINATOR
RESTO-FELICIANO, RUTH	 HIGH SCHOOLS OFFICER
RIVERA-QUIÑONES, MARÍA DE LOS A.	 REGISTRAR OFFICER
RIVERA-RODRÍGUEZ, LILLIAN	 LIBRARY ASSISTANT
<b>RIVERO-DÍAZ, JOANA</b> BA, 2017, National University College	 FINANCIAL AID OFFICER
RODRÍGUEZ-LLANOS, YOIRIS	 FINANCIAL AID OFFICER
RODRÍGUEZ-SUERO, MIRIAM	 BURSAR OFFICER

<b>ROSARIO-CLAUDIO, MARÍA</b> DED, 2016, Nova Southeastern University	 ADMISSIONS AND MARKETING OFFICE
SÁNCHEZ-HERNÁNDEZ, ROSA BA, 2010, National University College	 BURSAR OFFICER
SIERRA-ORTIZ, ZENAIDA	 ACADEMIC ADVISOR
<b>TREJO-DÍAZ, STACY M.</b> BBA, 2007, University of Puerto Rico	 MARKETING OFFICER
VARGAS-COLÓN, LUZEIDY	 INTEGRATED SERVICES OFFICER
VÁZQUEZ-DEL VALLE, YASMYN	 ADMISSIONS OFFICER
<b>VILLAR-MURCELO, GESLIE</b> BOS, 2015, University of Puerto Rico	 REGISTRAR OFFICER
VIZCARRONDO-NIEVES, GLORIMAR MBA, 2017, National University College	 ADMINISTRATIVE ASSISTANT

# RÍO GRANDE BRANCH CAMPUS FACULTY

AGOSTO - ROBLES, GLENDA L. BS, 1998, Interamerican University of Puerto Rico	 PHARMACY AND BIOLOGY
AMADOR-VÉLEZ, MARITZA MSN, 2014, Columbia Central University BSN, 2016, University of Puerto Rico	 CLINICAL LIASON
<b>BENÍTEZ-CIRINO, MIRIAM</b> Ph.D., Universidad Católica de Puerto Rico MSN, 1985, Universidad Católica de Puerto Rico BSN, 1978, Universidad Católica de Puerto Rico	 NURSING
<b>BONILLA-CARRASQUILLO, MANUEL A.</b> MA, 2006, Interamerican University of Puerto Rico BA, 1989, Interamerican University of Puerto Rico	 CRIMINAL JUSTICE
<b>CARABALLO-DÍAZ, DEBORA</b> MSN, 2016, Caribbean University BSN, 2010, Dewey University	 NURSING
<b>CARRASQUILLO-FLORES, MARIBEL</b> MSN, 1998, University of Puerto Rico BSN, 1989, Universidad Metropolitana	 NURSING
<b>CARRASQUILLO-MORALES, ROCHELIS</b> MSN, 2017, National University College BSN, 2014, National University College	 NURSING
CASANOVA-SOTO, WABEZCA MSN, 2014, Dewey University BSN, 2010, Dewey University	 NURSING
<b>COLLAZO-LÓPEZ, EVELYN</b> MBA, 2006, Universidad Metropolitana BBA, 1997, Interamerican University of Puerto Rico	 BUSINESS ADMINISTRATION AND TECHNOLOGY
<b>COLÓN-HERNÁNDEZ, AIDA</b> MSN, 2013, Dewey University BSN, 2003, University of Puerto Rico	 NURSING DIRECTOR
<b>CORTÉS-SUÁREZ, ELENA</b> BSN, 2014, Dewey University	 NURSING
<b>CRUZ-FIGUEROA, VILMA</b> MA, 2008, Interamerican University of Puerto Rico BA, 2003, University of Puerto Rico	 OFFICE SYSTEMS
<b>CRUZ-RODRÍGUEZ, JASMINE</b> MSN, 2016, Caribbean University BSN, 2001, University of Puerto Rico	 NURSING

<b>FELICIANO-RAMOS, CHATTERLYS</b> MSN, 2012, Columbia Centro Universitario BSN, 2008, Dewey University	 NURSING
FLORES-MOJICA, MARÍA MSN, 2014, Dewey University BSN, 2013, National University College	 NURSING
FONTÁNEZ-RIVERA, FÉLIX MSN, 2011, Caribbean University BSN, 1994, Caribbean University	 NURSING
HERNÁNDEZ-TORRES, PROVIDENCIA MA, 1990, Interamerican University of Puerto Rico BA, 1977, University of Puerto Rico	 BUSINESS ADMINISTRATION
<b>IBERN-CARABALLO, JOSÉ A.</b> DDS, 1991, New York University	 DENTAL
<b>IRIZARRY-ARROYO, MARIXA</b> BSN, 1994, Pontifical Catholic University of PR	 NURSING
MEDINA-CRUZ, JANET DE, 2017, Nova Southeastern University MBA, 2003, University of Turabo BA, 1993, Inter – Metropolitan	 CRIMINAL JUSTICE COORDINATOR
MELÉNDEZ-DELGADO, IRIS B. MA, 2008, Interamerican University of PR BA, 1992, Interamerican University of PR	 BUSINESS ADMINISTRATOR
MENA-SALGADO, YACKELIN MC/MHC, 2008, University of Phoenix BA, 1999, University of Puerto Rico	 INTERIM ACADEMIC AFFAIRS DEAN
MILETE-ROBLES DAYNA MA, 2011, Universidad del Turabo BS, 2007, University of Puerto Rico	 HEALTH SCIENCES DIRECTOR
<b>ORTIZ-RIVERA, HÉCTOR</b> MSN, 2017, National University College BSN, 2015, National University College	 NURSING
<b>PÉREZ-RODRÍGUEZ, ALICE</b> MSN, 2014, Caribbean University BSN, 1985, university of Puerto Rico	 NURSING
<b>RIVERA-DÍAZ, ALITZA</b> MSN, 2015, Columbia Central University BSN, 2012, Columbia Central University	 .NURSING
<b>RIVERA-ROSA, CARMEN</b> MSN, 2011, Caribbean University BSN, 1984, Interamerican University of Puerto Rico	 NURSING

<b>RODRÍGUEZ-GÓMEZ, CELINETTE</b> MSN, 2009, University of Puerto Rico BC, 2004, University of Puerto Rico	 CLINICAL LIASON
SÁNCHEZ-ÁLVAREZ, JUAN C. BS, 1998, Interamerican University of Puerto Rico	 HEALTH SCIENCES
VALENTÍN-CLASS CATHERINE MS, 2007, Interamerican University of Puerto Rico	 TECHNOLOGY COORDINATOR

# PONCE BRANCH CAMPUS ADMINISTRATION

ACOSTA-LUGO, ÁNGEL MBA, 2007, Interamerican University of Puerto Rico BBA, 2002, Interamerican University of Puerto Rico		EVENING COORDINATOR
ALVARADO-SEPÚLVEDA, JARIS BA, 2010, Interamerican University of Puerto Rico		LIBRARY ASSISTANT
ANGLADA-SUÁREZ, DIGMARI BBA, 2011, Pontifical Catholic University		PROMOTER
<b>BARBOSA-TORRES, ODITH</b> BS, 2013, Pontifical Catholic University		REGISTRAR OFFICER
<b>BERMÚDEZ-SÁNCHEZ, MAYRA</b> MBA, 2014, Universidad del Este BBA, 2009, Universidad del Este		ADMISSIONS AND MARKETING DIRECTOR
<b>BONILLA-MATEO, KUNDY</b> BBA, 2001, Interamerican University of Puerto Rico		HIGH SCHOOLS COORDINATOR
<b>COLÓN-COLLAZO, NYDIA</b> BBA, 2014, Pontifical Catholic University		ADMISSIONS OFFICER
<b>COLÓN-CORREA, YVETTE</b> BBA, 1993, Pontifical Catholic University of Puerto R	ico	FINANCIAL AID DIRECTOR
COLÓN MEDINA, SONIA BOS, 1999, Pontifical Catholic University of PR		ADMISTRATIVE ASSISTANT
<b>CRESPO-RODRÍGUEZ, SONIA</b> MBA, 2015, Caribbean University BBA, 2005, Interamerican University of Puerto Rico		REGISTRAR
<b>CRUZ-IRIZARRY, IVELIZ</b> MIS, 2015, University of Puerto Rico BA, 2012, Pontifical Catholic University of Puerto Ric	0	LIBRARY DIRECTOR
<b>DE JESÚS-MOLINA, FLORYMAR</b> BBA, 2004, Pontifical Catholic University of Puerto R		FINANCIAL AID OFFICER
GARCÍA-MERCADO, BELMARIE		REGISTRAR OFFICER
<b>GORDILS-MALDONADO, GLENDA</b> BSO, 2017, University of Puerto Rico		REGISTRAR OFFICER
GUZMÁN-BONILLA, LESLY		FINANCIAL AID OFFICER
<b>LABOY-EMANUELLI, WILMER</b> MA, 2000, Interamerican University of Puerto Rico BA, 1996, University of Puerto Rico		COUNSELOR
LABOY-PÉREZ, TERESA		STUDENT AFFAIRS DIRECTOR

<b>LEÓN-SASTRE, FÉLIX</b> BSN, 2015, National University College		BASIC SKILLS LABORATORY TECHNICIAN
<b>LUGO-GARCÍA, JENNY</b> BS, 2014, Caribbean University		LIBRARY ASSISTANT
<b>LUGO-LARACUENTE, SONIAMARIE</b> M.Ed, 2014, Pontifical Catholic University of Puerto R BA, 2011, University of Puerto Rico	ico	COUNSELOR
MALDONADO-GONZÁLEZ, LORENA BBA, 2014, University of Puerto Rico		INTEGRATED SERVICES OFFICER
MARTÍNEZ-RODRÍGUEZ, SARAH BA, 2013, Caribbean University		ADMISSIONS OFFICER
MUÑOZ-RIVERA, JANICE BBA, 1994, Interamerican University of Puerto Rico		BURSAR OFFICER
NIEVES-ALBINO, YOMAIRA BBA, 2014, University of Puerto Rico		BURSAR OFFICER
PACHECO-RIVERA, EFRAÍN BA, 2012, University of Puerto Rico		COMPUTER TECHNICIAN
PADILLA-PADILLA, CHRISTIAN BS, 2012, University of Puerto Rico		COMPUTER TECHNICIAN
PADILLA-RIVERA, ALMA D. BBA, 2007, University of Puerto Rico		ADMISSIONS COORDINATOR
PÉREZ-ALVARADO, LUZ BBA, 2004, Pontifical Catholic University of PR		ADMISSIONS & MARKETING OFFICER
RAMOS-ORTIZ, EDRA BA, 2011, University of Puerto Rico		RECEPTIONIST
<b>RIVERA-SANTIAGO, LIZBETH</b> BA, 2001, Interamerican University of Puerto Rico		ADMINISTRATIVE ASSISTANT
<b>RODRÍGUEZ-AMILL, JULIO</b> BBA, 2015, Interamerican University of Puerto Rico		PROMOTER
RODRÍGUEZ-ESCALERA, MICHELLE M. BA, 2004, University of Puerto Rico		STUDENT AFFAIRS OFFICER
SALCEDO-RIVERA, ELI		FINANCIAL AID OFFICER
SANTANA-RIVERA, JESSENIA MSS, 2012, Pontifical Catholic University of PR BA, 2004, University of Puerto Rico		MARKETING COORDINATOR
<b>TELLO-TORRES, ANDREA</b> BS, 2015, Pontifical Catholic University of Puerto Ricc	)	TUTORING COORDINATOR

<b>TIRADO-MERCADO, MELKY</b> MBA, 2004, Interamerican University of Puerto Rico BBA, 2001, Interamerican University of Puerto Rico		OPERATIONS DIRECTOR
<b>TORRES-FLORES, ENID</b> BBA, 2000, Pontifical Catholic University of Puerto R	ico	ADMINISTRATIVE ASSISTANT
<b>TORRES-YORDAN, LIZ BETSY</b> BA, 1992, Interamerican University of PR		PLACEMENT OFFICER
VARGAS-CINTRÓN, RUBÉN		LIBRARY ASSISTANT
VÁZQUEZ-PADILLA, FRANCES MSN, 2007, Universidad del Turabo		CHANCELLOR

BSN, 1999, Interamerican University of Puerto Rico

# PONCE BRANCH CAMPUS FACULTY

ALVARADO-SOTO, DEBORAH BS, 2001, University of Puerto Rico	DISTANCE EDUCATION DIRECTOR
ÁLVAREZ-DELGADO, ANAMNS, 2013, Columbia Centro UniversitarioBSN, 2004, Interamerican University of Puerto Rico	NURSING
AYALA-HERNÁNDEZ, MORAIMA MSN, 2013, Caribbean University BSN, 2011, National University College	NURSING
BÁEZ-RODRÍGUEZ, MIRNAMSN, 2017, National University CollegeBSN, 2011, National University College	NURSING
<b>BERMÚDEZ-SÁNCHEZ, NYDIA I.</b> PhD, 2007, Pontifical Catholic University of PR MEd., 1993, University of Puerto Rico BA, 1986, Interamerican University of Puerto Rico	ACADEMIC AFFAIRS DEAN
BURGOS-GUZMÁN, DENISSE	NURSING
CUEVAS-JUSTINIANO, NANCY MSN, 2009, Caribbean University MPH, 2007, Ponce School of Medicine BSN, 1986, Pontifical Catholic University of PR	NURSING
FIGUEROA-GALINDO, YAHAIRA	NURSING
GUILLOTY-CARABALLO, MADELINE BSN, 1983, Pontifical Catholic University of PR	NURSING
<b>LEÓN-SASTRE, IVETTE</b> MSN, 2013, Caribbean University BSN, 1999, Pontifical Catholic University of Puerto Rico	NURSING
LÓPEZ-ARENAS, MARANGELLY MSN, 2014, Columbia Central University	NURSING
MAHUMUD-PÉREZ, AZIZA MSN, 2003, University of Puerto Rico BSN, 1994, Pontifical Catholic University of Puerto Rico	NURSING
MERCADO-GONZÁLEZ, LUCEDENIA MSN, 2014, Pontifical Catholic University of Puerto Rico BSN, 1986, Pontifical Catholic University of Puerto Rico	NURSING
NAZARIO-PLAZA, LUCÍA MSN, 1992, Pontifical Catholic University of Puerto Rico	NURSING

BSN, 1984, Pontifical Catholic University of Puerto Rico ORTÍZ-ROSA, WALESKA I. MPH, 2007, Ponce School of Medicine BSN, 2003, Universidad Metropolitana	NURSING DIRECTOR
PADILLA-ACOSTA, ROSARIO MSN, 1998, Pontifical Catholic University of Puerto Rico BSN, 1995, Universidad Adventista de las Antilllas	NURSING
RIVERA-HERNÁNDEZ, RAÚL MA, 2007, Caribbean University BA, 2003, University of Puerto Rico	GENERAL EDUCATION
RIVERA-MARTÍNEZ, YANIRA MD, 2003, Universidad Central del Este MSN, 2013, Columbia Central University BSN, 1996, Pontifical Catholic University of Puerto Rico	NURSING
RIVERA-RIVERA, MARÍA MSN, 2011, Caribbean University BSN, 2006, Interamerican University of Puerto Rico	NURSING
RIVERA-RODRÍGUEZ, NELISMARIE MC, 2011, Universidad del Este BC, 2006, Universidad del Este	CRIMINAL JUSTICE COORDINATOR
RODRÍGUEZ-DAVID, LUZMD, 2003, Universidad Autónoma de GuadalajaraBS, 1997, Pontifical Catholic University of PR	HEALTH SCIENCES
<b>RODRÍGUEZ-MARTÍNEZ, YOLANDA</b> MSN, 1999, Pontifical Catholic University of Puerto Rico BSN, 1988, Pontifical Catholic University of Puerto Rico	NURSING
<b>RODRÍGUEZ-RODRÍGUEZ, ARLEEN</b>	NURSING
SANTIAGO-COLÓN, MAGALY MSN, 2011, Pontifical Catholic University of Puerto Rico	NURSING
SANTIAGO-HERNÁNDEZ, JOSENY MSN, 2018, National University College BSN, 2004, University of Puerto Rico	NURSING
SANTIAGO-NIEVES, NILSA MSN, 2015, Pontifical Catholic University of Puerto Rico	NURSING
SANTIAGO-ZAMBRANA, ZORAIDA MSN, 1999, Pontifical Catholic University of PR BSN, 1992, Pontifical Catholic University of PR	NURSING
<b>SOLER-RODRÍGUEZ, IRMA</b> MSN, 2004, Pontifical Catholic University of PR BSN, 2001, Interamerican University of Puerto Rico	NURSING

<b>TORRES-MATEO, LIDUVINA</b> MAED, 1988, University of Puerto Rico BAEd, 1966, University of Puerto Rico	 GENERAL EDUCATION
<b>TORRES-MORENO, CRUZ</b> MSN, 2000, Pontifical Catholic University of Puerto F BSN, 1994, Pontifical Catholic University of Puerto R	NURSING
<b>TORRES-ORTIZ, NORA</b> MAED, 2011, Universidad del Este CT, 2007, Interamerican University of Puerto Rico BS, 1977, University of Puerto Rico	 PHARMACY COORDINATOR
VÁZQUEZ-PADILLA, JOSÉ PhD, 2014, Interamerican University of Puerto Rico MA, 2003, Universidad Central de Bayamón BA, 1998, Universidad Central de Bayamón	 GENERAL EDUCATION DIRECTOR
VÉLEZ-CAQUIAS, YVONNE MAE, 1985, University of Phoenix BA, 1980, World University	 GENERAL EDUCATION
VILLA-MEDINA, HEIDY MSN, 2014, Caribbean University MAE, 2003, Caribbean University BSN, 1987, Pontifical Catholic University of Puerto R	 NURSING

# CAGUAS BRANCH CAMPUS ADMINISTRATION

AYALA-MOJICA, JOSÉ	 OPERATIONS DIRECTOR
CALDERÓN-OSORIO, AXEL	 HIGH SCHOOLS COORDINATOR
<b>CASTRO-LÓPEZ, NAOMI</b> BBA, 2012, Universidad del Turabo	 LIBRARY ASSISTANT
CINTRÓN-HERNÁNDEZ, GISELA BEd, 2003, National University College	 ADMINISTRATIVE ASSISTANT
<b>CRUZ-FRED, IRIS</b> BA, 2002, Sacred Heart University	 MARKETING COORDINATOR
<b>DÁVILA-PÉREZ, CARMEN</b> BBA, 2008, Interamerican University of Puerto Rico	 STUDENT AFFAIRS DIRECTOR
<b>DE LEÓN-SANABRIA, ANGELYS</b> BA, 2015, Universidad del Sagrado Corazón	 PROMOTER
<b>DELGADO-CARRASQUILLO, JENNIFER</b> BBA, 2012, Columbia Centro Universitario	 LIBRARY ASSISTANT
DÍAZ-MONTES, EDWIN BBA, 2012, University of Puerto Rico	 STUDENT ACTIVITIES AND SPORTS COORDINATOR
<b>FRANCES-SULIVERES, CARILI</b> MBA, 2014, Universidad del Este BBA, 2009, Interamerican University of Puerto Rico	 REGISTRAR
GARCÍA-GARCÍA, JENNIFER M.	 FINANCIAL AID OFFICER
GARCÍA-GÓMEZ, YANITZA MBA, 2011, Universidad del Turabo BA, 2008, Universidad del Turabo	 BURSAR OFFICER
GONZÁLEZ-RAMOS, GRISEL BA, 2012, University of Puerto Rico	 ADMISSIONS & MARKETING OFFICER
HUGUET-ORTIZ, JOADMA MBA, 2010, Universidad del Turabo BBA, 2006, University of Puerto Rico	 FINANCIAL AID OFFICER
JIMÉNEZ-ROSADO, YOLANDA BA, 2010, Sacred Heart University	 ADMISSIONS COORDINATOR
LÓPEZ-CORREA, JUAN	 ADMISSIONS & MARKETING
LÓPEZ-FELICIANO, JAVIER O. BA, 1989, University of Puerto Rico	 OFFICER EVENING COORDINATOR
MAISONAVE-VALENTÍN, YAMIL BS, 2017, National University College	 COMPUTER TECHNICIAN

MARCANO-CAPELES, SHEILA BA, 2013, Universidad del Turabo	 REGISTRAR OFFICER
MARTÍNEZ-DEL VALLE, SOLMARIE MBA, 2016, Universidad del Turabo BBA, 2014, Universidad del Turabo	 BURSAR DIRECTOR
MARTÍNEZ-MUÑOZ, ANA BA, 2005, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
MARTÍNEZ-RODRÍGUEZ, ALEXIS MBA, 2016, National University College BIT, 2011, National University College	 SYSTEMS ADMINISTRATOR
MÉNDEZ-ISAAC, ANAELIS	 ADMINISTRATIVE ASSISTANT
MERCADO-ALVARADO, DIANA	 FINANCIAL AID DIRECTOR
MUÑIZ-CORTÉS, MARÍA MA, 2015, Interamerican University of Puerto Rico BA, 2012, Interamerican University of Puerto Rico	 ADMISSIONS OFFICER
MUÑOZ-CÓRDOVA, LOURDES MBA, 1989, Universidad del Turabo BA, 1982, Universidad del Turabo	 TUTORING COORDINATOR
<b>ORTIZ-RIVERA, MARÍA</b> MA, 1999, Universidad de Phoenix	 COUNSELOR
PAGÁN-MARCHAND, MARISEL MA, 2000, University of Puerto Rico BBA, 1996, University of Puerto Rico	 CHANCELLOR
<b>PERÉ-RODRÍGUEZ, RAQUEL</b> BA, 2004, Interamerican University of Puerto Rico	 ADMISSIONS & MARKETING OFFICER
PÉREZ-BARRANCO, BRENDA	 RECEPTIONIST
<b>PIÑERO-APONTE, KIMBERLY</b> BSN, 2014, Columbia Central University	 BASIC SKILLS LABORATORY TECHNICIAN
<b>RAMOS-MORALES, YESSENIA</b> BBA, 2003, University of Puerto Rico	 INTEGRATED SERVICES OFFICER
RAMOS-PÉREZ, JENNIFER	 ASSOCIATE REGISTRAR
<b>REYERO-LEÓN, ALEJANDRA</b> MBA, 2016, University of Puerto Rico BA, 2012, University of Puerto Rico	 PLACEMENT OFFICER
<b>RIVERA-FERNÁNDEZ, MARICARMEN</b> BA, 2005, Universidad del Turabo	 ADMISSIONS & MARKETING OFFICER
<b>RIVERA MARTÍNEZ, YOLIMAR</b> MED, 2013, Universidad del Turabo BA, 2010, Universidad del Turabo	 ACADEMIC ADVISOR

RODRÍGUEZ-COTTO, SHAIRA	 BURSAR OFFICER
RODRÍGUEZ-HERNÁNDEZ, ELVIN MBA, 2014, Universidad del Este BA, 2012, Universidad del Este	 ADMISSIONS OFFICER
RODRÍGUEZ-MERCADO, GLADYS	 TELEMARKETING OFFICER
RUBIO-RIVERA, SUZETTE BA, 1979, University of Puerto Rico	 ADMISSIONS AND MARKETING DIRECTOR
SÁNCHEZ-BERENGUER, ALMA A. M.Ed., 2013, Universidad del Turabo BEd., 2010, National University College	 LIBRARY DIRECTOR
SIERRA-MIRANDA, JOSÉ	 PROMOTER
<b>TORRES-DÍAZ, MARÍA</b> ME.d, 1990, Universidad Católica BA, 1988, University of Puerto Rico	 COUNSELOR
<b>VEGA-VEGA, ELSIE</b> BA, 1984, University of Puerto Rico	 EFFECTIVENESS OFFICER
<b>VÉLEZ-FLORES, MARILYS</b> MA, 2007, Universidad del Turabo	 ADMISSIONS & MARKETING OFFICER

# CAGUAS BRANCH CAMPUS FACULTY

ADORNO-COLÓN, MICHELLE MSN, 2013, Dewey University BSN, 2010, Dewey University	 NURSING
AGUILAR-PÉREZ, MARÍA MSN, 1990, University of Puerto Rico BSN, 1982, University of Puerto Rico	 NURSING
<b>ALEJANDRO-MATOS, CLARITZA</b> MA, 2013, Universidad del Turabo	 GENERAL EDUCATION COORDINATOR
<b>CAPELLA-MIRANDA, OMAR</b> MSN, 2012, Columbia University College BSN, 2009, University of Puerto Rico	 NURSING
CARDONA-ORTIZ, VIRGEN MSN, 2012, Columbia Central University BSN, 2010, Columbia Central University ADN, 2004, Columbia Central University	 NURSING
<b>CÓRDOVA-SÁNCHEZ, DENNISE</b> MSN, 2012, Columbia Central University BSN, 2008, Dewey University	 NURSING
<b>CRUZ-RIVERA, OLGA</b> MBA-HSO, 2009, Columbia Centro Universitario BS, 1998, Interamerican University of PR AD, 2008, National University College	 PHARMACY
<b>DE JESÚS-RAMOS, RAQUEL</b> MSN, 2015, Columbia Central University BSN, 2011, University of Puerto Rico	 NURSING
<b>DELGADO-RAMOS, MARISEL</b> MSN, 2012, Columbia Central University BSN, 1990, University of Puerto Rico	 NURSING
<b>FLORES-O'NEILL, YISETTE</b> MSN, 2012, Columbia Central University BSN, 2013, Interamerican University of Puerto Rico	 NURSING
GALARZA-FLORES, MARÍA MSN, 2012, Columbia Central University BSN, 2003, University of Puerto Rico	 NURSING
<b>GONZÁLEZ-MORALES, MIGDALIA</b> MSN, 2012, Columbia Central University BSN, 2002, University of Puerto Rico	 NURSING
MORALES-LÓPEZ, KAREN MBA, 2003, University of Phoenix BA, 1999, University of Puerto Rico	 ACADEMIC AFFAIRS DEAN

59

<b>PÉREZ-GÓMEZ, ADA I.</b> JD, 2000, Pontifical Catholic University of PR MA, 1996, Inter – Metropolitan BA, 1995, Inter - Metropolitan	 DISTANCE EDUCATION COORDINATOR
RAMOS, LÓPEZ, ELIZABET MSN, 2014, Columbia Central University BSN, 2012, Columbia Central University	 NURSING
RICHARDSON-CASIANO, LINDA MSN, 2012, Columbia Central University BSN, 2002, Columbia Central University	 NURSING
<b>RIVERA-VÁZQUEZ, YEIDY</b> Ed.D., 2016, Interamerican University of Puerto Rico MA, 1998, Interamerican University of PR BA, 1989, University of Puerto Rico	 CRIMINAL JUSTICE COORDINATOR
ROMÁN-GÓMEZ, NÍNIVE MSN, 2014, Columbia Central University BSN, 2010, Columbia Central University ASN, 2008, Columbia Central University	 NURSING
SÁNCHEZ-MORENO, YEYDA MSN, 2006, University of Puerto Rico BSN, 1992, University of Puerto Rico	 NURSING
<b>TORRES-CÁDIZ, IDELIZA</b> MSN, 2012, Columbia Central University BSN, 2009, Interamerican University of Puerto Rico	 NURSING
<b>TORRES-HERNÁNDEZ, MYRNA</b> MSN, 1987, University of Puerto Rico BSN, 1979, Pontifical Catholic University of PR	 NURSING DIRECTOR

# MAYAGÜEZ BRANCH CAMPUS ADMINISTRATION

ACEVEDO-RIVERA, KEITHA	 ADMINISTRATIVE ASSISTANT
ACOSTA-BÁEZ, MARÍA DE LOS A.	 ADMISSIONS OFFICER
ARROYO-GUZMÁN, DARITZA BCAR, 2009, University of Puerto Rico	 BURSAR OFFICER
<b>BETANCOURT-ARESTIQUE, MARILYN</b> BSN, 2002, University of Puerto Rico	 BASIC SKILLS LAB. TECHNICIAN
<b>DE JESÚS-BERRÍOS, YAJAIRA</b> BBA, 2012, Interamerican University of PR	 ADMISSIONS COORDINATOR
DELIZ-ROMÁN, RAFAEL	 COMPUTER TECHNICIAN
<b>DÍAZ-LÓPEZ, JOHN</b> BA, 2016, Interamerican University of PR	 DATA ENTRY
HERNÁNDEZ-MÉNDEZ, RAISA MA, 2017, Interamerican University of Puerto Rico	 LIBRARY DIRECTOR
LAMADRID-CUEBAS, JAZMIN BOA, 2004, University of Puerto Rico	 INTEGRATED SERVICES OFFICER
MERCADO-IRIZARRY, JOSÉ BBA, 2017, University of Puerto Rico	 MARKETING OFFICER
MERCADO-NAZARIO, MARLYN BA, 2016, Universidad del Este	 STUDENT AFFAIRS DIRECTOR
MERCADO-RIVERA, OMAR BBA, 2003, Metropolitan University	 REGISTRAR OFFICER
MIRANDA-FELICIANO, YACHIRA BCAE, 2006, University of Puerto Rico	 FINANCIAL AID OFFICER
NADAL-VEGA, FRANCHESKA BA, 2010, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
NEGRÓN-PÉREZ, ALEXANDRA BSA, 2016, Universidad Católica	 MARKETING OFFICER
<b>ORTIZ-MORALES, VÍCTOR</b> MA, 2014, Interamerican University of Puerto Rico	 BURSAR OFFICER
PADILLA-LUCIANO, CHRISTAL BOA, 2013, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
<b>PÉREZ-MATOS, ADRIANA</b> MA, 2004, Interamerican University of PR BA, 1992, Pontifical Catholic University	 COUNSELOR
<b>PORRATA-SANTIAGO, ARMANDO</b> BCAE, 2016, University of PR	 MARKETING OFFICER

<b>RIVERA-NEGRÓN, DARLENE</b> BBA, 2016, Interamerican University of PR	 TELEMARKETING OFFICER
<b>RODRÍGUEZ-NEGRÓN, BRENDA</b> MAED, 2011, Universidad del Este BBA, 2003, Interamerican University of PR	 ADMISSION OFFICER
<b>RODRÍGUEZ-VÉLEZ, GABRIEL</b> BBA, 2013, Interamerican University of PR	 ADMISSION OFFICER
<b>ROSA-TORRES, JULISSA</b> BA, 2015, University of Puerto Rico	 REGISTRAR OFFICER
ROSARIO-ROLDÁN, OLGA BA, 1998, University of Puerto Rico	 ADMINISTRATIVE ASSISTANT
RUÍZ-OCASIO, DAISY MBA, 2005, Universidad Central de Bayamón BBA, 1990, University of Puerto Rico	 CAMPUS CHANCELLOR
SÁNCHEZ-RAMOS, WALESKA MBA, 2014, Universidad del Este BBA, 2000, Pontifical Catholic University	 ADMISSION & MARKETING DIRECTOR
SERRANO-CANCEL, EMANUEL BA, 2016, Interamerican University of Puerto Rico	 ADMISSIONS OFFICER
<b>TOLEDO-VÉLEZ, TEREANGELI</b> BA, 2008, Interamerican University of PR	 FINANCIAL AID DIRECTOR
TORRES-ALBEZ, VÍCTOR	 OPERATIONS DIRECTOR
<b>TORRES-MATOS, ALLISON</b> BA, 2017, University of Puerto Rico	 LIBRARY ASSISTANT
VARGAS-ALVARADO, PEDRO MS, 2014, University of Puerto Rico BS, 2012, University of Puerto Rico	 EVENING COORDINATOR
ZAPATA-BARBOSA, JESSICA	 FINANCIAL AID OFFICER

# MAYAGÜEZ BRANCH CAMPUS FACULTY

<b>BARRETO-VELÁZQUEZ, GRELLIANE</b> Ph.D., 2017, Centro de Estudios Avanzados de PR y el MA, 2000, University of Phoenix BA, 1994, University of Puerto Rico	ACADEMIC AFFAIRS DEAN	
<b>CORTÉS-CORTÉS, ELISA</b> MSN, 2015, University of Puerto Rico BSN, 2010, University of Puerto Rico		NURSING
<b>DURÁN-ROSA, YARITZA</b> MSN, 2015, Antillean Aventist University BSN, 2003, University of Puerto Rico		NURSING DIRECTOR
MATTHIAS-ROSA, EBONY MN, 2015, EDP University BSN, 2010, EDP University		NURSING
NIEVES-NATAL, JOSÉ MD, 2006 Universidad Iberoamericana		HEALTH SCIENCE DIRECTOR
RODRÍGUEZ-LÓPEZ, MICHELLE MSN, 2015, EDP University of Puerto Rico		CLINICAL LIASON

### LOCATION AND FACILITIES

The main campus is located in Bayamón at the National University College Plaza in the center of the business area of the city of Bayamón, Puerto Rico. This location assures students easy access to the Institution by public or private transportation. There is a train station within walking distance of the Institution.

The Arecibo Branch Campus is located in the Arecibo Centro Plaza Building, in the central part of the city of Arecibo. The Río Grande Branch Campus is located at Km. 22.1 on State Road No. 3, Ciénaga Baja Ward in Río Grande. The Ponce Branch Campus is located on State Road 506 Km 1.0, Bo. Coto Laurel, Ponce, PR. The Caguas Branch Campus is located at 190 Gautier Benítez Avenue in the city of Caguas. All locations are handicapped oriented and accessible to all students by public and private transportation.

#### SPECIAL FACILITIES AND SERVICES AVAILABLE TO DISABLED STUDENTS

National University College is committed to providing services to students with disabilities. This has resulted in positive attitudes on behalf of faculty, administrative and support personnel. The facilities are essentially barrier free and include ramps, elevators (not all campuses) and handicapped accessible bathrooms. In terms of services, National University College supports students who self-identify a disability and provide documentation of their disability from an appropriate source. If students have disabilities that require special accommodations in terms of learning, mobility or class access, it is incumbent upon the student to contact the Student Services Office and provide this information.

#### PARKING

At all campuses, unless otherwise stated, parking is provided at no cost to students on a first come, first served basis. A student identification card is required for its use. Neither the Institution nor any of its officers or employees, assume any responsibility for damages to any cars in its parking lots nor for theft of any personal belongings left in any car.

#### HOUSING AND TRANSPORTATION

The Institution does not provide housing for students. Facilities are easily reached by both public and private transportation. If any student needs accommodations, the Institution may recommend several options available.

#### EDUCATIONAL RESOURCES

Educational resources are those academic support services provided by the Institution to students, faculty, administration and alumni. These resources consist of Computer, Dental, Nursing, Pharmacy, Chemistry, Electrical and Electronic Technology Laboratories, and the Educational Resources Centers with access to modern technology.

#### EDUCATIONAL RESOURCES CENTERS

The Educational Resources Centers of National University College are equipped with complete upto-date collections of periodicals and other resources related to the academic programs offered by the Institution. The collections also include general and specialized encyclopedias, dictionaries, handbooks, textbooks, general and specialized newspapers, periodicals, and audiovisual equipment and materials, such as: laptops, data shows, computers, overhead projectors, color TV, video and DVD players and cassette recorders. Students also have access to the EBSCO data base which includes approximately 2,000 periodicals, most of them available in full text. Users can connect to the library from outside the institution through the library page interconnected within campuses. In addition, the Centers have access to a wide spectrum of information through the Internet and E-books.

The Centers' services include, at each campus, the availability of study and reading sections with appropriate equipment and well organized collections so that resources can be easily located. The Centers have developed policies to facilitate the lending and circulation of books and materials, as well as for the use of the technology. In addition to the users instruction on library services, there is the information literacy program which allows students to seek on their own the information needed throughout their lives. Besides the Library Directors, there is additional support personnel at each site. Daily communication and inter-library loans of library materials are provided for the improvement of the services at all three campuses. Library services are offered mainly from 7:30 a.m. to 9:00 p.m. Itineraries may vary among campuses depending on student's needs.

# **STUDENT AFFAIRS**

All students admitted at National University College are oriented with regard to student consumer information and its accessibility on the institution's website. A "Student Regulations Manual", an "Academic Progress Standards Policy", and other policies and procedures are also provided to students either directly or through the institution's website.

#### **SPECIAL PROJECTS**

The Student Affairs Office is in charge of providing services to the student population including those students participating in special projects. These are mostly students referred by different consortia of municipalities participating in job training programs and also from the local Department of Labor and Human Resources. The Student Affairs Office also prepares the different proposals requested for these training services.

### COUNSELING AND GUIDANCE

Counseling and guidance services are offered to students to help them fulfill their educational goals. These services include vocational and academic orientation, personal counseling, group discussions, referral services, workshops, support services through student associations and guidance and counseling to special groups. The office of Counseling and Guidance prepares different activities to inform students about the negative consequences of alcohol, drugs and violence, among other information. It also works closely with the Registrar's Office in the evaluation and counseling regarding the standards of academic progress. The Counseling and Guidance Office also maintains contact with the faculty in order to address any situation which may occur in the institution and may require a referral to the Discipline Committee.

The Admissions department will direct all prospective eligible Military Service members to speak with their Educational Service Officer or Counselor within their Military Service prior to enrolling.

## STUDENT ASSOCIATIONS

Student Associations are sponsored by the Office of Student Affairs and/or the academic department. The Associations aim to highlight qualities of leadership, responsibility and dynamism among their student members.

#### PLACEMENT COUNSELING SERVICE

The Placement Counseling Office aids students and graduates in the job search process to obtain gainful employment by providing job market information. It advises students regarding resume preparation, job interviews and job offers. It is also responsible for the development of relationships with employers and referrals of students to prospective employers. The institution provides placement and job search assistance. However, it does not make any guarantees of employment or salary upon graduation.

## STUDENT ACTIVITIES, SPORTS AND STUDENT CENTER

The Student Activities, Sports and Student Center offers students a variety of cultural, social, educational, prevention and recreational activities all of which promote an environment conducive to the student's growth and personal development.

Student identification cards can be obtained from this area. Student publications as well as other periodical type newsletters are published through this Office. A variety of sports such as volleyball, softball,

basketball, table tennis and others are available to students to enable them to compete and share with their fellow students within and between campuses from the main and branch campuses. Intercollegiate tournaments are also promoted to encourage in students a spirit of competition and excellence. Activities with the community are encouraged, such as Red Cross blood donations and other activities with social character to promote a better quality of life.

## **OTHER STUDENT SERVICES OFFICES**

### ADMISSIONS

The Admissions Office is responsible for providing information regarding all academic programs offered at National University College. This office evaluates the applications of candidates for admission. During an interview with the candidate the student receives information with respect to the admissions process as well as Institutional policies, rules and regulations.

## ADMISSION REQUIREMENTS FOR UNDERGRADUATE PROGRAMS (on ground and online students)

The following documents should be presented in order to be considered for admission:

- 1. Complete and submit an enrollment application for admission.
- 2. Present final High School Transcript, High School diploma, evidence of having passed the high school equivalency test or their recognized equivalence.
- 3. If the High School Diploma is from an accelerated school, the student should present the Final High School Transcript and, complete the current Accelerated High School Information Form and comply with the established criteria in it.
- 4. If the high school transcript is from a foreign school, the student should present the certification of its equivalency from the Department of Education of Puerto Rico.
- 5. Present the test results of the College Entrance Examination Board, SAT, or in its absence, take the Entrance Examination offered by the National University College. This particular requirement will not apply to transfer students.
- 6. If less than 21 years of age, present the inoculation certificate issued by the Puerto Rico Health Department. This requirement will not apply to students enrolled online residing outside Puerto Rico.
- 7. It is a requirement that each student meets the minimum grade point average (GPA) and other requirements indicated in the <u>Admission and Transfer Requirements Table for Undergraduate</u> <u>Programs.</u>
- 8. For all programs, except for the Education and Nursing programs, candidates with special qualifications who do not meet the minimum admissions index may be evaluated by an Admission's Committee. This committee which has representation from the Department Directors and the Counseling Department decides which of these candidates are admitted. The Admission's Committee will evaluate the candidates that did not obtain the minimum admission index. Such evaluation may be done at the request of the student or upon the recommendation of the Admissions Office. The committee will consider the following as mitigating circumstances which if one or more are met would make the candidate eligible for admission contingent upon the results of the evaluation.
  - a. Be 21 years of age or older
  - b. Have work experience
  - c. Be head of family
  - d. Have special studies (continuing education) after high school
  - e. Demonstrate special interest during the interview

- f. Present a recommendation letter from the high school counselor. If in the opinion of the Committee, the candidate meets two or more of the above criteria, the student will qualify to be evaluated for admission. The Committee may also recommend for those students admitted a limited course load, closer or more frequent follow-up and even special monitoring.
- 9. Students whose admissions index cannot be calculated because they don't have a high school grade point average, must be evaluated by the Admission's Committee. In the case of Nursing, students must be interviewed by the Nursing Program Lead Director of their campus.
- 10. Home schooled students must present an official certification from the applicable state, recognized agency that they have completed high school through home schooling. In the event this is not available, they should present evidence that they have passed the high school equivalency exam or GED. Home schooled students will also be required to complete and submit all admission documents required by the institution.

## Geographic limitations apply. Please contact us for more information.

## Formula for computing the admission's Index:

The high school index is multiplied by 100. The College Entrance Examination Board or the National University College Entrance Exam is divided by 100. The sum of these products is equivalent to the Admission's Index.

<u>For example</u>: a student with a high school graduation index of 2.00 and 2,000 points in the College Entrance Examination board test will accumulate an admission index of 220 points. The admission index will be computed using the following formula:

 $(G.P.A. x 100) + (C.E.E.B. or NCBT Entrance Exam \div 100) = Admission Index (A.I.) (2.00 x 100) + (2,000 \div 100) = A.I. 200 + 20 = 220 Admission Index$ 

The use of this formula will permit applicants to use their high school record and academic potential to the maximum.

Those candidates who for reasons beyond their control, such as economic ones were not able to take the College Board exam, will be permitted to take the National University College Entrance Exam.

Newly admitted students are encouraged to attend an orientation session prior to their class start.

Graduates of Allied Health and Education programs are reminded that they are required by law to take an exam offered by the various Boards that oversee these professions to obtain their licenses. A good conduct certificate is required in some Allied Health Programs. Minimum age requirements may also apply to begin internships in some programs.

## ADMISSION AND TRANSFER REQUIREMENTS FOR UNDERGRADUATE PROGRAMS

Credential Level	Admission Index (HS graduation index)	Transfer Admission Index	Other requirements	
Associate's Degree in Pharmacy Technician	2.00/220 points	GPA 2.00 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
Associate's Degree in Nursing	2.00/220 points	GPA 2.00 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
Associate's Degree in Physical Therapist Assistant*	3.00/300 points	GPA 3.00 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
Bachelor's Degree in Education Programs	2.25/225 points	GPA 2.25 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
Bachelor's Degree in Science in Nursing	2.25/225 points	GPA 2.25 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
RN to BSN (on-line)	N/A	GPA 2.25 Associates Degree Conferred and Active RN License	<ol> <li>Have an Associate Degree in Nursing from an accredited institution recognized by the US Department of Education or by an official agency from the country of origin.</li> <li>Have a permanent RN License in the United States or Puerto Rico and evidence that such license is active. All students must keep their license active during their time of study.</li> <li>Meet all transfer and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
	1	ALL OTHER U	NDERGRADUATE PROGRAMS	
All Associate's Degree Programs	1.76/176 points	GPA 2.00 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	
All Bachelor's Degree Programs	1.76/176 points	GPA 2.00 Minimum 1 approved course	<ol> <li>Meet all general admission, transfer requirements and specific program requirements as applicable.</li> <li>Read and sign the Special Requirements Orientation Certification.</li> </ol>	

For the graduate programs admission requirements, please refer to the Graduate Programs section.

\*The Physical Therapist Assistant Program at National University College's Bayamon Campus is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111North Fairfax Street Alejandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program / institution directly, please call 787-780-5134 Ext. 4111 or email: mtorres2@nuc.edu.

# **TRANSFER STUDENTS**

## **Undergraduate Transfer Students**

An undergraduate transfer student is a student entering National University College for the first time but known to have previously attended a postsecondary institution, with at least one (1) course approved, whether he intends to transfer course(s) or not.

## Undergraduate Transfer Students Admission Requirements

The undergraduate transfer student must comply with the following conditions:

- 1. Complete and submit an application for admission.
- 2. Meet the minimum grade point average (GPA) and other requirements indicated in the <u>Admission</u> <u>and Transfer Requirements Table for Undergraduate Programs.</u>
- 3. If less than 21 years of age, present the inoculation certificate issued by the Puerto Rico Health Department. This requirement will not apply to students enrolled online residing outside Puerto Rico.
- 4. Submit a transcript from the institution from where the student is transferring.
  - a. If the transcript is from a foreign university, the student will be responsible for having the document translated to English by a certified translator, and have the credits evaluated by a certified foreign credential evaluator that is a member of the National Association of Credential Evaluation Services. The certified documents must be sent to the Dean of Academic Affairs of National University College to which the student is applying.
  - b. If the student has completed a post-secondary university degree, no evidence of High School Completion is needed. Otherwise, if student has an incomplete college degree or a completed post-secondary non-university degree, high school completion evidence is needed. If the college transcript does not include evidence of high school completion, the student must present the final high school transcript, high school diploma, evidence of having passed the high school equivalency test or their recognized equivalence. If the High School Diploma is from an accelerated school, the student should present the Final High School Transcript and, complete the current Accelerated High School Information Form and comply with the established criteria in it. If the high school transcript or evidence is from a foreign school, the student should present the certification of its equivalency from the Department of Education of Puerto Rico or an educational credential assessment from a recognized International Credential Evaluation Services organization.

## TRANSFER COURSES PROCEDURE FOR UNDERGRADUATE STUDENTS

- 1. The student must complete the Request Form for Transfer Courses.
- 2. The process request for transferring courses must be generated by the student during the admission process and in a period of not more than forty-five (45) calendar days from the initial date to their first academic term; after that deadline no new requests will be accepted.
- 3. The Registrar's Office will only accept one (1) application for transfer courses and one (1) reconsideration or appeal to that request.
- 4. Those students with transferred courses from other institutions must present the transcript from each institution in order to transfer courses. A copy of the catalog, syllabus or any other document may be required to verify the credit hours, content and duration of courses.
- 5. The transfer of courses will be done taking into consideration the official transcript(s) received. The student may request a preliminary evaluation with a copy of the transcript(s). Each course will be evaluated with their corresponding courses equivalency at NUC.

- 6. The student is accountable for following up that the documents arrive in a timely manner to the Registrar's Office, specifically official transcript of all courses that transfer is requested for. If the student's record reaches the Registrar's Office with no official documents for transfer of courses, the registrar officer will place a *Hold* status within the Student Management System, which will restrict the student's enrollment for the next academic term. The *Hold* can be removed only if the official TC is received or if the student enrolls in those courses that he had requested to be transferred, in the next term, according to availability.
- 7. If a student presented problems when completing the application, to obtaining his official transcript, he can be granted an extension to the transfer course period. The extension will be for about 15 additional working days from the date of application.
- 8. All transfer courses must be approved with a grade of "C" at least. Courses approved with less than a "C" will not be considered for transfer. For the Physical Therapy Assistant program, transfer courses must be approved with a grade of "B" at least. Courses approved with less than a "B" will not be considered for transfer. For this program also, courses that are not part of the curriculum, including general education courses, will not be considered for transfer. In addition, major courses to be transferred, must come from a CAPTE accredited institution.
- 9. Courses approved in a period that exceeds 10 years, will be considered based on their merits and in accordance with the requirements of the accreditation agencies and the changes and requirements of the examination boards. These cases will be reviewed by a committee composed of the Academic Dean and the Department Directors or Program Coordinator.
- 10. The maximum transfer credits allowed will be 50 percent of the total credits that the student must take to meet graduation requirements of an academic program in NUC, either in transferred credits or combined with competency exams. (For the Bachelor's Degree in Science in Nursing (RN to BSN) program, please refer to specific transfer requirements on page 163).
- 11. The University Environment Seminar course will be granted as transferred in those cases in which the students has an awarded degree or has approved six or more credits.
- 12. Some courses that are not part of the academic offerings of NUC may be considered as electives transferred credits, upon authorization of the Vice President of Academic Affairs.
- 13. Any transfer student who upon presenting their transcript is not in good standing will be referred for evaluation to the Admission's Committee.
- 14. The Registrar's Office will notify students which courses have been accepted for transfer.
- 15. The student may submit a written appeal to the Dean of Academic Affairs if in disagreement with the decision in a period no longer than ten (10) working days from the receipt of the notification.
- 16. Transferred courses will be reflected without grade in the student transcript. These courses will affect the percentage of credits attempted vs those approved.
- 17. NUC does not guarantee the transferability of any of the credits from its programs to other institutions of higher education.

# SPECIAL STUDENTS (NON-DEGREE SEEKING-NDS) POLICY

National University College (NUC) currently receives students (Audit Students) who seek to take courses without any interest whatsoever in obtaining a degree. The institution's student information system, Campus Vue, classifies these students as Non Degree Seeking (NDS). Special students will be those students who are not interested in obtaining an academic degree but are interested in taking courses for their own professional or personal development. In addition, special students will be those students enrolled in other collegiate or university level institutions who have been authorized to take courses at NUC.

Also, NUC receives students who wish to obtain a certification as teaching personnel in the PR Department of Education either through the recertification route or through the direct route.

The alternate students who wish to obtain a certification are those who already possess an academic degree with a certification as teachers and return to study because they are interested in obtaining a certification in another area of concentration or specialty.

The alternate students who follow the direct route are those who already possess an academic degree and return to study the necessary courses to apply for a certification as teaching personnel in the PR Department of Education. These students will be classified by NUC as special even if the PR Department of Education identifies them as alternates.

Those students who already have a Bachelor's degree or a Master's degree awarded and are interested in studying another concentration under the same program can take these additional courses. However, since these courses by themselves are not considered an eligible program, students will be classified under the category of "non-degree seeking" student. This means that they will be enrolled on a course-by-course basis and will be not classified as a regular student pursuing a degree. For this reason students will not be granted another diploma nor will they be eligible for Title IV financial aid for these courses.

All the students previously described, except Audit Students, will receive credits and a final grade. This means that they will have to comply with all the assignments and required exams to approve the courses. If a student doesn't have a conferred degree and wishes to continue his studies to obtain a university degree, he should complete all the requirements to be admitted as a regular student.

## Requirements to be admitted as a special student

- 1. Should complete and submit the application for admission.
- 2. If under the age of 21, should submit the original document or a copy of the updated immunization certificate. (This will not apply to alternate students enrolled in the education programs)
- 3. Payment of admissions fee (nonrefundable)
- 4. If the student is enrolled in another collegiate institution, he should submit evidence of authorization from his institution to take courses at NUC (This will not apply to alternate students enrolled in the education programs).
- 5. Submit a transcript that certifies the award granted.
- 6. Be interviewed by the NUC Education Department Director or Coordinator (This only applies to alternate students enrolled in the education programs).
- 7. The student should follow the norms and procedures established by the institution.
- 8. The costs per credit and fees will be the same as those charged to regular students with the exception of Audit Students who will be charged 50% of tuition per credit and fees.

This policy will apply to on ground, online and foreign students. For this policy, students should comply with all the requirements of the Commonwealth of Puerto Rico, the United States and their place of origin.

# FINANCIAL AID OFFICE

National University College offers financial aid to students who are eligible for the programs currently administered by the Institution. Financial aid may not be available for all programs. Please contact the Financial Aid Office for more information. The aid offered to each eligible student is subject to the availability of funds for the specific award year. The Financial Aid programs currently available at the Institution are the following:

- Federal Pell Grant Program
- Federal Work Study (FWS) Program
- Federal Supplemental Educational Opportunity Grant (FSEOG) Program
- Federal Direct Loan Program
- PRCE Supplementary Educational Sub-graduate and Graduate Program
- PRCE Students with Merit Program
- PRCE High Honor Students Program
- PRCE Special Fund for Students Exceeded Pell LEU > 600%
- PRCE Scholarship Program Specific Academic Areas
- RED Técnica Universitaria Scholarship Program Fund
- Creemos en ti Institutional Grant

To apply for financial aid, students must complete the standard forms, provided by the Financial Aid Office, for the programs currently offered. In the case of federal programs under Title IV, the Free Application for Federal Student Aid (FAFSA) can be obtained by completing an application online at www.fafsa.ed.gov. Specific information concerning the eligibility requirements for each program is also available at the Financial Aid Office.

To be eligible for any type of financial aid, all students must comply with the Institution's Standards of Satisfactory Academic Progress.

The following is a description of the different types of financial aid offered by the Institution:

## Federal Pell Grant Program

This grant does not have to be repaid by the student. Funds for this program are available for eligible undergraduate students. The eligibility for this program is determined by a standard formula provided by the US Department of Education. Students must apply annually for this aid by completing the Free Application for Federal Student Aid (FAFSA).

#### **Federal Direct Loan Program**

Enables eligible students and parents to borrow directly from the US Department of Education. The program provides low interest loans that must be repaid with interest. Students must apply annually for this aid by completing the Free Application for Federal Student Aid (FAFSA) and by completing an Entrance Counseling session and Master Promissory Note.

## Federal Work Study (FWS) Program

The Federal Work Study Program provides jobs for eligible students with financial aid need as defined by the US Department of Education. Federal Work Study gives students the opportunity to earn money to help pay educational expenses. The amount of the awards is based on need and availability of funds.

### <u>Federal Supplemental Educational</u> <u>Opportunity Grant (FSEOG) Program</u>

The Federal Supplemental Educational Opportunity Grant is an award to help those eligible undergraduate students having the greatest financial need (with priority given to Pell Grant recipients), and it doesn't have to be repaid. The amount of the award is based on need and availability of funds.

# PRCE Programs/State Grants Program

These funds are assigned to the institution by the Puerto Rico Council of Higher Education for eligible students with financial need who are enrolled in a master's, bachelor's or associate's degree program.

## **RED Técnica Universitaria Scholarship Program Fund**

These funds are assigned to the institution by the RED Técnica Universitaria of Puerto Rico for eligible students with financial need who are enrolled in a bachelor's or associate's degree program.

## **Creemos en Ti Institutional Grant**

National University College (NUC) recognizes the challenges that Puerto Rico is currently facing and the importance of education in building a new future. This is why, NUC, in accordance with its academic and federal regulations, promulgates the implementation of the *CREEMOS EN TI Institutional Grant*, which will grant a maximum of \$600.00 to eligible students for their first academic year of study at NUC.

# **Applicability of This Policy**

This policy applies to new students.

This policy applies to new students who will be enrolling in National University College in August 2016, new starts and transfers, full-time, regardless of whether they receive federal financial aid or any other kind of aid. This aid will be submitted to evaluation. The policy does not apply to students enrolled in continuing education courses.

### **INSTITUTIONAL GRANT:** Creemos en ti

This grant requires that student applicants meet the following criteria:

- 1. Start in an academic program with NUC in August 2016.
- 2. Be a first-time NUC student.
- 3. Come to NUC from another postsecondary institution or high school.
- 4. Have completed and submitted all required documents for Admission.
- 5. Have completed the FAFSA, and submitted any documents requested by the Financial Aid Office.
- 6. Show financial need.
- 7. Reside in Puerto Rico.
- 8. Maintain a satisfactory academic progress.
- 9. Be in compliance with any financial obligation with the institution.

Students applying for any financial aid administered by NUC are required to report any additional external financial aid they plan to receive to finance their studies (Veterans, Vocational Rehabilitation, Americorps, etc.).

Applications are available and should be submitted to the Financial Aid Office. All applications will be evaluated by a committee formed by the President, the Vice President for Student Affairs and Effectiveness, and the Campus Chancellor, in order of receipt. Therefore, NUC invites applicants to apply early since funds available for this grant are limited.

NUC will disburse the amount granted in equal parts at the end of each academic term (\$200.00 per academic

term). The student must have complied with the standard requirement of satisfactory academic progress and with any financial obligation with the institution, in order to receive the disbursement.

NUC has allocated a \$700,000.00 budget for the CREEMOS EN TI Grant.

# **ACADEMIC YEAR**

The Institution's Academic Year is divided into three terms (trimesters of approximately three and a half (3.5) months each). The academic calendar is published yearly and is included within this Catalog. The institution's programs are measured in trimester credit hours as per the accreditation criteria formula.

# **CLASS ATTENDANCE**

Students are expected to attend all the courses in which they are officially enrolled. Work missed by absences is the responsibility of the student. This work, whether it be for a grade or not, can be made-up through a consultation with the course professor.

## Online Division Programs and Courses Attendance Policy

National University College recognizes students have varied personal and professional responsibilities in addition to their obligations as students and as a consequence many elect to complete a degree through distance learning. NUC's Online Division provides academic flexibility and diversity to meet the needs of students varied learning styles. Learning is a combination of individual study and engagement with other students in a structured learning environment. Therefore, NUC expects that students meet their academic obligations with a high level of responsibility and timeliness, while on the other hand, expects faculty to maintain flexibility to meet student needs.

To stay in compliance with state and federal regulations, National University College is required to maintain accurate attendance records in all courses. Online courses are no different from classroom courses in this regard, however, attendance is monitored in a different manner. Student "attendance" in online courses will be defined as active participation in the course.

Online courses will, at a minimum, have weekly activities to monitor student participation. Students are primarily responsible for class attendance and are expected to complete course required activities each week by the required deadline. Students are encouraged to review the course syllabus for details of required activities that constitute active participation. Failure to meet attendance expectations may result in an administrative withdrawal.

Participation is captured and recorded as the Last Date of Attendance (LDA) in the student records system and updated with each consecutive academically-related activity. This provides a dynamic update to the LDA in the student's academic record for monitoring of course participation throughout a term. In the event of a student-initiated or administrative withdrawal, the LDA is used as the official date of withdrawal.

Students are expected to communicate with the respective faculty, in advance, when an absence will occur. It is at the discretion of the faculty member to accept late assignments or to allow make up work due to absences. To this end, each course syllabus clearly delineates expectations regarding absence notification to faculty by students, class participation, and acceptance of late work.

Students that want to drop one or all courses after the end of the add/drop period (first week of term), should refer to the University's withdrawal polices and their Student Services Advisor for options. Students who stop attending class will receive an earned letter grade of W or A-F at the end of the term determined by the student's last date of class attendance.

# **CLASS SCHEDULE**

The Institution's academic programs are offered during daily sessions. Students are advised that some courses are offered during evening and/or Saturday sessions and therefore must adjust their programs accordingly. Weekend sessions may be offered depending on enrollment and may vary by campus. Classes are offered daily from 7:00 a.m. to 4:00 p.m.; evenings from 5:00 to 10:30 p.m.; and Saturdays from 8:00 a.m. to Noon. There is a six minute break between classes during the day session schedule.

### **Credit Hours**

The basic unit in evaluating a student's work is credit hours. One lecture credit is equivalent to 15 lecture contact hours and 30 hours of out-of-class work. One laboratory credit is equivalent to 30 contact hours. Practicum hours may vary depending on the field and Examination Boards, if applicable, but one credit practicum is equivalent to not less than 45 hours per term.

#### **Out-of-Class Work**

Each lecture credit requires 30 hours of out-of-class student work. The out-of-class work may include but is not limited to: required reading, library research, studio work, written assignments, portfolios, and studying for quizzes and exams.

# **ADVANCED PLACEMENT**

Students who have successfully taken one or more of the Advanced Placement Tests of the College Entrance Examination Board may ask for course equivalency. Scores of 3 or more are required for such action. The decision to grant credit for the Advanced Placement Test is based on test equivalency to the content of courses in National University College. In order for more than one level to be considered by course material, a score of 4 or 5 will be required. Advanced placement or credit action is only taken if the student has specifically requested such consideration and has submitted official score reports from the College Board. No grades are assigned to courses credited.

SCORE	COURSE
3	ENGL 1010
	MATH 1010
	SPAN 1010
4 or 5	ENGL 1010-1020
	MATH 1010
	SPAN 1010-1020

# NATIONAL EXAMS FOR COLLEGE CREDIT

Students earning satisfactory scores on CLEP\*, DSST or ECE exams may be awarded credit hours towards a degree program at National University College. The Registrar's office will determine eligible examinations and the potential number of credits possible for each examination. For more information on exams, how to order study guides, and to find a testing center near you, please visit:

- CLEP http://clep.collegeboard.org/
- DSST http://www.getcollegecredit.com
- ECE http://www.excelsior.edu/exam-list#schools

\*CLEP, DSST and ECE are approved by the American Council on Education (ACE). http://www.acenet.edu/news-room/Pages/National-Exams-for-College-Credit.aspx

# **ARMED FORCES CREDIT**

Some training courses provided by the Armed Forces may be the equivalent of college courses and transfer credit may be obtained. Where courses are applicable to a program of study, credit will be determined using the American Council on Education publication titled *Guide to Evaluation of Educational Experience in the Armed Services*.

# **VETERANS AND OTHER BENEFICIARIES**

Veteran students and beneficiaries of Veteran's Administration Programs will be entitled to benefits if they complete their study programs at the regular time (minimum number of credits required for completion) stipulated in the Catalog. In the event that they exceed the minimum number of credits required to complete a program, they lose eligibility for these benefits under Title 38. However, they may still be eligible for financial aid under Title IV (Pell Grants and others) if they comply with the corresponding requirements for this aid.

## Standards of Academic Progress for VA Students

Students receiving VA educational benefits must maintain a minimum cumulative grade point average (CGPA) of 2.00 each term (quarter, semester, evaluation period, etc.).

A VA student whose CGPA falls below 2.00 at the end of any term (quarter, semester, evaluation period, etc.) will be placed on academic probation for a maximum of two consecutive terms of enrollment. If the VA student's CGPA is still below 2.00 at the end of the second consecutive term of probation, the student's VA educational benefits will be terminated.

A VA student terminated from VA educational benefits due to unsatisfactory progress may petition the Institution to be recertified after attaining a CGPA of 2.00

## Veteran's Credit for Previous Education or Training

Students must report all education and training. The Institution will evaluate and grant credit, if appropriate, with the training time shortened, the tuition reduced proportionately, and the student notified.

# STUDENTS GRIEVANCE POLICY

NUC, in compliance with its mission, promotes the learning of students in a healthy environment among the members of the university community. NUC is committed to the attention and resolution of complaints presented by students in a reasonable time and with recommendations made judiciously and assertively by the Research Committee established in each campus or center. (The Grievance Policy is in Student Regulations Manual 2018-2020).

# **INTERNAL GRIEVANCE POLICY**

An internal grievance policy has been established to consider complaints received from employees and other interested parties. The process is the following:

- 1. In the case of employees or interested parties, they should submit their complaint in writing to the Institutional Human Resources Director.
- 2. The complaints will be reviewed by the designated officials within five business days after filing.
- 3. Once the complaint is investigated a response should be submitted to the complainant within the following 10 business days of the final decision.

# NON DISCRIMINATION POLICY

In accordance with the requirements of Title IX of the Education Amendments of 1972 and its implementing regulations, National University College designated Ms. Yamaira Serrano, Human Resources Director, as its Title IX Coordinator. The following nondiscrimination policy and grievance procedures are hereby published to address any complaints of discrimination on the basis of sex in educational programs and activities at this institution.

- 1. National University College does not discriminate on the basis of sex in admission to or employment in its education programs or activities.
- The Title IX Coordinator for the Institution is Ms. Yamaira Serrano, Institutional Human Resources Director, National University College. She can be contacted at the Human Resources Office, National University College Plaza Building #1660, Km 11.2, State Road #2, Bayamón, PR 00961, telephone (787)780-5134 ext. 4180.
- 3. All inquiries concerning the application of Title IX and its implementing regulations may be referred to the Institutional Human Resources Director or to the Office for Civil Rights of the US Department of Education at 75 Park Place, 14th floor, New York, NY 10007-2146, telephone (212) 637-6466.
- 4. Any complaints of discrimination based on age, race, color, place of birth, social origin or condition, physical or mental handicap or political or religious beliefs will also follow the grievance procedures policy mentioned below and as described in the Student Handbook and institutional policies.

The following procedure should be followed in order to file/address complaints of discrimination on the basis of sex in educational programs and activities at this institution.

- 1. The student or employee should submit his complaint in writing to the Human Resources Office to the attention of the Institutional Human Resources Director of the National University College.
- 2. The complaint will be reviewed by the designated officials within five business days after filing.
- 3. Once the complaint is investigated a response should be submitted to the complainant within the following 10 business days of the final decision.

# **REGISTRAR'S OFFICE**

The Registrar's office is responsible for carrying out all transactions related to student academic records. All information that the student may need to know regarding academic progress, grades, grade point average and related information can be found at this office.

### **Registration Process**

The Registrar's Office organizes the entire registration process. Each active student is responsible for participating in this process to guarantee his selection of courses. All students should comply with the established requirements including the academic calendar. This enrollment process for continuing students including the courses pending academic counseling is carried out before the end of the term in progress. No enrollment will be valid until the student has paid all the necessary fees and has received the official enrollment form from the Registrar's Office.

#### **Enrollment Status**

The enrollment status of students at our Institution is as follows: 11 1 1 10

01111	Full Time Student	a student enrolled in 12 or more credits
	3/4 Time Student	a student enrolled in 9-11 credits
	1/2 Time Student	a student enrolled in 6-8 credits
	Less than 1/2 Time Student	a student enrolled in less than 6 credits
	Special Student	Enrollment for informational instruction only or for professional development. These students are not enrolled in a program of study.

#### **Student Records**

The Office of the Registrar is responsible for the registration and maintenance of all student's academic transcripts, certifications of studies and of graduation. Students requiring information concerning grade records, issuance of transcripts and related services should contact the Registrar's office.

In compliance with the Family Educational Rights and Privacy Act of 1974, the confidentiality of student records is protected. Students may request or examine any information from their student record or they may authorize in writing that a third person be provided access to their academic record.

#### **Notification / Grades Changes**

At the end of each term, students can access their grades through the student portal on the website of National University College. Students who experience difficulty accessing their grades through the Student Portal, should contact the Registrar's Office. If a student understands that there has been an error, the student should first contact his professor and if there was an error, should visit the Registrar's office to request a grade change form to be completed by the student's professor. The completed form should be returned to the Registrar's office no later than upon completion of the third week of classes of the following term (this date is specified in the institution's academic calendar.

## **Certifications and Transcripts**

Upon a student's written request on the appropriate form and upon payment of the corresponding fees, a certification of his program of study, transcripts or any other official statement will be issued by the Registrar within a minimum of 10 business days after having filed said request.

However, when requests are made at the beginning or the end of a term, a longer period of time may be required to issue the corresponding certifications.

For transfer of credits to other colleges and universities and for information to be sent to certifying agencies and prospective employers, confidential transcripts are issued upon a student's request. These are sent directly to the address provided by the student in his request and are never given to the student.

For their personal information, students may obtain a "certified student copy" transcript, which is unacceptable for official purposes. Any alleged errors in a transcript should be informed to the Registrar within ten days of its receipt.

# **Change of Address**

When students register, they are required to file their residential mailing address with the Office of Registar. Changes of address should be informed immediately to the Registar.

The institution will not be responsible for notifications not received by students if their address has changed and they did not make the corresponding notification. Any notice, mailed to a student's address as it appears on the records shall be deemed sufficient notice.

#### National University College Withdrawal Policy

A student is considered to have withdrawn from a term (payment period) if the student does not complete all the days in the term that the student was scheduled to complete.

Students that are considering withdrawing as an option are encouraged to meet with the Academic Advisor and/or the Retention Officer before leaving school. Students must also review the Title IV and Institutional Refund Policies to have an understanding of how withdrawals could affect their accounts, amounts of Title IV received, and obligations to repay federal loans.

## **Official Withdrawals**

A student is considered to have officially withdrawn when the official withdrawal process is completed.

### **Official Withdrawal Process:**

- 1. Student must contact the Registrar's Office (On ground students) or the Academic Advisor (Online Division) to notify his/her intent of withdrawal, from some or all courses, and request the Official Withdrawal Form.
- 2. Student must complete the Official Withdrawal Form and obtain the appropriate authorizations.
- 3. After completed, form must be returned to the Academic Advisor or Registrar's Office.

### Written Confirmation of Future Attendance – Only for Programs Offered in Modules

A student may not be considered a withdrawal if he/she temporarily stop attending, but plans to attend a future module that begins later in the same term (payment period). A student may qualify to remain active in term (payment period) if the student meets all of the following criteria:

- The student must be enrolled in a program that offers courses in modules.
- The student must be able to return to a future module in the same term (payment period).
- The student must complete and return the Written Confirmation of Future Attendance Form at the time of the withdrawal and prior to the student being absent from class for 14 consecutive days, even if the student has already registered for subsequent courses.

Written Confirmation of Future Attendance must also be completed before the start date of the future module the student plans to attend.

Since eligible students are not considered to have withdrawn from the payment period, a Return of Title

IV Funds is not required. However, other regulatory provisions concerning recalculation may apply.

If the student does not return within 14 days from the date he/she was scheduled to resume attendance, the student will be considered to have withdrawn from the term (payment period).

#### **Unofficial Withdrawals**

If the student does not complete the official withdrawal process but is absent for 14 consecutive days, without providing written confirmation of future attendance, he/she will be administratively withdrawn.

### **Reinstallation after Withdrawal**

A student who would like to rescind his/her notification of withdrawal, or appeal the institution decision of administrative withdrawal must complete the Withdrawal Appeal Form where the student indicates his or her intent to remain in academic attendance through the end of the term.

The completed Withdrawal Appeal Form must be submitted to the Registrar's Office or Academic Advisor for the appropriate evaluation.

#### **Satisfactory Academic Progress Effect of Withdrawals**

For the purpose of measuring the satisfactory academic progress of a student, withdrawals will be considered as courses not approved. This will not affect the student's cumulative grade point average, but will have an effect on the number of credits that the student should have successfully completed at the moment in which his academic record has been evaluated to measure the time frame for academic progress.

#### **Date of Determination and Withdrawal Date**

For Official Withdrawals, the Date of Determination (DOD) will be the date the student completes the Official Withdrawal Process. For Unofficial Withdrawals, the DOD will be the date National University College became aware that the student was not in attendance (no later than 14 days of LDA).

For students that do not return after providing Written Confirmation of Future Attendance, the DOD will be no later than 14 days after the date student was scheduled to resume attendance.

For all Withdrawal types, the Withdrawal date will be the last date of academic attendance (LDA) as determined by the attendance records.

### Deadlines

The deadline to request partial or total withdrawals is established on the academic calendar.

#### **Financial Aid**

All students that received loans from the Federal Student Loan Program must complete an exit counseling session after leaving the institution, completing the program or reducing course load to less than half time.

Exit counseling can be completed at: https://studentloans.gov/myDirectLoan/index.action

Direct Subsidized Loans, Direct Unsubsidized Loans, Subsidized Federal Stafford Loans, and Unsubsidized Federal Stafford Loans have a six-month grace period before payments are due. PLUS loans have no grace period.

#### Administrative Withdrawals

This status is assigned by the Institution to any student who has been dismissed from the Institution due to disciplinary reasons. Only the Dean of Academic Affairs will make the determination. Students may be dismissed for one or more terms or permanently.

#### No Show (NS)

Refers to an enrolled student who doesn't attend any of his courses.

#### **Transfer Credits (TC)**

Credits granted for courses transferred from other collegiate institutions.

#### **Repeating Courses**

A student can repeat a course if he is interested in improving his grade. Only the highest grade will be used in the calculation of the cumulative grade point average. All courses will also be considered credits attempted for the purpose of determining successful course completion percentages. Repetition of previously failed courses may be counted in the student's enrollment status for Title IV funding purposes. However, repetition of a previously passed course may be counted in the student's enrollment status for Title IV funding purposes only one time and the course repetition cannot be due to the student failing other previous coursework.

# **COMPETENCY EXAMS**

Undergraduate students can apply for and take competency exams for any course in their program of study, subject to academic evaluation, availability and depending upon the regulations and/or the accreditation standards of those academic programs. Not all program courses will be available for competency exams. Only those students who understand that they have the necessary knowledge of the course material for which they are interested in taking a competency exam should apply for it. This exam will be authorized to students after they have been officially enrolled in the institution and active in the term in which they apply for the exam. Competency exams will only be offered to students in courses in which they have never been enrolled.

If the student passes the exam with a grade of 70 per cent or higher, he will obtain the value in credits assigned to that course. No grade will be assigned for competency exams. The competency exam may be taken up to a maximum of two times, which means that the student can only repeat the exam once. Each attempt requires a new application and payment. The student may only take two competency exams per academic term, and up to a total of four tests in his academic life at National University College, while not exceeding the amount of allowed transfer credits as stated in the transfer credit policy. If the student should fail the exam on both attempts, the student must enroll and take the course.

# UNIVERSITY ENVIRONMENT SEMINAR

All graduates of National University College as well as transfer students who have completed degrees are exempt from taking the SEMI 1001, University Environment Seminar.

# **GRADING SYSTEM**

The grading system used is fully explained on the transcript. The evaluation of a student's academic progress in the institution is based on:

100-90	A	=	Excellent	4.00	Grade Points
89-80 1	3	=	Good	3.00	Grade Points
79-70 (	2	=	Satisfactory	2.00	Grade Points
69-60 I	0	=	Deficient	1.00	Grade Point
59-0 I	5	=	Failure	0.00	Grade Point
	Ι	=	Incomplete		
	R	=	Repeated Course		
	TC	=	Transfer Credits		
	TD	=	Transfer Degree		
	AW	=	Administrative Withdrawal		
	CE	=	Competency Exam		
	NS	=	No Show		
	Р	=	Pass		
	W	=	Withdrawal		
	NP	=	No Pass		
	NR	=	Grade not Reported		

# **RE-ADMISSIONS**

Every student who has withdrawn from the Institution and is interested in being re-admitted should complete a re-admission request form at the Registrar's office. This process applies to those students who have not been enrolled at the Institution for one or more terms.

# **PROCEDURE FOR RE-ADMISSION**

- 1. Obtain the re-admission form in the Registrar's office.
- 2. Obtain the authorization of: Finance (Bursar's) office, Financial Aid office, Educational Resources Center, Admission's Office, Orientation and Counseling Office and finally the Registrar's office.
- 3. Pay a non-refundable fee of \$25.

Students applying for re-admission should be aware that academic credits expire ten years after the student has studied for the last time. Except in those cases in which the student has completed an academic degree, all other academic credits completed within the ten years prior to the date in which the student seeks re-admission, will be evaluated for equivalency as per the corresponding catalog and the course content of the applicable program.

# **ELECTIVES**

Electives are courses included in the offerings of National University College at the student's level of study. They exclude the required courses for the degree in which the student is enrolled. Any student can select from any of these courses to comply with the electives requirements. Elective courses must be passes with at least a "C" grade.

# ACADEMIC INTEGRITY POLICY

**Statement of Policy:** NUC's principles of academic integrity will not tolerate acts of falsification, misrepresentation, intellectual dishonesty, whether intentional or unintentional or deception. Such acts of intellectual dishonesty include, but are not limited to, cheating, plagiarism, fabricating data or citations, stealing examinations, selling or distributing stolen examinations, using faculty member editions of textbooks without authorization, taking an exam for another student, using technology to disseminate exam questions and answers, tampering with the academic work of another student, misuse of grant or institutional funds, facilitating other students' acts of academic dishonesty, academic sabotage, and resubmitting work completed in another course (with the exception of compiling previous coursework, if approved, into a Directed Research Project).

The student will be responsible for reading and complying with the Academic Integrity Policy available on the Institution's Website.

# STANDARDS OF SATISFACTORY ACADEMIC PROGRESS (SAP)

#### **Policy Declaration**

National University College, in accordance with its academic and federal regulations, specifically 34 CFR 668.34, promulgates and adopts this Satisfactory Academic Progress Policy.

#### **Applicability of this Policy**

This policy applies to any student enrolled in National University College, regardless of whether they are full-time or part-time students or if they receive federal financial aid or any other kind of aid. The policy does not apply to students enrolled in continuing education courses.

#### **Satisfactory Academic Progress Definition**

**National University College** defines Satisfactory Academic Progress as the required measurement of a student's academic progress towards completing their academic program. Satisfactory Academic Progress is evaluated with two standards: a qualitative component (GPA) and a quantitative component (Credits Successfully Completed).

The student must maintain the required cumulative grade point average and successfully approve the credits required in order to meet the qualitative and quantitative components of SAP. In order that the student completes the approved academic program within the established maximum time frame for the program (the quantitative component of SAP), the student must also maintain a steady pace of completing approved courses throughout the duration of the student's academic program.

A review of the Satisfactory Academic Progress is not complete until both the qualitative and quantitative measures have been reviewed. If the review shows that a student does not have the required GPA or is not maintaining the required pace, they become ineligible for FSA funds unless they are placed on a Financial Aid Probation period, after a successful appeal.

#### Requirements that need to be met in order to maintain satisfactory academic progress

### **Qualitative Component (GPA):**

Students are required to maintain a grade point average that allows them to meet the graduation requirements. Students need to achieve a minimum cumulative grade point average at each evaluation point. (For details, please refer to the Academic Progress Evaluation Charts).

#### **Quantitative Component (Credits):**

Students need to successfully complete a minimum amount of academic credits to remain on track to

finish the academic program within the allowable maximum time. Compliance with this component is monitored to ensure students complete their programs within the maximum time frame. Students who meet or exceed the minimum requirements will complete their program within the maximum time frame as described in the Maximum Time section.

The quantitative component is measured by dividing the credits that were successfully completed by the number of credits attempted. Students must successfully complete a minimum percentage of all attempted credits at each evaluation point to meet minimum SAP standards (*For details, please refer to the Academic Progress Evaluation Charts*).

The table below provides information about how grades affect the Qualitative (GPA) and Quantitative
(Credits) components.

Grade Type	Grade	GPA	Credits/Hours Attempted	Credits/Hours Earned (Successfully Completed)	Maximum Time Frame
Passing grades	A, B, C, D	Yes	Yes	Yes	Yes
Additional passing grades	CE, P,	No	Yes	Yes	Yes
Fail Grade	F	Yes	Yes	No	Yes
No Passing Grade	NP	No	Yes	No	Yes
Incompletes	IC, IB, IA, ID, IF	Yes	Yes	Yes	Yes
Drop Courses	W, AW, FW	No	Yes	No	Yes
Repeated courses	An*will appear after grade	Highest grade obtained	Yes	It depends grade	Yes
Transferred Credits from prior programs at NUC that were accepted towards current program	Refer to grades above	Yes	Yes	Yes	Yes
Transferred Credits from Other Schools that were accepted towards current program	TC, TD	No	Yes	Yes	Yes

#### Maximum Time Frame

Students are required to complete their program within a reasonable time frame. Federal regulations define the maximum time frame as 150% of the published length of the program of study.

The maximum time is based on credits attempted and is determined by multiplying the published amount of credits in the program by 1.5. For example, a program that consists of 64 credits would have a maximum time frame of 96 credits to complete the program.

A student fails to meet Maximum Time Frame standards when it becomes mathematically impossible for him to complete his program within 150% of its length.

A student who fails to meet Maximum Time Frame standards loses eligibility to receive financial aid, unless he/she completes an appeal process and has their appeal approved. For more information, please refer to the Appeal Process and Extended Enrollment details below.

#### **Evaluation Procedure**

The Registrar's Office will evaluate the academic progress for programs annually, at the conclusion of the spring term (During the month of July, for details, please refer to the Academic Progress Evaluation Charts).

#### **Reevaluation Procedure**

The Registrar's Office will reevaluate Satisfactory Academic Progress for students for whom a late notification of grade change is received. The Registrar will send written notification, indicating the results of the evaluation, to those students that, as a result of the reevaluation, met or failed to meet satisfactory academic progress standards.

### Satisfactory Academic Progress Statuses and Notification Process

If students do not meet satisfactory academic progress standards they will receive a written notification from the Registrar's Office indicating the results of the evaluation, the satisfactory academic progress status

under which student was placed, and any applicable process that should be followed to maintain or regain financial aid eligibility.

#### **Financial Aid Probation**

This status is given to those students who have failed to meet the academic progress requirements, but then complete the appeal process and have their appeal approved (*Please refer to the Appeal Process below*).

The Financial Aid Probation period is for only one academic term. The approval of an appeal may require that the student be placed on an academic plan during the Financial Aid Probation period if it is unlikely for the student to be able to meet the SAP standards by the end of the term the student is on probation. The academic plan is to ensure the student is monitored each subsequent academic term to determine if the student is on track to graduate within the maximum time frame *(See the Academic Plan section below)*.

Students will be eligible for financial aid during the term on probation. Once the probation period ends, in order to maintain eligibility for financial aid, students must be able to show they meet the requirements of satisfactory academic progress or the academic plan.

#### **Appeal Process**

An appeal is a process by which a student who is not meeting SAP standards petitions the institution for reconsideration of his continued eligibility for FSA funds. The appeal process applies to students who did not meet the academic progress requirements in the year reviewed.

If a student asserts that his/her condition for not having a satisfactory academic progress status is because the determination made by the institution was the result of an administrative error or because during the evaluation period there were extenuating circumstances that prevented them from meeting the requirements of the Satisfactory Academic Progress Policy, the student has the right to appeal the decision made by the institution.

The Institution considers the following as examples of extenuating circumstances:

- Student's illness
- Family Illness
- Distress in the family unit, such as: divorce or death of the parents, spouse, or children
- Job loss or potentially significant changes in the work schedule during the term
- Abusive relationships
- Disabilities that were not previously documented
- Natural disasters
- Financial hardship, such as foreclosure or eviction
- Other situations beyond the student's control

In order to start the appeal process, the student needs to complete and submit a Satisfactory Academic Progress Appeal Application, within five (5) days after the start date of the next academic term in which the student intends to continue his studies, if approved by the Appeal's Committee. The application is available at the Counselor's Office in the Student Affairs office of each campus. The Counselor will submit the Satisfactory Academic Progress Appeal Application to the Academic Dean, who will summon the Appeals Committee for proper evaluation.

The responsibility of the Appeals Committee is to evaluate the reasons presented in the Satisfactory Academic Progress Appeal Application and determine if, by the end of the following term, the student should be able to meet the academic progress standards or an academic plan.

The Appeals Committee consists of the Student Affairs Director, Registrar, the Financial Aid Director, a Professional Counselor and an Academic Representative. The Appeals Committee will evaluate the Satisfactory Academic Progress Appeal Application and will notify the Academic Dean about the decision made. The Committee will stablish a meeting's calendar. The Registrar will then send a written notification to the student no later than 5 calendar days from the date of the committee's decision. This notification will be configured and sent from Student Administration System. This will have access staff of Academic

Departments, Student Affairs, Counselor, Financial Aid and Student Account Offices.

If the application is approved, the student will be eligible for financial aid during the term on probation. Once the probation period ends, in order to maintain eligibility for financial aid, the student must be able to show the requirements of the satisfactory academic progress or the academic plan has been met.

The student has the opportunity to appeal again, if it fails to meet with the agreements stablished for the academic period.

#### Academic Plan

Academic Plans are developed by the Academic Counselor and an academic representative in conjunction with the student to ensure that the student is able to meet the institution's satisfactory academic progress standards by a specific point of time.

If a student successfully appeals and is placed on a SAP probation period and on an academic plan, the student's SAP would be reviewed at the end of each subsequent term, as long as the student continues to meet the requirements of the academic plan. In order to continue on the academic plan after the initial term on probation, the Academic Dean will oversee that Academic representative meet with follow up, monitoring and documenting that the student is meeting the academic plan requirements and that it is possible for the student to be able to meet graduation standards within the maximum time frame.

#### **Financial Aid Suspension**

Students will lose eligibility for financial aid if they fail to meet Satisfactory Academic Progress standards and:

- Have the option, but did not complete an Appeal, or
- An Appeal was denied, or
- Fail to meet Academic Plan requirements, or
- It became mathematically impossible for the student to complete the program within the maximum time frame allowed, or to meet the minimum required GPA.

Students may continue studies without financial aid assistance after financial aid suspension, if otherwise allowed academically. If the student continues without FSA assistance, the student will be responsible for the total cost that may apply during such period of continued enrollment.

Students will receive written notification of Financial Aid Suspension from the Registrar's Office. The Registrar will also be notifying the Academic Dean, Financial Aid and the Student Account's Office of the student's ineligibility for financial aid.

#### **Reestablishing Eligibility**

Financial aid eligibility that is lost due to not meeting SAP standards may be reestablished once the student obtains the required minimum cumulative GPA and/or required minimum pace.

#### **Extended Enrollment**

A student who fails to meet Maximum Time Frame standards loses eligibility to receive financial aid, but may be allowed to continue studies under a Financial Aid Probation period or Extended Enrollment period. Students interested in this option, must complete the Satisfactory Academic Progress Appeal form.

The Appeal's Committee will meet to review appeals (For more details, please refer to the Appeal process above). The committee may place the student under a Financial Aid Probation period, if it is determined that it is likely for the student to be able to complete the program by the end of the next term (payment period). Students that are placed under a Financial Aid Probation period will be eligible for financial aid only for this additional term (Please refer to the Financial Aid Probation period above).

The committee may place the student on an extended enrollment period, if it is determined that the student needs more than one additional term to complete the program. Students that are placed under an Extended Enrollment period will lose eligibility for financial aid and will be responsible for the total cost that may apply during this period.

# STANDARDS OF SATISFACTORY ACADEMIC PROGRESS TABLES

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated annually during the month of July. At each evaluation point, students must achieve a cumulative GPA and a minimum credit completion rate as shown in the SAP tables below (Applicable SAP table for each program is identified in the program tables below).

## **Associate's Degrees**

Program	Credits in Program	Maximum Credit Attempts to Complete Program	Applicable SAP Table
Associate Degree in Accounting	64	96	SAP Table I
Associate Degree in Business Administration	69	103	SAP Table I
Associate Degree in Business Administration with Major in Entrepreneurship	67	100	SAP Table I
Associate Degree in Criminal Justice	71	106	SAP Table I
Associate Degree in Dental Assistant with Expanded Functions on/after 2007	81	121	SAP Table I
Associate Degree in Dental Assistant with Expanded Functions on/after 2014	78	117	SAP Table I
Associate Degree in Electrical Engineering Technology with Renewable Energy	80	120	SAP Table I
Associate Degree in Electronics Engineering Technology in Telecommunications	86	129	SAP Table I
Associate Degree in Information Technology in Health	61	91	SAP Table I
Associate Degree in Instrumentation	85	127	SAP Table I
Associate Degree in Medical Billing and Coding	61	91	SAP Table I
Associate Degree in Network Technology and Application Development on/after 2011	87	130	SAP Table I
Associate Degree in Network Technology and Application Development on/after 2013	74	111	SAP Table I
Associate Degree in Office Systems with Major in Information Processing	82	123	SAP Table I
Associate Degree in Office Systems with Major in Medical Secretary	84	126	SAP Table I
Associate Degree in Pharmacy Technician on/after 2007	87	130	SAP Table I
Associate Degree in Pharmacy Technician on/after 2014	76	114	SAP Table I
Associate Degree in Physical Therapy	78	117	SAP Table I
Associate Degree in Physical Therapist Assistant on/after 2016	77	116	SAP Table I
Associate Degree in Nursing on/after 2008	81	121	SAP Table I
Associate Degree in Nursing on/after 2014	70	105	SAP Table II

# **Bachelor's Degrees**

Bachelor's Degrees	Credits in	Maximum Credit	Applicable	
Program	Program	Attempts to Complete Program	SAP Table	
Bachelor Degree in Business Administration with Major in Business Intelligence	120	180	SAP Table I	
Bachelor Degree in Business Administration with Major in General Business	120	180	SAP Table I	
Bachelor Degree in Business Administration with Major in Human Resources	120	180	SAP Table I	
Bachelor Degree in Business Administration with Major in Accounting on/after 2010	129	193	SAP Table I	
Bachelor Degree in Business Administration with Major in Accounting on/after 2013	121	181	SAP Table I	
Bachelor Degree in Business Administration with Major in Healthcare Management	120	180	SAP Table I	
Bachelor Degree in Business Administration with Major in International Business	120	180	SAP Table I	
Bachelor Degree in Business Administration with Major in Management	120	180	SAP Table I	
Bachelor Degree in Criminal Justice on/after 2007	121	181	SAP Table I	
Bachelor Degree in Criminal Justice on/after 2012	117	175	SAP Table I	
Bachelor Degree in Criminal Justice on/after 2013	120	180	SAP Table I	
Bachelor Degree in Criminal Justice with Major in Cyber Crimes	120	180	SAP Table I	
Bachelor Degree in Criminal Justice with Major in Forensic Investigation	120	180	SAP Table I	
Bachelor Degree in Criminal Justice with Major in Homeland Security	120	180	SAP Table I	
Bachelor Degree in Criminal Justice with Major in Human Services	120	180	SAP Table I	
Bachelor Degree in Information Technology	120	180	SAP Table I	
Bachelor Degree in Information Technology with Major in Information Assurance & Security	120	180	SAP Table I	
Bachelor Degree in Information Technology with Major in Network Administration	120	180	SAP Table I	
Bachelor Degree in Information Technology with Major in Software Analysis & Development	120	180	SAP Table I	
Bachelor Degree in Network Technology and Application Development on/after 2011	133	199	SAP Table I	
Bachelor Degree in Network Technology and Application Development on/after 2013	120	180	SAP Table I	
Bachelor Degree in Office Systems Administration	126	189	SAP Table I	
Bachelor's Degree in Information Technology	133	199	SAP Table I	
Bachelor Degree in Business Administration with Major in Banking	125	187	SAP Table III	
Bachelor Degree in Science in Nursing on/after 2008	126	189	SAP Table II	

Program	Credits in Program	Maximum Credit Attempts to Complete Program	Applicable SAP Table
Bachelor Degree in Science in Nursing on/after 2014	122	183	SAP Table III
Bachelor Degree in Science in Nursing RN to BSN on/after 2013	45	67	SAP Table III
Bachelor Degree in Science in Nursing RN to BSN on/after 2014	52	78	SAP Table III
Bachelor Degree in Education with Major in Health Education	125	187	SAP Table IV
Bachelor Degree in Education with Major in Preschool Education	131	196	SAP Table IV

# Master's Degrees

Program	Credits in Program	Maximum Credit Attempts to Complete Program	Applicable SAP Table
Master Degree in Business Administration	39	58	SAP Table V
Master Degree in Business Administration with Major in Digital Marketing	39	58	SAP Table V
Master Degree in Business Administration with Major in Planning and Strategy	39	58	SAP Table V
Master Degree in Business Administration with Major in Human Resources	39	58	SAP Table V
Master Degree in Education with Major in Educational Leadership	39	58	SAP Table V
Master Degree in Education in Curriculum	39	58	SAP Table V
Master Degree in Education in Assessment and Effectiveness	39	58	SAP Table V
Master Degree in Science in Nursing in Education	36	54	SAP Table V
Master Degree in Science in Nursing with Specialty in Medical Surgery and Role in Education	36	54	SAP Table V

# SAP TABLES

SAP TABLE I				
Terms Completed	Minimum Pace (Credit Hours Completed / Credit Hours Attempted)	Minimum Grade Point Average		
1	50%	1.50		
2	50%	1.60		
3	50%	1.70		
4	60%	1.80		
5	60%	1.90		
6 or more	67%	2.00		

SAP TABLE II				
Terms Completed	Minimum Pace (Credit Hours Completed / Credit Hours Attempted)	Minimum Grade Point Average		
1	50%	1.50		
2	50%	1.70		
3	50%	1.90		
4	60%	2.00		
5	60%	2.10		
6 or more	67%	2.25		

SAP TABLE III				
Terms Completed	Minimum Pace (Credit Hours Completed / Credit Hours Attempted)	Minimum Grade Point Average		
1	50%	1.70		
2	50%	1.90		
3	50%	2.10		
4	60%	2.20		
5	60%	2.40		
6 or more	67%	2.50		

SAP TABLE IV		
Terms Completed	Minimum Pace (Credit Hours Completed / Credit Hours Attempted)	Minimum Grade Point Average
1	50%	2.00
2	50%	2.50
3	50%	2.70
4	60%	2.80
5	60%	2.90
6 or more	67%	3.00

SAP TABLE V		
Terms Completed	Minimum Pace (Credit Hours Completed / Credit Hours Attempted)	Minimum Grade Point Average
1	50%	3.00
2	50%	3.00
3	50%	3.00
4	60%	3.00
5	60%	3.00
6 or more	67%	3.00

# INSTITUTIONAL POLICY REGARDING WITHDRAWALS, INCOMPLETES, LEAVES OF ABSENCE, AND OTHERS

## Withdrawals

For the purpose of measuring the satisfactory academic progress of a student, withdrawals will be considered as courses not approved and will not be considered as a repeated course. This will not affect the student's cumulative grade point average, but will have an effect on the number of credits that the student should have completed successfully at the moment in which his academic record has been evaluated to measure the time frame for academic progress. It will also affect student's eligibility and funds to be disbursed.

### **Incompletes (I)**

Removing an incomplete is the sole responsibility of the student. Any student who cannot complete the course requirements as a result of a documented illness or an emergency occurring before the course end will receive an incomplete and a provisional grade in the class upon request to the professor and approval of the incomplete. This grade must be removed not later than 12 calendar days after the start date of classes of the following term.

If not removed by that time the Registrar will assign as final the grade originally accompanying the incomplete in the student's record. In some cases and in mutual agreement with his professor, a student may also receive an incomplete if he owes an assignment or has missed an exam. In these cases, the incomplete may be removed by the student taking the missed exam or by submitting the assignment owed. Incompletes accompanied by an F (IF) not removed by the time established herein will have the same effect as a course not approved.

#### **Program changes**

A change of program will be considered any change which involves a change of curriculum, whether it be within the same program the student is enrolled in or not. Students interested in changing programs should first visit the Counseling Office to be interviewed.

At the interview, both the student and the Counselor will evaluate the student's academic goals and skills and proceed to complete a Change of Program form from the Registrar's office. The program change will be authorized by the Department Director to whom the student is referred.

The program change will be provided to the Registrar to update the system and the student's record. No more than two (2) program changes will be permitted. With regard to the determination of a student's satisfactory academic progress who changes programs, seeks to earn an additional degree or changes to a different curriculum either voluntarily or through the re-admission process, only the credits approved and grades earned under the previous program that are required in the new program will be counted in academic progress.

#### Leave of absence (LOA)

The student should notify the Registrar's Office in writing of the reasons why he is requesting a leave of absence. The request for leave of absence should be made prior to the start date of the LOA. The student's request will be evaluated and, if approved, the student will be notified in writing. It will be the student's responsibility to enroll in the term immediately following the LOA end date.

### **Repeating a course**

A student can repeat a course if he is interested in improving his grade. Only the highest grade will be used in the calculation of the cumulative grade point average. All courses will also be considered credits attempted for the purpose of determining successful course completion percentages. Repetition of previously failed courses may be counted in the student's enrollment status for Title IV funding purposes. However, repetition of a previously passed course may be counted in the student's enrollment status for Title IV funding purposes only one time and the course repetition cannot be due to the student failing other previous coursework.

#### **Re-admission**

Any student who discontinues his studies in the institution and is later re-admitted in the same academic program, as long as the program has not undergone any curricular revision, will re-enter under the academic progress status that he had at the moment of discontinuing his studies. If the student is re-admitted in the same program that has undergone a curricular revision or change to a different academic program, only the credits approved and grades earned under the previous program that are required in the new program will be counted in academic progress. Notwithstanding the above, the students so re-admitted, should be bound by academic program and other requirements in the Catalog and other established guidelines effective as of the date of this re-admission.

#### **Transfer Credit**

All the transfer credits (TC) from other institutions that are equivalent to the program of studies will be included in the maximum time frame. Transfer credits (TC) will be counted as attempted and completed credits, but they will not be included in the grade point average (GPA) calculation.

In the event that there are no relevant courses to transfer to the new academic program, the student begins the new curriculum with a new maximum time frame and a new cumulative grade point average.

#### **Pass-No Pass Grades**

Pass-No Pass grades for satisfactory academic progress purposes do not affect the student's cumulative grade point average but are counted as credits attempted as well as for maximum time frame purposes.

#### **Remedial Courses**

The Institution does not offer remedial courses.

#### **Grade Points and Grade Point Averages**

Each grade has a grade point value. The grade point average is computed according to the following procedure: write down the grade and number of credits for each course; then multiply the grade point value for each grade by the number of credits of each course. After this, add the number of credits to obtain the total number of credits, add the grade point values to obtain the total grade point value, then divide the total grade point value by the total number of credits. This will provide the grade point average.

Example:	GRADE	POINT VALUE
SPAN 1010	A(4)  X	3 CRS. 12
ENGL 1010	B (3) X	3 CRS. 9
BUAD 2050	C(2)  X	3 CRS. 6
MATH 1010	D(l) X	3 CRS. 3
HUMA 1010	F(0)  X	3 CRS. 0
TOTALS		15CRS. 30
GRADE POINT VALUE		$30 \div 15 = 2.00 = C$

# **Course Prerequisites**

 $30 \div 15 = 2.00 = C$ 

### Students are required to take the prerequisites as established in each program of study. Exceptions for the prerequisites are to be approved by the Department Director.

# **AVERAGE LENGTH OF DEGREE PROGRAMS**

Average length of time required to obtain an Associate's Degree is from two to two and a half year whereas in the case of the Bachelor's Degree it's from three to four years. For the Master's Degree programs, the average length of time normally required to obtain this degree is from one to one and a half year.

# GUARANTEE OF DEGREE COMPLETION IN ACADEMIC PROGRAMS WHICH THE INSTITUTION PROPOSES TO TERMINATE OR PLACE ON MORATORIUM STATUS

When an academic program is placed on moratorium or termination status, neither new students nor reentries will be permitted to enroll. For active currently enrolled students in these programs, National University College will ensure that the necessary courses that these students need to complete their programs are offered in accordance with the curricula of these programs.

However, if a student withdraws from a course or discontinues studies in the academic program that was placed on a moratorium, National University College does not guarantee the offer of the course or program.

In the case of inactive students that wish to reenter a program that has either been placed on moratorium status or is planned to be terminated, they will have the option of transferring to another program that is being offered, and request a transfer of credits in accordance with the Transfer of Credit policy of NUC.

# **GRADUATION REQUIREMENTS**

Students are recommended for graduation under the rules and regulations in the official catalog at the time the student entered or was readmitted to the Institution whichever date is later. A student may apply for graduation at the time he has completed 90 percent of the courses required. The student should meet the minimum grade point average and other requirements as indicated in the **Graduation Requirements Table for Undergraduate Programs.** Additionally, the student must have satisfied all outstanding debt with the institution in order to graduate.

A graduation application should be submitted with a receipt from the Bursar's Office for the amount of \$50.00. This application will be effective until the next scheduled graduation ceremony held in July of every year. The Registrar will evaluate every application for graduation to determine if the student has completed all graduation requirements. A graduation certification is available upon request. Students who graduate with two different majors will receive two diplomas and will pay a graduation fee for each major.

### **Graduation with Honors**

In recognition of high achievement, certificates or medals will be awarded to those students who graduate from the Bachelor's Degree program as follows:

3.95-4.00 Summa Cum Laude 3.71-3.94 Magna Cum Laude 3.50-3.70 Cum Laude In the Associate's Degree Programs students will be eligible for honors recognition as follows:

3.85 to 4.00 points - High Honor 3.50 to 3.84 points - Honor

### **Graduation Ceremony**

The graduation ceremony will normally be held during July of every year. Students who have completed the requirements for graduation in any of the Institution's programs are eligible to participate in this ceremony. Students whose accounts are not current or have an outstanding debt with the institution, will not be granted a graduation permit to attend the graduation ceremony.

### **Graduation Requirements Table for Undergraduate Programs**

Grade Level	Minimum grade point average for graduation	Minimum grade needed to approve courses
Associate's Degree in Pharmacy Technician	GPA 2.00	All core and major courses, and those general education courses identified in the catalog should be approved with a minimum grade of C.
Associate's Degree in Physical Therapist Assistant	GPA 2.00	All general education, core courses and all major courses must be passed with at least a "C" grade, except for the clinical practices that must be passed with at least "B" grade.
Associate's Degree in Nursing	GPA 2.25	All courses should be approved with a minimum grade of C.
Bachelor's Degree in Education Programs	GPA 3.00	All courses should be approved with a minimum grade of B.
Bachelor's Degree in Science in Nursing	GPA 2.50	All courses should be approved with a minimum grade of C.
Bachelor's Degree in Science in Nursing (RN to BSN)	GPA 2.50	All courses should be approved with a minimum grade of C.
ALL OTHER UNDERGRADUATE PROGRAMS		
All Associate's Degree Programs	GPA 2.00	All major courses, and those general education and core courses identified in the catalog should be approved with a minimum grade of C.
All Bachelor's Degree Programs	GPA 2.00	All major courses, and those general education and core courses identified in the catalog should be approved with a minimum grade of C.

For the graduate programs graduation requirements, please refer to the Graduate Programs section. For purposes of Title IV recipients, the definition of a passed course means any grade higher than an "F". Please refer to the Financial Aid Office for further information.

# FINANCIAL INFORMATION

## **Tuition and Fees – On ground students**

### Tuition and Fees (per academic term)\*

Tuition per credit	
undergraduate level	\$175.00
undergraduate level (Nursing Programs Accredited by ACEN)	\$180.00
graduate level	
Laboratory fees:	
Dental Assistant with Expanded Functions, Nursing, Pharmacy Technician and Physical	Therapist
Assistant Programs	
Other Programs Laboratory Fees	
Practicum/Simulators fees:	
Nursing Programs practicum (undergraduate and graduate)	
Other programs practicum and courses with simulators	
Registration fee (per term)	
Admission fee for new students only (non refundable)	
Readmission fee (non refundable)	
Administrative Services and Technological Resources fee (per term)	
Removal of incomplete	
Change of registration/course	
Change of major	
Cancellation of enrollment	
Transcript/Certification	
Official	
Unofficial (student copy)	
Certifications	
Competency exam (per credit)	
Duplicate copy of official registration form	
Duplicate copy of diploma	
Academic evaluation	
Accident insurance	***5.00
Graduation fee	

Audit students (no credit awarded) Payment of Admission Fee (non-refundable) and 50% of tuition per credit and fees. Graduates of programs from IBC campuses who enroll as full time students at NUC may qualify for a waiver of the \$25.00 admissions fee. \*Subject to annual revision./\*\*Not applicable to online courses./\*\*\*The accident insurance for students offered by the institution only covers accidents occurring in official student activities on campus.

	Full Online		Hybrid	
	Undergrad	luate	Undergrad	
Charge	Out-of-State (anywhere other than PR <b>&amp; Caribbean</b> )	In-State (PR & <i>Caribbean</i> )	In-State (PR & Caribbean)	
Tuition*	\$320 <sup>1</sup>	\$175	\$175	
Tuition* (Nursing Programs Accredited by ACEN)	\$320 <sup>1</sup>	\$180	\$180	
Nursing Programs Laboratory fee	-	\$100	-	
Nursing Programs practicum fee	\$150	\$150	\$150	
Courses with simulators fee	\$100	\$100	\$100	
Registration fee**	\$25	\$25	\$25	
Admissions Fee (Non-refundable)	\$25	\$25	\$25	
Readmission fee***	\$25	\$25	\$25	
Administrative Services and Technological Resources fee **	\$100	\$100	\$100	
Foreign Credentials Evaluation Fee	\$100	\$0	\$0	
Removal of Incomplete***	\$50	\$50	\$50	
Change of Registration/Course***	\$30	\$30	\$30	
Change of Major***	\$30	\$30	\$30	
Cancellation of Enrollment***	\$100	\$100	\$100	
Transcript/Certification*** Official Unofficial Certifications***	\$5 \$3 \$2	\$5 \$3 \$2	\$5 \$3 \$2	
Competency Exam (Per Credit)***	\$100	\$100	\$100	
Duplicate copy of diploma	\$10	\$10	\$10	
Duplicate Copy of official Registration form***	\$0 \$0	\$0	\$0	
Academic Evaluation***	\$0	\$0	\$0	
Accident Insurance***	\$0	\$0	\$5	
Graduation Fee***	\$100	\$100	\$100	

<sup>1</sup>Eligible US military students who enroll in fully online programs (undergraduate) qualify for a discounted tuition rate of **\$275.00 per credit** in accordance with the Tuition and Fees schedule disclosed in the current institutional catalog.

\*Per Term, Per Credit Hour

\*\* Per Term

\*\*\* As required

California Online Students please refer to page 98 for Student Tuition Recovery Fund (STRF) important information.

Charge	Out-of-State (anywhere other than PR & <i>Caribbean</i> )	In-State (PR & <i>Caribbean</i> )
Tuition*	\$370 <sup>1</sup>	\$195
Nursing Programs practicum fee	\$150	\$150
Courses with simulators fee	\$100	\$100
Registration fee**	\$25	\$25
Administrative Services and Technological Resources Fee**	\$100	\$100
Foreign Credentials Evaluation Fee	\$150	\$0
Admissions Fee (Non-refundable)	\$25	\$25
Readmission fee***	\$25	\$25
Removal of Incomplete***	\$50	\$50
Change of Registration/Course ***	\$30	\$30
Change of Major***	\$30	\$30
Cancellation of Enrollment***	\$100	\$100
Transcript/Certification*** Official Unofficial Certifications***	\$5 \$3 \$2	\$5 \$3 \$2
Competency Exam (Per Credit)***	\$100	\$100
Duplicate copy of diploma	\$10	\$10
Duplicate Copy of official Registration form***	\$0	\$0
Academic Evaluation***	\$0	\$0
Accident Insurance***	\$0	\$0
Graduation Fee***	\$100	\$100

Tuition and Fees - Graduate Students (On ground and Online St	udent)
---	--------

<sup>1</sup>Eligible US military students who enroll in fully online programs qualify for a discounted tuition rate of \$300.00 per credit in accordance with the Tuition and Fees schedule disclosed in the current institutional catalog.

\* Per Term, Per Credit Hour

\*\* Per Term

\*\*\* As required

California Online Students please refer to page 98 for Student Tuition Recovery Fund (STRF) important information.

# For NUC California Online Students Only

Student Tuition Recovery Fund (STRF)

"The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

- 1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
- 2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
- 3. You were enrolled at an institution or location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
- 4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
- 5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
- 6. You have been awarded restitution, a refund, or other monetary award by an arbitrator of court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
- 7. Your sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder of debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number."

# **Payment Policy**

### I. General Information with Regard to Payment Policy for Tuition and Fees

The academic year consists of three trimesters with a duration of approximately 14 weeks each. Each trimester represents a payment period for financial aid purposes. All student payment balances pending after the applicable financial aid has been applied to the student's amount should be paid in accordance with the following options:

- a. By paying the full balance upon the student's completion of the registration process and upon the student receiving their official program of study.
- b. Through a payment plan of 3 payments per payment period.
- c. Through any other grant or benefit for which the student may be eligible such as:

Clara Abbott Foundation Grant
 Workmen's Compensation Fund Corporation
 Arecibo Observatory Grant (Cornell University)
 Vocational Rehabilitation
 Veteran's Benefits Program
 Workforce Investment Act (WIA) Funds
 PR Law 7
 Other

The disbursements will be credited directly to the student's account to cover the payment of tuition and fees. Once the tuition and fees for the academic year have been covered, a check will be issued for the amount in excess, if any, within the 14 days following the date in which the account reflects the credit.

### II. Payment Policy for students who are not eligible for Federal and/or State Financial Aid

The Institution reserves the right to request an initial deposit from these students to receive their official program of study of no less than 35% of the total cost of their tuition and fees for the term in question.

### III. Continuing or Regular Students

If the student has a pending debt with the institution from a prior term of studies, it should be paid in full before receiving the official program of study for the current term. The applicable procedure to make the payments will be governed by what is stated in the institution's enrollment agreement and the payment policy found in this catalog and available at the Bursar's Office

### **IV.** Payment procedure

Payments shall be made in cash, personal check, Manager's check (payable to National University College), ATM, American Express, Master Card, Visa or any debit or credit card accepted by the Institution. Payments made by credit card may also be made through the student's portal. The institution reserves the right to accept checks which are not payable to National University College. All checks returned by the bank will have a \$15 surcharge payable upon picking up the check and paying in cash the amount it was made out for.

In the eventuality that National University College refers an unpaid student account to an external collection agency, all related costs must be paid in full by the student. The Institution reserves the right to restrict the provision of certain documents such as student transcripts, certifications, diplomas and participation in the graduation ceremony to those students whose accounts are not current.

#### Cancellation prior to commencement of classes

If a student cancels his enrollment prior to the beginning of classes the Institution may charge him a \$100 administrative fee.

#### Contract Training

In the case of government or private sponsored contract training, an administrative cost will be included in the budget to cover administrative and student services provided to these students. This also includes all students trained with funds provided through the "Workforce Innovation and Opportunity Act" (WIOA).

#### Add/Drop Period

The add/drop period is the first week of each term. If the student withdraws before the end of the add/drop period, the student will be refunded all tuition and fees, as well as any funds paid for unused supplies, books, or equipment. No adjustments will be made for courses dropped after this date. Please refer to the refund policies below for more information.

#### **Institutional Refund Policy**

The Institutional Refund Policy regulates how National University College (NUC) will manage the charges when a student cancels his enrollment, adds and/or drops courses during the add-drop period, or withdraws prior to completing a term. The Institutional Refund Policy applies to all students enrolled at NUC.

The student has the right to cancel his/her enrollment agreement within three (3) business days from the student's signing his/her enrollment agreement. To cancel the enrollment agreement, the student must complete the Enrollment Cancellation Request form which is available at the admission's office. Upon cancellation of the enrollment agreement, the institution will cancel all of the student's financial obligations, other than books and supplies which are not returnable because of use.

Any student who is registered for a term will have until the end of the add-drop period, as specified in the academic calendar, to cancel his/her term enrollment or add/drop courses without penalty. Any charges for tuition and fees, as well as any funds paid for supplies, unused books or equipment which can be returned to the institution during this period will be refunded. Except for exceptional circumstances, there will be no adjustments for these charges after this period. Any student, who does not cancel his/her term registration prior to the end of the add/drop period and does not attend classes, may incur in a non-refundable fee of \$ 100.00 to cover administrative expenses.

If a student attends but withdraws prior to completing a term the percentage used to determine the applicable charges will be the percentage of completed days from the total days in the term, rounded to the nearest 10% or \$ 100.00, whichever is greater. NUC will use the last day of attendance to determine the days completed in the term. The table below provides details about how percentages are determined.

Completed Days/Total Term Days	Percentage due to the Institution
.01 % to 10.0%	10%
10.01 % to 20.0%	20%
20.01 % to 30.0 %	30%
30.01 % to 40.0%	40%
40.01 % to 50.0%	50%
50.01 % to 60.0%	60%
60.01 % to 100%	100%

There are several fees that are exempt from adjustment in this refund policy. These are:

Admission Fee – Non-refundable	\$25.00
Readmission Fee – Non-refundable	\$25.00
Student Accident Insurance	\$5.00

NUC reserves the right to exclude other fees it deems necessary for calculating debt adjustment.

The student is responsible for the outstanding balance on his/her account, after the institution has applied any financial aid for which the student is eligible. Institutional refunds shall be made within 30 days of the date that the institution determines that the student has withdrawn.

The Bursar's Office has the responsibility to apply this policy to the accounts of students which require it.

#### **Return of Title IV Funds Policy**

National University College (NUC) established this policy in accordance with federal law and regulations. This policy applies to both new and continuing students enrolled in eligible programs leading to a degree who withdraw, drop out, are expelled or otherwise fail to complete the term (payment period) for which funds were awarded.

The law requires that, when you withdraw prior to completing a term (payment period) the amount of student financial assistance that you have earned up to that point is determined by a specific formula. If you received less assistance than the amount that you earned, you will be able to receive those additional funds. If you received more assistance than you earned, the excess funds must be returned.

The Return of Title IV calculation process will determine if there are excess funds that need to be returned and who (*NUC or the student*) will be responsible for the return of those funds. If the Institution is not required to return all of the excess funds, the student must return the remaining amount. The Student Accounts Office will notify the student if there are excess funds he/she is responsible for returning.

The law only requires students to return 50 percent of any grant assistance received in excess that is his/her responsibility to repay. The grant amount that the student has to return is considered a grant overpayment, and the student must make arrangements with NUC or the Department of Education to return the funds. Any loan funds that the student is responsible for returning must be repaid in accordance with the terms of the promissory note. That is, the student makes scheduled payments to the holder of the loan over a period of time.

#### **Order of Return of Title IV Funds**

When applicable, National University College will return Title IV funds to the programs from which the student received aid during the term (payment period), in the following order.

Unsubsidized FFEL/Direct
 Subsidized FFEL/Direct Loans
 FFEL/Direct PLUS (Graduate Student)
 FFEL/Direct PLUS Parent
 Federal Pell Grant
 FSEOG

# ADMINISTRATIVE AND ACADEMIC REGULATIONS

Students are expected to conduct themselves in a nature and manner that reflects the values and integral development that National University College has as its mission for its students. Students are expected to abide by the rules and regulations found in the Student's Manual and the Institutional Catalog.

The Institution may dismiss any student in case of violation of the rules of conduct set forth in the Student's Manual, or the Institutional Catalog.

The Institution will keep a record of disciplinary actions taken. This record will be kept separately from the student's academic record.

# INSTITUTIONAL RULES AND REGULATIONS

National University College's main objective is that its students complete their program within an excellent academic environment and by receiving quality services. Such services require an atmosphere of adequate behavior conducive to an optimum learning environment. To that effect, the following rules must be observed by every student.

- 1. Students are expected to observe good behavior at all times at National University College.
- 2. Classrooms are considered study areas where students should maintain silence and act orderly. Silence and order is also required in the Educational Resources Centers, laboratories and halls.
- 3. Regular and prompt attendance at classes and laboratories is an essential part of the academic program.
- 4. Appropriate dressing is required at all times. Students should be aware that some programs require a specific uniform to be worn during the internship and/or in certain laboratories.
- 5. Every student is encouraged to hand-in requested documents at the required time.
- 6. The administration will expel from the Institution any student who damages or destroys any property of National University College. Damaging or destroying any property or equipment of the Institution or of other students is reason for automatic expulsion of the student.
- 7. Students who have officially enrolled in National University College have the right to use the laboratories corresponding to the courses they are enrolled in. However, they must be careful in handling laboratory and computer equipment and follow all rules governing their utilization.
- 8. Children are not allowed in classrooms and National University College is not responsible for any injuries or accidents they may suffer.
- 9. Collection of money or any kind of selling without written authorization of the administration is prohibited.
- 10. Students are not permitted to smoke except in the designated smoking areas.
- 11. The use of alcohol or illegal drugs at National University College, or attending classes under the influence of said products is reason for automatically expelling the students involved in accordance with the Institution's policy.

Additional information regarding rules and regulations to be observed by students can be found in the publication entitled "Reglamento Estudiantil," a student manual provided to the Institution's students.

# **EXPLANATION OF COURSE NUMBERING SYSTEM**

The prefix of a course designated in the program outline for each program of study stands for the type of course. Courses are designated with a 4 digit numerical code.

General Education Courses have a 1000 or low 2000 numbering with some exceptions. The higher the number in each category is indicative of a more advanced course. This numbering of courses can be more easily identified as prerequisites or advanced depending on whether they are assigned lower or higher numbers.

Courses designated with a first digit of one or two are lower division courses whereas those with a first digit of three or four are upper division courses. Five thousand and six thousand level courses are courses in graduate programs.

# ACADEMIC OFFERING BY LOCATIONS

## <u>National University College - Bayamón Main Campus</u> (Residential Programs)

Associate's Degree		
Accounting*	Medical Billing and Coding	
Business Administration with Major in	Network Technology and Applications	
Entrepreneurship*	Development*	
Criminal Justice	Nursing	
Dental Assistant with Expanded Functions	Office Systems with Major in Medical Secretary	
Pharmacy Technician	Physical Therapist Assistant***	
Electrical Engineering Technology with Major in	Electronics Engineering Technology in	
Renewable Energy	Telecommunications**	

Bachelor's Degree	
Business Administration with Major in	Network Technology and Applications
Accounting	Development
Criminal Justice	Science in Nursing
Criminal Justice with major in Forensic	Science in Nursing (RN to BSN)
Investigation	
Education with Major in Preschool Education**	

Master's Degree	
Business Administration	Business Administration with major in Planning
	and Strategy
Business Administration with major in Digital	Science in Nursing in Education
Marketing	
Business Administration with major in Human	Science in Nursing with Specialty in Medical-
Resources	Surgical and Role in Education

Some courses for some of the above mentioned programs may be offered through distance education.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our websites at: http://www.nuc.edu/programas/divulgacion

- \* Not currently offered for new students in the residential modality.
- \*\* Not currently offered for new students.
- \*\*\* The Physical Therapist Assistant Program at National University College's Bayamon Campus is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111North Fairfax Street Alejandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program / institution directly, please call 787-780-5134 Ext. 4111 or email: mtorres2@nuc.edu.

## <u>National University College - Bayamón Main Campus</u> (Online Programs)

The following programs are offered fully online and have no residency requirements, with the exception of those with an asterisk (\*):

Associate's Degree	
Accounting	Medical Billing and Coding
Business Administration	Nursing*
Business Administration with Major in	Network Technology and Applications Development
Entrepreneurship	
Criminal Justice	

Bachelor's Degree	
Business Administration with Major in Accounting	Criminal Justice with major in Cyber Crimes
Business Administration with major in Business	Criminal Justice with major in Human Services
Intelligence	
Business Administration with major in General Business	Information Technology
Business Administration with Major in Healthcare	Information Technology with Major in Information
Management	Assurance & Security
Business Administration with Major in International	Information Technology with Major in Network
Business	Administration
Business Administration with major in Human	Information Technology with Major in Software
Resources	Analysis & Development
Business Administration with Major in Management	Network Technology and Applications Development
Criminal Justice	Science in Nursing*
Criminal Justice with major in Homeland Security	Sciences in Nursing (RN to BSN)
Criminal Justice with major in Forensic Investigation	

Master's Degree	
Business Administration	Education in Curriculum
Business Administration with major in Digital	Education in Assessment and Effectiveness
Marketing	
Business Administration in Human Resources	Education with Major in Educational Leadership**
Business Administration with major in Planning and	Science in Nursing with Specialty in Medical-Surgical
Strategy	and Role in Education
	Science in Nursing in Education

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at: http://online.nuc.edu/sobre-nosotros/divulgacion-de-programas/

\* The nursing programs (with exception of the RN to BSN which is fully online) includes clinical laboratories and internships, that are offered on ground.

\*\*Puerto Rico residents who aspire to be certified as school principals by the Puerto Rico Education Department should contact this agency to familiarize themselves with the requirements needed to obtain this certification. At present, it is requirement that the candidates be certified as regular teachers, have two years of experience as a teacher, and complete a practicum, for which the student should enroll in the courses EDUC 6015 and EDUC 6025 (Field Experiences in the Educational Scenario I and II). Residents from outside Puerto Rico are not required to complete the Field Experiences in the Educational Scenario courses. These students should instead enroll in the courses EDUC 6025 – Leadership for Diversity and EDUC 6045 – Integrated Seminar in Educational Leadership.

## National University College - Arecibo Branch Campus

Associate's Degree	
Business Administration with Major in	Network Technology and Applications Development
Entrepreneurship	
Criminal Justice	Instrumentation*
Dental Assistant with Expanded Functions	Medical Billing and Coding
Electrical Engineering Technology with Major in	Electronics Engineering Technology in
Renewable Energy	Telecommunications*
Nursing	Office Systems with Major in Medical Secretary
	Pharmacy Technician

Bachelor's Degree	
Business Administration with Major in Accounting	Business Administration with major in Business
	Intelligence
Education with Major in Health Education*	Education with Major in Preschool Education*
Criminal Justice	Office Systems Administration*
Criminal Justice with major in Forensic Investigation	Network Technology and Applications Development
Criminal Justice with major in Cyber Crimes	Science in Nursing
	Sciences in Nursing (RN to BSN)

Master's Degree	
Business Administration	Education with Major in Educational Leadership**
Business Administration with major in Digital	Science in Nursing with Specialty in Medical-Surgical
Marketing	and Role in Education
	Science in Nursing in Education

Some courses for some of these programs may be offered through distance education.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our websites at:

http://www.nuc.edu/programas/divulgacion

\* Not currently offered for new students.

\*\*Students who aspire to be certified as school principals by the Puerto Rico Education Department should contact this agency to familiarize themselves with the requirements needed to obtain this certification. At present, it is requirement that the candidates be certified as regular teachers, have two years of experience as a teacher, and complete a practicum, for which the student should enroll in the courses EDUC 6015 and EDUC 6025 (Field Experiences in the Educational Scenario I and II).

# National University College - Río Grande Branch Campus

Associate's Degree	
Accounting*	Electronics Engineering Technology in
	Telecommunications*
Business Administration with Major in	Medical Billing and Coding
Entrepreneurship*	
Criminal Justice	Network Technology and Applications Development
Dental Assistant with Expanded Functions	Nursing
Electrical Engineering Technology with Major in	Office Systems with Major in Medical Secretary
Renewable Energy	
	Pharmacy Technician

Bachelor's Degree	
Business Administration with Major in Accounting	Criminal Justice with major in Forensic Investigation
Business Administration with major in General	Education with major in Preschool Education*
Business	
Business Administration with major in Business	Network Technology and Applications Development
Intelligence	
Business Administration with major in Human	Office Systems Administration
Resources	
Criminal Justice	Science in Nursing
Criminal Justice with major in Cyber Crimes	Sciences in Nursing (RN to BSN)

Master's Degree	
Business Administration	Education with Major in Educational Leadership**
Business Administration with major in Digital	Science in Nursing with Specialty in Medical-Surgical
Marketing	and Role in Education
Business Administration in Human Resources	Science in Nursing in Education

Some courses for some of these programs may be offered through distance education.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our websites at:

http://www.nuc.edu/programas/divulgacion

\*Not currently offered for new students.

\*\*Students who aspire to be certified as school principals by the Puerto Rico Education Department should contact this agency to familiarize themselves with the requirements needed to obtain this certification. At present, it is requirement that the candidates be certified as regular teachers, have two years of experience as a teacher, and complete a practicum, for which the student should enroll in the courses EDUC 6015 and EDUC 6025 (Field Experiences in the Educational Scenario I and II).

# **National University College - Ponce Branch Campus**

Associate's Degree	
Applied Science in Cardiorespiratory Care	Medical Billing and Coding
Applied Science in Clinical Sonography	Nursing
Applied Science in Radiologic Technology	Pharmacy Technician
Criminal Justice	

Bachelor's Degree	
Criminal Justice	Office Systems Administration*
Criminal Justice with major in Forensic Investigation	Science in Nursing
	Sciences in Nursing (RN to BSN)

Master's Degree	
Business Administration with major in Digital	Nursing with Specialty in Medical-Surgical and Role
Marketing	in Education
Science in Nursing in Education	

Some courses for some of these programs may be offered through distance education.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our websites at:

http://www.nuc.edu/programas/divulgacion

\*Not currently offered for new students

# National University College - Caguas Branch Campus

Associate's Degree		
Criminal Justice	Nursing	
Medical Billing and Coding	Pharmacy Technician	

Bachelor's Degree	
Criminal Justice	Criminal Justice with major in Forensic Investigation
Criminal Justice with major in Cyber Crimes	Science in Nursing
	Sciences in Nursing (RN to BSN)

Master's Degree	
Business Administration	Science in Nursing in Education
Business Administration with major in Digital	Nursing with Specialty in Medical-Surgical and Role in
Marketing	Education
Business Administration in Human Resources	

Some courses for some of these programs may be offered through distance education.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our websites at:

http://www.nuc.edu/programas/divulgacion

# National University College - Mayagüez Branch Campus

Associate's Degree		
Applied Science in Cardiorespiratory Care	Medical Billing and Coding	
Applied Science in Clinical Sonography	Nursing	
Applied Science in Radiologic Technology	Office Systems in Medical Secretary	
Dental Assistant with Expanded Functions	Pharmacy Technician	

Bachelor's Degree		
Criminal Justice with major in Cyber Crimes	Network Technology and Applications Development	
Criminal Justice with major in Forensic Investigation	Sciences in Nursing	
	Sciences in Nursing (RN to BSN)	

Master's Degree	
Business Administration	Business Administration with major in Digital
	Marketing
	Sciences in Nursing with major in Education

Some courses for some of these programs may be offered through distance education.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our websites at: http://www.nuc.edu/programas/divulgacion

# DISTANCE EDUCATION TECHNICAL REQUIREMENTS INFORMATION

National University College has selected Canvas as a technological tool to support its online courses, starting on July 16<sup>th</sup> 2014. Canvas is a platform for delivering online courses, is simple and allows you remote access to your courses.

# Minimum technical requirements to use Canvas

#### E-mail Account

This is an institutional account exclusively to contact professors and classmates and receive official notifications from the Institution. (Do not mix up with your personal e-mail.)

#### Minimum Hardware required for PC (Windows)

- Pentium 4 Processor 2 Ghz or faster
- Operating System: Windows XP, Windows 7 or W8
- Minimum 2 Gb memory
- 80 Gb hard disk
- Audio Card (integrated)
- Video Card (optional)
- Monitor
- Webcam
- Headset for oral presentations and interaction in live class sessions

#### Minimum Hardware required for MAC (Macintosh)

- Intel Processor or faster
- Mac OSX 10.6 Operating System or latest
- Minimum 2 Gb memory
- 80 Gb hard disk or greater
- Audio Card (integrated)
- Video Card (optional)
- Monitor
- Webcam
- Headset for oral presentations and interaction in live class sessions

If the student wants to view Canvas on a device with a screen smaller than 1024 x 600 resolution, it is recommended to use Canvas Mobile App available at http://guides.instructure.com

#### Software<sup>1</sup> and Plugins<sup>2</sup>

- <u>ADOBE Acrobat Reader</u> 1
- <u>Apple Quicktime</u><sup>1</sup>
- <u>Windows Media Player</u><sup>2</sup>
- Flash Player<sup>1</sup>
- <u>Mozilla Firefox</u> (Latest version. Uninstall previous versions.) Language preferences
- JAVA Player<sup>2</sup> (Latest version. Uninstall previous versions.) Should be enabled in your browser.
- <u>Respondus Lockdown Browser</u> (Used for taking course tests in Blackboard platform.)
- <u>Microsoft Office</u> 2007 or latest: Word, Excel, PowerPoint, Access. (Windows User)
- Office for MAC 2008 or latest: Word, Excel, PowerPoint

- If you have a previous version of Microsoft Office, you can download Microsoft Office Compatibility Pack for Word, Excel and PowerPoint 2007 file formats. Select according to your version at <u>http://www.microsoft.com/en-us/download/details.aspx?id=3</u>
- If you do not have Microsoft Office, you can download Open Office (Free software compatible with Microsoft Office) at <u>www.openoffice.org</u>
- With your institutional e-mail you have access to online Microsoft Office applications: Word, PowerPoint y Excel. To get value from this benefit, just sign in with your institutional e-mail account at <u>https://skydrive.live.com/</u>.

# **Internet Connection**

- Wired connection: Cable, DSL, Modem 256k or faster
- Wired connection preferable. Wireless connections are sensitive to weather changes; thus, they are unstable and may cause trouble when you are working or taking a test in the platform.

# **Basic Knowledge**

- How to manage, send and receive e-mails
- Ability to open, close and save files in the following formats: Word (DOC), Plain text (TXT), Rich text format (RTF) and PDF
- Basic knowledge on software used for course content (Example: Word, PowerPoint, Excel, among others)

# **Recommended Browser**

Google Chrome Internet Explorer versión 9.0 or higher Firefox versión 19 or higher GRADUATE ACADEMIC PROGRAMS

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION

#### **OBJECTIVE**

The graduates of the Master's Degree in Business Administration will be able to implement management principles, while applying the process and analysis of optimal evaluation to contemporary business problems. Manage organizations within a dynamic and competitive global environment, using proper business tools for qualitative and quantitative research and resolve organizational problems. Furthermore, evaluate business theories according to their relevance and application to the world of global business and develop professionally with an appreciation of the importance of social responsibility, ethics, and excellence.

#### MINIMUM REQUIREMENTS

24 Credits in Core Courses 15 Credits in Major Courses 39 Total Credits

#### **CORE COURSES**

MBA 5000	ORGANIZATIONAL BEHAVIOR	3
MBA 5010	MARKETING MANAGEMENT	3
MBA 5020	MANAGERIAL ECONOMICS	3
MBA 5040	MANAGERIAL ACCOUNTING	3
MBA 5050	MANAGERIAL FINANCE	3
REME 5100	RESEARCH METHODOLOGY	3
STAT 5210	STATISTICS	3
MBA 5990	SEMINAR ON GLOBAL BUSINESS STRATEGIES	<u>3</u> 24
MAJOR COU	JRSES	
MBA 5030	HUMAN RESOURCES DEVELOPMENT ADMINISTRATION AND MANAGEMENT	3
MBA 5200	BUSINESS LEADERSHIP	3

MBA 5220	SOCIAL AND ETHICAL RESPONSIBILITY	3
MBA 5240	PROJECT MANAGEMENT AND ADMINISTRATION	3
MBA 5260	MANAGERIAL INFORMATION SYSTEMS	<u>3</u>
		15

#### TOTAL CREDITS

This program is offered in both fully on ground and online delivery modes. All courses must be passed with at least a "B" grade.

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN DIGITAL MARKETING

# **OBJECTIVE**

The Master's Degree Program in Business Administration with major in Digital Marketing aims to develop in students strategic and analytical skills to guide organizations in a digital world. Students will develop a strategic mindset with the ability to apply creative and innovative solutions using the tools provided by the Internet, social networks, and electronic commerce (e-commerce) for optimal exposure and promotion of products or services.

## MINIMUM REQUIREMENTS

24 Credits in Core Courses 15 Credits in Major Courses **39 Total Credits** 

#### **CORE COURSES**

MBA 5000	ORGANIZATIONAL BEHAVIOR	3
MBA 5010	MARKETING MANAGEMENT	3
MBA 5020	MANAGERIAL ECONOMICS	3
MBA 5040	MANAGERIAL ACCOUNTING	3
MBA 5050	MANAGERIAL FINANCE	3
MBA 6000*	BUSINESS ADMINISTRATION INTEGRATING SEMINAR (CAPSTONE)	3
REME 5100	RESEARCH METHODOLOGY	3
STAT 5210	STATISTICS	<u>3</u>
		24
MAJOR CO	URSES	

MBA 5240	PROJECT MANAGEMENT AND ADMINISTRATION	3
MKTG 6010	ONLINE STRATEGIC MARKETING	3
MKTG 6020	ONLINE ADVERTISING AND PROMOTION	3
MKTG 6030	SOCIAL MEDIA	3
MKTG 6040	ONLINE MARKETING DISTRIBUTION CHANNELS	<u>3</u>
		15

#### TOTAL CREDITS

All courses must be passed with at least a "B" grade. This program is offered in both fully on ground and online delivery modes. \*This course includes the use of simulator.

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN HUMAN RESOURCES

# **OBJECTIVE**

The Master's in Business Administration with Major in Human Resources aims to develop professionals with the knowledge, skills and attitudes necessary for human resources management from a strategic perspective that includes the development, implementation and administration of policies concerning the management of staff in any type of organization.

# MINIMUM REQUIREMENTS

24 Credits in Core Courses 15 Credits in Major Courses **39 Total Credits** 

#### **CORE COURSES**

MBA 5000	ORGANIZATIONAL BEHAVIOR	3
MBA 5010	MARKETING MANAGEMENT	3
MBA 5020	MANAGERIAL ECONOMICS	3
MBA 5040	MANAGERIAL ACCOUNTING	3
MBA 5050	MANAGERIAL FINANCE	3
MBA 6000*	BUSINESS ADMINISTRATION INTEGRATING SEMINAR (CAPSTONE)	3
REME 5100	RESEARCH METHODOLOGY	3
STAT 5210	STATISTICS	<u>3</u>
		24

#### **MAJOR COURSES**

HURE 6010	ORGANIZATIONAL DESIGN	3
HURE 6020	LABOR LAW	3
HURE 6030	DEVELOPMENT OF HUMAN RESOURCES POLICIES	3
MBA 5030	HUMAN RESOURCES DEVELOPMENT ADMINISTRATION AND	3
	MANAGEMENT	
MBA 5240	PROJECT MANAGEMENT AND ADMINISTRATION	<u>3</u>
		15

# TOTAL CREDITS

This program is offered in both fully on ground and online delivery modes. All courses must be passed with at least a "B" grade. \*This course includes the use of simulator.

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN PLANNING AND STRATEGY

# **OBJECTIVE**

The Master's Degree Program in Business Administration with major in Planning and Strategy aspires to develop professionals with the necessary knowledge and skills to manage daily and non-routinary operations within the company. The graduates from this program will be able to develop strategic projects and at the same time participate effectively in the management of operations. Furthermore, the student will be able to manage quantitative, qualitative, comparative, and analytical methodological tools, as well as tools in planning, direction, and control of operations in organization.

#### MINIMUM REQUIREMENTS

24 Credits in Core Courses 15 Credits in Major Courses **39 Total Credits** 

#### **CORE COURSES**

MBA 5000	ORGANIZATIONAL BEHAVIOR	3
MBA 5010	MARKETING MANAGEMENT	3
MBA 5020	MANAGERIAL ECONOMICS	3
MBA 5040	MANAGERIAL ACCOUNTING	3
MBA 5050	MANAGERIAL FINANCE	3
MBA 6000*	BUSINESS ADMINISTRATION INTEGRATING SEMINAR (CAPSTONE)	3
REME 5100	RESEARCH METHODOLOGY	3
STAT 5210	STATISTICS	<u>3</u>
		24
MAJOR CO	URSES	
MBA 5240	PROJECT MANAGEMENT AND ADMINISTRATION	3

MDA 3240	PROJECT MANAGEMENT AND ADMINISTRATION	3
PLAN 6010	OPERATIONS MANAGEMENT	3
PLAN 6020	STRATEGIC PLANNING	3
PLAN 6030	QUANTITATIVE ANALYSIS FOR DECISION MAKING	3
PLAN 6040	SUPPLY CHAIN ADMINISTRATION	<u>3</u>
		15

# TOTAL CREDITS

This program is offered in both fully on ground and online delivery modes. All courses must be passed with at least a "B" grade. \*This course includes the use of simulator.

# MASTER'S DEGREE IN EDUCATION IN ASSESSMENT AND EFFECTIVENESS

# **OBJECTIVE**

The Master's Degree in Education in Assessment and Effectiveness aims to develop competent leaders in their profession, capable of designing and implementing evaluation plans for assessments of the learning outcomes and aspects concerning the effectiveness of the academic process. In addition, it prepares the students with the skills, concepts and attitudes necessary to support the continuous improvement of institutions by assessing and evaluating the effectiveness of their educational and organizational processes.

# MINIMUM REQUIREMENTS

- 21 Credits in Core Courses
- 18 Credits in Major Courses

**39 Total Credits** 

#### **CORE COURSES**

EDUC 5100	EDUCATIONAL RESEARCH METHODS	3
EDUC 5110	PSYCHOSOCIAL FOUNDATIONS OF EDUCATION	3
EDUC 5120	ORGANIZATIONAL BEHAVIOR AND CHANGE	3
EDUC 5200	THEORIES, PRINCIPLES AND PROCESSES GOVERNING THE DESIGN OF	3
	EDUCATIONAL PROGRAMS	
EDUC 5210	ETHICAL AND LEGAL ASPECTS OF EDUCATION	3
EDUC 5220	HUMAN RESOURCES ADMINISTRATION	3
EDUC 5140	ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS	<u>3</u>
		21
MAJOR COUR	SES	
EDUC 6225	FUNDAMENTALS OF ASSESSMENT AND EFFECTIVENESS	3
EDUC 6230	EFFECTIVENESS IN HIGHER EDUCATION	3
EDUC 6240	EVALUATION OF THE TEACHING-LEARNING PROCESS	3
EDUC 6250	ASSESSMENT OF EDUCATIONAL PROGRAMS AND SYSTEMS	3
EDUC 6060	PLANNING AND EVALUATION	3
EDUC 6040	GRADE PROJECT SEMINAR	<u>3</u>
		18
TOTAL CRED	ITS	39

# TOTAL CREDITS

This program is offered in both fully on ground and online delivery modes. All courses must be passed with at least a "B" grade.

# MASTER'S DEGREE IN EDUCATION IN CURRICULUM

# **OBJECTIVE**

The Master's Degree in Education in Curriculum aims to develop competent leaders who are highly qualified to develop, implement and evaluate innovative curriculums in public or private educational organizations. In addition, it will prepare the student with the necessary knowledge and skills to be actively involved in the continuous improvement of the academic achievements and as a consequence, of their own professional skills in the education field.

# MINIMUM REQUIREMENTS

- 21 Credits in Core Courses
- 18 Credits in Major Courses

**39 Total Credits** 

#### **CORE COURSES**

EDUC 5100	EDUCATIONAL RESEARCH METHODS	3
EDUC 5110	PSYCHOSOCIAL FOUNDATIONS OF EDUCATION	3
EDUC 5120	ORGANIZATIONAL BEHAVIOR AND CHANGE	3
EDUC 5200	THEORIES, PRINCIPLES AND PROCESSES GOVERNING THE DESIGN OF	3
	EDUCATIONAL PROGRAMS	
EDUC 5210	ETHICAL AND LEGAL ASPECTS OF EDUCATION	3
EDUC 5220	HUMAN RESOURCES ADMINISTRATION	3
EDUC 5140	ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS	<u>3</u>
		21
MAJOR COUI	RSES	
EDUC 6200	CURRICULUM DESIGN AND PLANNING	3
EDUC 6240	EVALUATION OF THE TEACHING-LEARNING PROCESS	3
EDUC 6260	THEORIES AND PRINCIPLES OF CURRICULUM IN CONTEMPORARY	3
	EDUCATION	
EDUC 6265	CURRICULUM AND LEADERSHIP	3
EDUC 6060	PLANNING AND EVALUATION	3

## TOTAL CREDITS

EDUC 6040

This program is offered in both fully on ground and online delivery modes. All courses must be passed with at least a "B" grade.

**GRADE PROJECT SEMINAR** 

3

18

# MASTER'S DEGREE IN EDUCATION WITH MAJOR IN EDUCATIONAL LEADERSHIP

#### **OBJECTIVE**

The Master's Degree in Education with Major in Educational Leadership will provide the students with the necessary knowledge, skills and competencies to: function as transformative leaders in public and private educational organizations, effectively, ethically and productively; promote through innovative management and instructional practices a school climate conductive to learning for all constituents; encourage the formation and strengthening of learning communities in constant development and the creation and maintenance of a service-oriented organizational culture of the highest quality to all customers. It is characterized by the attitude toward collaboration, participation and sense of commitment from all participants.

# MINIMUM REQUIREMENTS

- 21 Credits in Core Courses
- 18 Credits in Major Courses
- **39 Total Credits**

#### **CORE COURSES**

EDUC 5100	EDUCATIONAL RESEARCH METHODS	3
EDUC 5110	PSYCHOSOCIAL FOUNDATIONS OF EDUCATION	3
EDUC 5120	ORGANIZATIONAL BEHAVIOR AND CHANGE	3
EDUC 5200	THEORIES, PRINCIPLES AND PROCESSES GOVERNING THE DESIGN OF	3
	EDUCATIONAL PROGRAMS	
EDUC 5210	ETHICAL AND LEGAL ASPECTS OF EDUCATION	3
EDUC 5220	HUMAN RESOURCES ADMINISTRATION	3
EDUC 5140	ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS	<u>3</u> 21
		21
MAJOR COUR	SES	
EDUC 5230	INSTRUCTIONAL LEADERSHIP IN EDUCATIONAL SCENARIOS	3
EDUC 5240	ETHICAL AND TRANSFORMATIONAL LEADERSHIP	3
EDUC 6000	EDUCATIONAL SUPERVISION	3
EDUC 6010	SEMINAR ON PROCESSES AND CONTROVERSIAL ISSUES IN	3
	EDUCATIONAL MANAGEMENT	
EDUC 6015*	FIELD EXPERIENCES IN THE EDUCATIONAL SCENARIO I	3
OR		
EDUC 6025**	LEADERSHIP FOR DIVERSITY	
EDUC 6035	FIELD EXPERIENCES IN THE EDUCATIONAL SCENARIO I	<u>3</u>
OR		
EDUC 6045	INTEGRATED SEMINAR IN EDUCATIONAL LEADERSHIP	
		18
TOTAL CRED	ITS	39

#### TOTAL CREDITS

\*Puerto Rico residents who aspire to be certified as school principals by the Puerto Rico Education Department should contact this agency to familiarize themselves with the requirements needed to obtain this certification. At present, it is requirement that the candidates be certified as regular teachers, have two years of experience as a teacher, and complete a practicum, for which the student should enroll in the courses EDUC 6015 and EDUC 6025 (Field Experiences in the Educational Scenario I and II).

\*\*Residents from outside Puerto Rico are not required to complete the Field Experiences in the Educational Scenario courses. These students should instead enroll in the courses EDUC 6025 –Leadership for Diversity and EDUC 6045 – Integrated Seminar in Educational Leadership.

# This program is offered in both fully on ground and online delivery modes. All courses must be passed with at least a "B" grade.

Before beginning internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program.

The Master's Degree in Education with major in Educational Leadership Field Experiences in the Educational Scenario are equivalent to a total of 105 hours and additional 40 hours of Integrative Seminars.

Note: Puerto Rico residents that aspire to become school principals of the Puerto Rico Education Department should: Please, contact the Teacher Education and Certification Division of the Puerto Rico Department of Education to verify the requirements for the school principal licensure. For more details:

http://www.de.gobierno.pr

http://www.de.gobierno.pr/sites/de.gobierno.pr/files/ReglamentoCertificaciones.pdf

# MASTER'S DEGREE IN SCIENCE IN NURSING IN EDUCATION

#### **OBJECTIVE**

The Master's Degree in Science in Nursing in Education will prepare students with the abilities and skills needed to efficiently fulfill the nursing education specialty. It also promotes the acquisition of skills on evidence-based research, in which the student will build a solid foundation to pursue continuous professional growth.

# **COURSE DISTRIBUTION**

#### **Minimum Requirements**

- 12 Core Courses
- 24 Major Courses
- **36** Total Credits

#### CORE COURSES

NURS 5100	HEALTH AND DEFENSE POLICY TO IMPROVE HEALTH	3
	OUTCOMES OF THE POPULATION	
NURS 5110	INFORMATION TECHNOLOGY USED TO IMPROVE QUALITY	3
	IN NURSING SERVICES	
NURS 5120	EVIDENCE-BASED RESEARCH AND PRACTICE	3
NURS 5130	ORGANIZATIONAL AND SYSTEMATIC LEADERSHIP	<u>3</u>
	IN NURSING	
		12

#### **MAJOR COURSES**

NURS 5200	ADVANCED PATHOPHYSIOLOGY	3
NURS 5210	ADVANCED PHARMACOLOGY	3
NURS 5220	ADVANCED PHYSICAL EXAM	3
EDUC 5200	THEORIES, PRINCIPLES, AND PROCESSES GOVERNING	3
	THE DESIGN OF EDUCATIONAL PROGRAMS	
EDUC 6012	TEACHING AND LEARNING STRATEGIES	3
EDUC 6014	LEARNING ASSESSMENT AND EVALUATION	3
NURS 6035P/	THE ROLE OF NURSING EDUCATOR: SEMINAR AND INTERNSHIP I	3
NURS 6035*		
NURS 6045P/	THE ROLE OF NURSING EDUCATOR: SEMINAR AND INTERNSHIP II	<u>3</u>
NURS 6045*		
		24

TOTAL CREDITS

\*For online offering All courses must be passed with at least a "B" grade.

# MASTER'S DEGREE IN SCIENCE IN NURSING IN MEDICAL-SURGICAL AND ROLE IN EDUCATION<sup>1</sup>

# **OBJECTIVE**

The graduated of the Master Degree in Science in Nursing in Medical-Surgical and Role in Education will carry out a professional education process applying leadership, management, critical thinking and assertive communication skills. The Master in Science in Nursing in Medical-Surgical and Role in Education emphasizes the need for education in the profession, human care, teaching and integration of knowledge. The goal is to develop nurse specialists with the following competencies: leadership, creativity, teaching-learning, communication, critical and creative thinking, mathematical and logical reasoning, information literacy, ethical-legal, and respect for diversity. Students will become assertive communicators aware of the importance of distinguishing the needs of different groups, populations and scenarios, be informed of the individual's clinical and psychological development aspects, and work in different teaching scenarios. As graduates, they will also contribute to improve the quality of life in our society.

#### MINIMUM REQUIREMENTS

27 Core Courses Credits<u>9</u> Major Courses Credits**36 Total Credits** 

# **CORE COURSES**

EDUC 6012	TEACHING AND LEARNING STRATEGIES	3
EDUC 6014	LEARNING ASSESSMENT AND EVALUATION	3
NURS 5100	HEALTH AND DEFENSE POLICY TO IMPROVE HEALTH	3
	OUTCOMES OF THE POPULATION	
NURS 5110	INFORMATION TECHNOLOGY USED TO IMPROVE QUALITY	3
	IN NURSING SERVICES	
NURS 5120	EVIDENCE-BASED RESEARCH AND PRACTICE	3
NURS 5130	ORGANIZATIONAL AND SYSTEMATIC LEADERSHIP	3
	IN NURSING	
NURS 5200	ADVANCED PATHOPHYSIOLOGY	3
NURS 5210	ADVANCED PHARMACOLOGY	3
NURS 5220	ADVANCED PHYSICAL EXAM	<u>3</u>
		27
MAJOR COUR	SES	
NURS 6000	ADVANCE SURGICAL	3
NURS 6010	ADVANCED MEDICAL-SURGICAL I	2

NURS 6011P/ NURS 6011*	ADVANCED MEDICAL-SURGICAL INTERNSHIP I	1
NURS 6020 NURS 6021P/	ADVANCED MEDICAL-SURGICAL II ADVANCED MEDICAL-SURGICAL INTERNSHIP II	2 <u>1</u>
NURS 6021*		9

# TOTAL CREDITS

#### \*For online offering

# All courses must be passed with at least a "B" grade.

<sup>1</sup>This program is pending approval from the U.S. Department of Education.

# MASTER'S DEGREE PROGRAMS ADMISSION REQUIREMENTS

In order for students to be admitted into a Master's Degree program students must:

- 1. Complete and submit an application for admission.
- 2. Meet the minimum grade point average (GPA) and other requirements indicated in the Admission and Transfer Requirements Table for Graduate Programs.
- 3. Submit a transcript from the institution where the student is transferring from. An official transcript must be received within a period of no more than forty-five (45) calendar days from the initial date of the first academic term.
- 4. If the transcript is from a foreign university, the student will be responsible for having the document translated to English by a certified translator, and have the credits evaluated by a certified foreign credential evaluator that is a member of the National Association of Credential Evaluation Services. The certified documents must be sent to the Academic Dean / Academic Director of the location to which the student is applying.
- 5. Students who don't comply with any one of these admission requirements will not be considered for admission into the program.

# **GRADUATE TRANSFER STUDENTS**

A graduate transfer student is one who enters National University College (NUC) for the first time and has taken graduate courses at another accredited institution, whether he intends to transfer course(s) or not.

# Admission Requirements for Graduate Transfer Students

To apply for admission as a graduate transfer student, the following conditions must be met:

- 1. Complete and submit an application for admission.
- 2. Meet the minimum grade point average (GPA) and other requirements indicated in the Admission and Transfer Requirements Table for Graduate Programs.
- 3. Submit a transcript from the institution where the student is transferring from. An official transcript must be received within a period of no more than forty-five (45) calendar days from the initial date of the first academic term.
- 4. If the transcript is from a foreign university, the student will be responsible for having the document translated to English by a certified translator, and have the credits evaluated by a certified foreign credential evaluator that is a member of the National Association of Credential Evaluation Services. The certified documents must be sent to the Academic Dean / Academic Director of the location to which the student is applying.

# TRANSFER COURSES PROCEDURE FOR GRADUATE STUDENTS

- 1. The student must complete the Request Form for Transfer Courses.
- 2. The process request for transferring courses must be generated by the student during the admission process and in a period of not more than forty-five (45) calendar days from the admission date to their first academic term; after that deadline no new requests will be accepted.
- 3. The Registrar's Office will only accept one (1) application for transfer courses and one (1) reconsideration or appeal to that request.
- 4. Those students with transferred courses from other institutions must present the transcript from each institution in order to transfer courses. A copy of the catalog, syllabus or any other document may be required to verify the credit hours, content and duration of courses.
- 5. The transfer of courses will be done taking into consideration the official transcript(s) received. The student may request a preliminary evaluation with a copy of the transcript(s). Each course will be evaluated with their corresponding courses equivalency at NUC.
- 6. The student is accountable for following up that the documents arrive in a timely manner to the Registrar's Offices, specifically official transcript of all courses that transfer is requested for. If the

student's record reaches the Registrar's Office with no official documents for transfer of courses, the registrar officer will place a *Hold* status within the Student Management System, which will restrict the student's enrollment for the next academic term. The *Hold* can be removed only if the official TC is received or if the student enrolls in those courses that he had requested to be transferred, in the next term, according to availability.

- 7. If a student presented problems when completing the application, to obtaining his official transcript, he can be granted an extension to the transfer course period. The extension will be for about 15 additional working days from the date of application.
- 8. The maximum amount of credits to be transferred will be six (6) credits. Those courses must be approved by an accredited institution with a minimum grade of B and approved within the last six (6) years.
- 9. The transferability of graduate credits is not guaranteed unless there is evidence that the degree level and competencies of the course to be transferred are equivalent to the degree level and competencies of a graduate course at NUC.
- 10. The Registrar's Office will notify students which courses have been accepted for transfer.
- 11. The student may submit a written appeal to the Academic Dean / Academic Director if in disagreement with the decision in a period no longer than ten (10) working days from the receipt of the notification.
- 12. Transferred courses will be reflected without grade in the student transcript. These courses will affect the percentage of credits attempted vs those approved.
- 13. NUC does not guarantee the transferability of any of the credits from its programs to other institutions of higher education.

Grade Level	Admission	Transfer	Other requirements
Grade Level	Index	Admission Index	
All Master's Degrees in Business Administration	2.50 points	GPA 2.50 Minimum 6 approved credits Minimum Grade B	<ol> <li>Have a bachelor's degree from an accredited institution recognized by the US Department of Education or by an official agency from the country of origin.</li> <li>Online students must have computer literacy and a valid e-mail address.</li> <li>Meet all general admission and transfer requirements.</li> </ol>
All Master's Degrees in Education	3.00 points	GPA 3.00 Minimum 6 approved credits Minimum Grade B	<ol> <li>Have a bachelor's degree from an accredited institution recognized by the US Department of Education or by an official agency from the country of origin.</li> <li>Two letters of recommendation from professors or other professionals.</li> <li>Interview with the Program Director or Academic Dean.</li> <li>Online students must have computer literacy and a valid email address.</li> <li>Meet all general admission and transfer requirements.</li> </ol>
All Master's Degrees in Science in Nursing	2.50 points	GPA 2.50 Minimum 6 approved credits Minimum Grade B	<ol> <li>Have a bachelor's degree in Science in Nursing from an accredited institution recognized by the US Department of Education or by an official agency from the country of origin.</li> <li>Have and present evidence of active and permanent License of General Nurse (BSN) in U.S. or P.R. The student must maintain the license active during the time of study.</li> <li>Interview with the Program Director, Coordinator or Academic Dean.</li> <li>Two letters of recommendation from teachers or other professionals.</li> <li>Professional resume.</li> <li>Must have computer literacy and a valid email address.</li> <li>Meet all general admission and transfer requirements.</li> </ol>

# Admission and Transfer Requirements Table for Graduate Programs

# **GRADUATION REQUIREMENTS**

Students are recommended for graduation under the rules and regulations in the official catalog at the time the student entered or was readmitted to the Institution whichever date is later. A student may apply for graduation at the time he has completed 90 percent of the courses required. The student should have the minimum grade point average as indicated in the **Graduation Requirements Table for Graduate Programs.** upon completing the total number of required credits for requesting graduation. Additionally, the student must have satisfied all outstanding debt with the institution in order to graduate.

A graduation application should be submitted with a receipt from the Bursar's Office for the amount of \$50.00. This application will be effective until the next scheduled graduation ceremony held in July of every year. The Registrar will evaluate every application for graduation to determine if the student has completed all graduation requirements. A graduation certification is available upon request.

Grade Level	Minimum grade point average for graduation	Minimum grade needed to approve courses
All Master's Degrees in Business Administration	GPA 3.00	All courses should be approved with a minimum grade of B.
All Master's Degrees in Education	GPA 3.00	All courses should be approved with a minimum grade of B.
All Master's Degrees in Science in Nursing	GPA 3.00	All courses should be approved with a minimum grade of B.

#### **Graduation Requirements Table for Graduate Programs**

# **Graduation Ceremony**

The graduation ceremony will normally be held during July of every year. Students who have completed the requirements for graduation in any of the Institution's programs are eligible to participate in this ceremony. Students whose accounts are not current or have an outstanding debt with the institution, will not be granted a graduation permit to attend the graduation ceremony.

# **Graduation with Honors**

In recognition of high achievement, certificates or medals will be awarded to those students who graduate from the Master's Degree program as follows:

# 4.00 Academic Excellence

# STANDARDS OF SATISFACTORY ACADEMIC PROGRESS (SAP) FOR ACADEMIC GRADUATE PROGRAMS

The SAP Policy for graduate students is the same as for undergraduate students and can be found on pages 83-90. For the SAP tables related to graduate programs please see below.

# SATISFACTORY ACADEMIC PROGRESS TABLES

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated annually during the month of July. At each evaluation point, students must achieve a cumulative GPA and a minimum credit completion rate as shown in the SAP tables below (Applicable SAP table for each program is identified in the program tables below).

# **MASTER'S DEGREES**

Program	Credits in Program	Maximum Credit Attempts to Complete Program	Applicable SAP Table
Master Degree in Business Administration	39	58	SAP Table V
Master Degree in Business Administration with Major in Digital Marketing	39	58	SAP Table V
Business Administration with Major in Human Resources	39	58	SAP Table V
Business Administration with Major in Planning and Strategy	39	58	SAP Table V
Master Degree in Education with Major in Educational Leadership	39	58	SAP Table V
Master Degree in Education in Curriculum	39	58	SAP Table V
Master Degree in Education in Assessment and Effectiveness	39	58	SAP Table V
Master Degree in Science in Nursing in Education	36	54	SAP Table V
Master Degree in Science in Nursing with Specialty in Medical Surgery and Role in Education	36	54	SAP Table V

# SAP TABLE

SAP TABLE V			
Terms Completed	Minimum Pace (Credit Hours Completed / Credit Hours Attempted)	Minimum Grade Point Average	
1	50%	3.00	
2	50%	3.00	
3	50%	3.00	
4	60%	3.00	
5	60%	3.00	
6 or more	67%	3.00	

# FINANCIAL INFORMATION

# Tuition and Fees - Graduate Students (On ground and Online Student)

Charge	Out-of- State (anywhere other than PR & <i>Caribbean</i> )	In-State (PR & Caribbean)
Tuition*	\$370 <sup>1</sup>	\$195
Nursing Programs practicum fee	\$150	\$150
Courses with simulators fee	\$100	\$100
Registration fee**	\$25	\$25
Administrative Services and Technological Resources Fee**	\$100	\$100
Foreign Credentials Evaluation Fee	\$150	\$0
Admissions Fee (Non-refundable)	\$25	\$25
Readmission fee***	\$25	\$25
Removal of Incomplete***	\$50	\$50
Change of Registration/Course ***	\$30	\$30
Change of Major***	\$30	\$30
Cancellation of Enrollment***	\$100	\$100
Transcript/Certification*** Official Unofficial Certifications***	\$5 \$3 \$2	\$5 \$3 \$2
Competency Exam (Per Credit)***	\$100	\$100
Duplicate copy of diploma	\$10	\$10
Duplicate Copy of official Registration form***	\$0	\$0
Academic Evaluation***	\$0	\$0
Accident Insurance***	\$0	\$0
Graduation Fee***	\$100	\$100

<sup>1</sup>Eligible US military students who enroll in fully online programs qualify for a discounted tuition rate of \$300.00 per credit in accordance with the Tuition and Fees schedule disclosed in the current institutional catalog.

\* Per Term, Per Credit Hour

\*\* Per Term

# \*\*\* As required

# For NUC California Online Students Only

Student Tuition Recovery Fund (STRF)

"The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

- 1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
- 2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
- 3. You were enrolled at an institution or location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
- 4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
- 5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
- 6. You have been awarded restitution, a refund, or other monetary award by an arbitrator of court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
- 7. Your sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder of debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number."

# GRADUATE PROGRAMS COURSE DESCRIPTIONS

# **GRADUATE PROGRAMS COURSE DESCRIPTIONS**

#### EDUC 5100: Educational Research Methods: 3 credits

In this course, the student will discuss and analyze paradigms and types of research in education. The student will also emphasize on research methods and techniques and their application, design, and applied statistical concepts.

#### EDUC 5110: Psychosocial Foundations of Education: 3 credits

In this course, the student will analyze various aspects of schools of thought in psychology and sociology that directly impact education and their influence on students; the environment and a positive school culture conducive to learning. This course includes the study of real and simulated cases, with emphasis on recent research.

#### EDUC 5120: Organizational Behavior and Change: 3 credits

In this course, the student will analyze theories and models of change and organizational behavior, as well as their implications toward achieving the vision and goals of the institution. The student will also examine the importance of climate, organizational culture, and the role of the leader as a change agent. This includes the analysis of recent research and its implication in education.

#### EDUC 5140: Administration of Special Education Programs: 3 credits

In this course, the student will discuss the process of teaching, evaluation, and legal basis that intervene and regulate Special Education. Evaluate the role of the educational leader and support staff in the intervention process. Analyze cases in which the student will apply new trends and practices in Special Education. The student will also integrate regulations and procedures in the educational setting to ensure and promote the social and academic development of people with disabilities.

# EDUC 5200: Theories, Principles and Processes Governing the Design of Educational Programs: 3 credits

In this course, the student will analyze and evaluate the general concepts of the curriculum, as well as apply them in the development of a curriculum segment integrated into the educational and work scenario it serves. Examine various theories and curricular approaches in order to seize them critically for successful implementation of these in the development of the curricular segment. The student will also recommend and impart direction towards achieving the educational goals of the institution.

# EDUC 5210: Ethical and Legal Aspects of Education: 3 credits

In this course, students will discuss the legal basis that intervene and regulate the public and private school system in elementary, middle school, and high school levels in the United States of America and their implications in the territories or associated states of the American nation. Critically evaluate ethical and moral concepts and professional standards that influence the educational leadership and teaching career. The student will emphasize in educational structures, and legal, academic, and administrative areas that the educational leader must know, and will apply the concepts and laws in order to improve the academic progress of students. Furthermore, examine case studies of educational systems as professional learning strategies.

#### EDUC 5220: Human Resources Administration: 3 credits

In this course, the student will examine the administrative practices that apply in human resources administration in contemporary educational organizations. The student will critically discuss and analyze the current legislation related to: selection and recruitment, personnel development (both at a personal and professional level), cultural and organizational environment, internal policies, and the development of work groups. This includes the study of real and simulated cases, emphasizing in the application of concepts.

#### EDUC 5230: Instructional Leadership in Educational Scenarios: 3 credits

In this course, the student will discuss and analyze the professional competencies needed for the professional development of the school director as an educational leader and capable of achieving student learning. The student will develop plans and study models based on the scientific basis for the continuous renewal of the school. It includes the analysis of real and simulated cases and situations directed toward the learning process of all students.

#### EDUC 5240: Ethical and Transformational Leadership: 3 credits

In this course, the student will examine the evolutional development of the educational leadership concept, emphasizing on transactional and transformational leadership and their implementation in effective contemporary organizations. The course includes aspects related to strategic thinking and the promotion of an organizational vision of the future.

#### EDUC 6000: Educational Supervision: 3 credits

In this course, the student will critically examine new paradigms in the supervision designed to facilitate teacher professional development and the improvement of the academic achievement of all students. The student will also study models and innovative supervisory strategies as part of continuous school improvement. (*Pre-requisite: EDUC 5230*)

#### EDUC 6010: Seminar on Processes and Controversial Issues in Educational Management: 3 credits

This course requires the student to reflect, analyze, and perform investigations related to controversies, problems, and developments in light of conditions prevailing in the educational system. The student will examine aspects from an integrative perspective on how to: establish a mission and a vision, development of an educational project involving the integration of technology, parent participation, and educational partnerships, among others.

# EDUC 6012: Teaching and Learning Strategies: 3 credits

In this course, students will design and adapt important lessons for multiple learning environments. They will also examine how to effectively integrate technology tools, and design lessons that meet the diverse students' learning needs.

#### EDUC 6014: Learning Assessment and Evaluation: 3 credits

In this course, students will describe the basic fundamentals of the learning assessment process and its relationship with the educational process; evaluate assessment strategies used to evaluate students' learning; analyze how to use assessment results as a means to improve student learning; design assessment techniques that best respond to the educational objectives and goals planned in the teaching-learning process; and develop a student learning assessment plan.

# EDUC 6015: Field Experiences in the Educational Scenario I:

#### 3 Credits

In this course, the student will make visits to various educational settings, both in public and private sectors and of various levels, and other community agencies with educational programs. Observe and become aware of aspects in the educational environment, how to carry out managerial, supervisory, and educational processes from the perspective of a future leader. This course includes visits (group and individual) to schools, interviews with school staff and students, and observation of the environment and school organization. This stage requires a minimum of 30 hours in the educational setting and an integration seminar consisting of 15 hours of meetings with the professor. Furthermore, the student will reflect on this learning process.

(Pre-requisites: EDUC 5100, EDUC 5110, EDUC 5120, EDUC 5140, EDUC 5200, EDUC 5210, EDUC 5220, EDUC 5230, EDUC 5240)

## EDUC 6025: Leadership for Diversity: 3 Credits

In this course, students will evaluate the effect of globalization on learning environments, taking into account the importance of individual cultural interactions within society. They will develop the managerial skills of an educational leader with the ability to diversify culturally, respecting individual perspectives that interact in educational and work settings. They will also take and defend positions that integrate and value the respect that must prevail for diversity and for a pluralist and multicultural environment in society.

#### EDUC 6035: Field Experiences in the Educational Scenario II: 3 Credits

In this course, the student will participate in direct experiences in the field to observe the relationships between instructional leadership theories and the practice applied in an educational setting. This stage requires a minimum of 75 hours spread over 3 hours a day, five days a week in the school setting and an integration seminar consisting of 25 hours of meetings with the professor during a period of five weeks. (*Pre-requisites: EDUC 6015*)

#### EDUC 6045: Integrated Seminar in Educational Leadership: 3 Credits

In this course the student will analyze educational scenarios in several public and private organizations, where the student will demonstrate the competences and acquired abilities in their educational formation. Will also evaluate situations in the work environment to develop skills for effective decision making in diverse organizations and educational institutions with multicultural environments. Furthermore, will prepare oral and written reports about the influence of the effective leadership in an educational working environment.

(Pre-requisites: EDUC 5100, EDUC 5110, EDUC 5120, EDUC 5140, EDUC 5200, EDUC 5210, EDUC 5220, EDUC 5230, EDUC5240, EDUC 6025)

# EDUC 6060: Planning and Evaluation: 3 credits

In this course the student will examine the operational considerations related to educational planning and development. They will study elements that allow them to properly develop a plan, program or educational project. They will be trained to lead in the exercise of planning and educational development.

# EDUC 6200: Curriculum Design and Planning: 3 credits

In this course the student will discuss the fundamentals of instructional design and curricular planning. It will cover the diverse approaches and theoretical models in instructional design. They will apply strategies for the design of lectures through the comparative study of different curricular designers. They will also create and evaluate an instructional module with teaching material that qualifies it for use in a teaching-learning process.

# EDUC 6225: Fundamentals of Assessment and Effectiveness: 3 credits

In this course the student will discuss the basic fundamentals of the assessment process and its relationship with the educational process. They will evaluate assessment strategies used to determine the effectiveness in the processes. They will analyze how to use the assessment results as a way to improve student learning and process effectiveness. They will design assessment techniques that best respond to the academic objectives and goals planned in the teaching-learning process, and also develop a learning assessment plan.

#### EDUC 6230: Effectiveness in Higher Education: 3 credits

In this course the student will discuss the historical development of higher education as well as the advantages and challenges it represents at the time to evaluate the effectiveness of a higher education institution. They evaluate the effectiveness of the academic, administrative and fiscal structures in higher education institutions. Additionally, they will consider assessment as a tool to evaluate, improve and evidence the effectiveness of higher education.

(Pre-requisites: EDUC 5120, EDUC 5220)

# EDUC 6240: Evaluation of the Teaching-Learning Process: 3 credits

In this course the student will analyze the theory fundamentals that support the processes and procedures of an assessment cycle for the teaching-learning process. They will plan and execute assessment activities to identify, modify and promote effective strategies for the teaching-learning process. They will develop measuring, evaluation and assessment instruments and analyze and inform the results obtained. They will also justify the actions to take based on the results and findings obtained in the assessment cycle of a teaching-learning process.

(Pre-requisites: EDUC 6225)

# EDUC 6250: Assessment of Educational Programs and Systems: 3 credits

In this course the student will analyze the programmatic and systematic assessment, measuring, evaluation and assessment processes for academic programs or educational systems. It will explain the theories and techniques for the assessment of administrative and management processes and procedures of an academic program or educational systems. They will plan and develop instruments for these that respond to the philosophy and purpose they are based on. Additionally, they will propose corrective measures based on results from the assessment cycle regarding the administrative or management processes of academic programs and educational systems.

(Pre-requisites: EDUC 5200, EDUC 5210, EDUC 5140, EDUC 5100, EDUC 6060, EDUC 6225)

# EDUC 6260: Theories and Principles of Curriculum in Contemporary Education: 3 credits

In this course the student will analyze the curricular theories and principles that sustain modern education. They will examine and describe various curricular design models from a philosophical, psychological, historical, scientific and contemporary perspective. They will research educational theories and implications that influence the development of curricular content. Additionally, they will develop a curricular unit that responds to the educational needs and principles of an academic institution.

(Pre-requisites: EDUC 5200, EDUC 6240)

# EDUC 6265: Curriculum and Leadership: 3 credits

In this course the student will discuss the curricular development processes and how educational psychology affects said processes. They will examine teaching and curricular evaluation models. They will prepare a curricular evaluation and explain its importance for the process of institutional accreditation. They will also evaluate the relationship between curricular development and leadership in an educational organization to achieve an ideal teaching-learning process.

# HURE 6010: Organizational Design: 3 credits

In this course the student will analyze the evolution of the Organizational Design Theory. Additionally, they will evaluate the nature of organizations and their interaction with the elements of a dynamic environment. They will discuss the advantages and disadvantages of the main models of organizational design. They will compare and contrast the organizational change and knowledge management concepts. *(Pre-requisites: MBA 5030)* 

#### HURE 6020: Labor Law: 3 credits

In this course the student will judge the rights and duties that exist in employer-employee relationships. They will discuss the legal requirements that prohibit discriminatory practices in the workplace. They will also describe the processes and obligations of each of the parts in the organization of a union and in the process of collective negotiation in private businesses.

(Pre-requisites: MBA 5030)

#### HURE 6030: Development of Human Resources Policies: 3 credits

In this course the student will discuss the fundamental politics for human resources practices. They will evaluate the context and planning of human resources for an organization. They will create, prepare and review the politics applicable to the design of job positions, recruitment and selection processes, training and instruction plans, development assessment and conflict management, among others. Additionally, they will discuss the impact of hiring expats in the development of human resources' politics for an organization. (*Pre-requisites: MBA 5030*)

# MBA 5000: Organizational Behavior: 3 credits

In this course, students will analyze the theories and concepts related to organizational behavior. They will develop skills that will enable them to manage the behavior of work groups, corporate culture, and their implications on organizational performance. Students will also discuss the relationship between motivation, communication, and conflict management and the performance of individuals within an organization.

#### MBA 5010: Marketing Management: 3 credits

In this course, the student will analyze the marketing mix, segmentation and positioning concepts from a managerial approach. Argue marketing strategies based on the analysis of the internal and external environment. Furthermore, develop processes for the creation of goals and decision-making based on markets needs and opportunities.

#### MBA 5020: Managerial Economics: 3 credits

In this course, students will examine microeconomic and macroeconomic theories, how they are applied in a company environment and analyze the links that exist between the company and its different areas, and its economic means. Students will apply knowledge on related issues, such as economic problems and supply and demand functions. Furthermore, students will also discuss and analyze the theory, production costs, perfect and imperfect competition models and monopolies and oligopolies to provide economic growth and stability in the decision-making process.

#### MBA 5030: Human Resources Development Administration and Management: 3 credits

In this course, the student will assess administrative practices, important functions and primary processes related to human resources. Discuss theoretical models that promote the development of the organization. Analyze the interdependence and highlight elements of the modern management style to promote a culture of continuous learning. The student will also argue about the influence of managerial leadership and conflict management in the supervision of staff in a company.

#### MBA 5040: Managerial Accounting: 3 credits

In this course, students will examine the purposes of managerial accounting and compare its different branches to achieve an effective process of decision-making within the company. Students will examine the importance of systems for cost analysis used to interpret internal reports. They will also evaluate the techniques and tools that allow profit maximization to obtain greater productivity and to support the decision-making process. Furthermore, students will emphasize on the implications of cost analysis in management decisions, capital planning, and investment strategies that contribute to the company's optimal and reliable fiscal performance.

#### MBA 5050: Managerial Finance: 3 credits

In this course, the student will analyze reports, financial statements, risk and performance as a base for decision-making. Furthermore, the student will study the value of time and its implications on financial decisions.

#### MBA 5200: Business Leadership: 3 credits

In this course, students will analyze the main concepts and theories regarding business leadership and development of the skills needed to exercise effective leadership. The students will critically evaluate current leadership challenges and their implications in an organization's changes and performance. In addition, students will examine the human resources of a company through an ethical, fair, democratic, and inspiring process.

#### MBA 5220: Social and Ethical Responsibility: 3 credits

In this course, students will examine the criterion that contributes to social responsibility development in an organization. The students will evaluate how personal values influence the decision-making process. Furthermore, they will discuss the ethical decisions made daily at the work place.

# MBA 5240: Project Management and Administration: 3 credits

In this course, students will analyze and evaluate the concepts, theories, and criteria related to the organization and administration of the resources used to manage a project. The students will discuss the role of leadership in project management necessary to complete a project. They will examine the tools, methodologies, and standards established by the Project Management Institute. Furthermore, they will design projects that add value to an organization by using the PERT and CPM models.

#### MBA 5260: Managerial Information Systems: 3 credits

In this course, students will analyze the concepts, processes and modern techniques used to ensure control of information management as well as the security, integrity and quality of the data stored in the information systems. Students will discuss security techniques used in information management of a network system. Also, they will develop a relationships diagram that implements automation and security processes for a company or business.

#### MBA 5990: Seminar on Global Business Strategies: 3 credits

In this course, students will incorporate knowledge, skills and abilities acquired throughout their courses. Also, students will prepare a dossier demonstrating their planning and implementation skills in activities that reflect their ability to make decisions and implement solutions with leadership, a sense of duty, and using critical and ethical thinking. Furthermore, they will analyze case studies that include cultural and global contexts, into which they must insert the development of competitive strategies, the impact of strategies within the organization's functional areas, and ethical situations that multinational corporations are faced with. This course is the conclusion of the experience that began in previous courses.

(Pre-requisites: MBA 5000, 5010, 5020, 5030, 5040, 5050, 5200, STAT 5210)

#### MBA 6000: Business Administration Integrating Seminar (Capstone): 3 credits

In this course the student will analyze inputs coming from the functional areas of the organization and will integrate the strategic plan. This analysis will lead **the student to make** financial, operational and market decisions to generate sustainable competitive advantages. In addition, **the student will prepare** oral and written reports about the performance of a business. (*This course includes the use of simulator.*)

#### MKTG 6010: Online Strategic Marketing: 3 credits

On this course the student will analyze strategies that will allow the organization to have commercial presence on the Internet. They will justify the use of technology in online communication for marketing purposes and the importance of its commercial presence on the Internet. Likewise, they will develop a strategic online marketing plan, taking into consideration the important of legal aspects, intellectual property and the ethics that are associated to strategic decisions when using communication channels on the web. (*Prerequisite: MBA 5010*)

## MKTG 6020: Online Advertising and Promotion: 3 credits

On this course the student will justify the methods for measuring the effectiveness of advertising and promotion strategies on social media. They will discuss the factors that influence the promotional mix and its relation to sales and competition in the market, while meeting legal regulations and ethical principles. Likewise, they will design a promotional plan for social media.

# MKTG 6030: Social Media: 3 credits

On this course the student will analyze and apply the main marketing concepts and theories on social media. They will evaluate different social media and their function as a communication platform for organizations. They will analyze consumer participation as part of a brand or service. Also, they will develop a strategic marketing plan for a product or service on social media. (*Pre-requisite: MBA 5010*)

# MKTG 6040: Online Marketing Distribution Channels: 3 credits

On this course, the student will analyze the characteristics and the scope of different online marketing channels and will choose the most convenient online tools for creating a marketing program, based on the objectives and goals of the organization. They will explore the use of different web tools with the purpose of commercializing products and services, as well as supporting general activities of the marketing department. (*Pre-requisite: MBA 5010*)

# NURS 5100: Health and Defense Policy to Improve Health Outcomes of the Population: 3 credits

In this course, students will analyze the history and development of Health Services policies globally. They will evaluate the economic impact on policies, procedures and rights in the provision of services in public or private health systems. They will examine the procedures, patterns and paradigms of the new health care models and the role of the nursing professional.

# NURS 5110: Information Technology Used to Improve Quality in Nursing Services: 3 credits

In this course, students will discuss how IT competencies and skills have been integrated into the role of the nursing professional; and examine the main topics related to nursing informatics, patient quality and safety, and other topics relevant to the contemporary nursing. They will justify the use of the electronic health record as a tool to promote and improve patient health care. They will analyze the nursing role as an agent of change in the adoption of new technologies.

# NURS 5120: Evidence-Based Research and Practice: 3 credits

In this course, students will analyze the role of research in the professional nursing practice, its principles and evidence-based practice models; evaluate several research methodologies used in the clinical scenario and the role of nursing theories in research and practice; explain the importance of fulfilling human rights in a research process; evaluate research studies and use this process and its results as key elements to improve the quality of evidence-based nursing practice, education, leadership and management. They will elaborate as well a research proposal that responds to a need identified in their practice.

# NURS 5130: Organizational and Systematic Leadership in Nursing: 3 credits

In this course, students will learn to exercise effective leadership in a health organization; examine the impact of changes in the health system and the transformation of the nursing profession; evaluate leadership and management theories; and argue about empowerment strategies that help nurses, who have obtained an MSN, to be successful in taking on leadership positions.

# NURS 5200: Advanced Pathophysiology: 3 credits

This course allows students to focus on pathological conditions, which are found during the practice throughout the life cycle. It emphasizes the regulatory and compensatory mechanisms related to diseases of higher prevalence, and the development of critical thinking skills that distinguish the relationship between normal physiology and specific alterations caused by injuries or illness.

# NURS 5210: Advanced Pharmacology: 3 credits

This course is designed to expand the knowledge of advanced pharmacology in the nursing practice by allowing students to analyze the effects of drugs and examine the general categories of pharmacological agents. Research findings, evidence-based practice, and ethical-legal considerations are discussed. It focuses on the principles of drug action, pharmacokinetics, and pharmacotherapeutics in the context of the advanced nursing practice. The most common drug classifications, indications and evaluation of therapy results are presented.

# NURS 5220: Advanced Physical Exam: 3 credits

This course allows advanced practice students to gain the knowledge, skills and ability to provide a safe, proficient, and complete health assessment. It focuses on the advanced knowledge and skills needed for the health assessment and promotion throughout the life cycle. Students will learn to use the advanced diagnostic communication reasoning and physical examination skills to identify changes in acute and chronic health patterns. The emphasis is on a detailed information gathering with a systematic focus on the health assessment and physical examination, interpretation, and documentation of physical, biological, and psychosocial data throughout the life cycle regarding normal and altered findings.

# NURS 6000: Advance Surgical: 3 credits

In this course, the student will analyze pathological conditions which require invasive and noninvasive surgical procedures they encounter in their practice throughout the life cycle. They will discuss surgical anatomy, general nursing perioperative considerations and specific considerations of the operational procedure for each surgical intervention. They will examine technological advances associated with invasive and noninvasive surgical procedures in a hospital, mobile surgical center or medical office. They will explain the guidelines for preoperative and postoperative care, secondary effects and complications, home care, release, follow-up care, psychosocial care and remissions. They will observe particular considerations for pediatric or geriatric patients, traumas and surgeries, as well as for interventions guided through images, complementary and alternative therapies.

# NURS 6010: Advanced Medical-Surgical Nursing I: 2 credits

In this course, students will discuss and develop the competencies of the medical-surgical nurse specialist in the care of adults and elders with pathophysiological alterations in diverse health scenarios. They will integrate the health assessment, advanced physical examination and diagnostic reasoning skills, and the planning, implementation and evaluation of therapeutic interventions as nurse specialists. They will also analyze cultural and ethical-legal considerations related to adult and elder care; and develop the expertise in advanced nursing management of the following systems: intergumentary, mental health, fluid and electrolyte balance, respiratory and cardiovascular.

(Pre-requisites: NURS 5100, NURS 5110, NURS 5120, NURS 5130, NURS 5200, NURS 5210, NURS 5220, NURS 6000)

(Co-requisites: NURS 6011P, NURS 6011\*, EDUC 6012)

# NURS 6011P/6011\*: Medical-Surgical Nursing Practice I: 1 credit

In this course, students will apply the knowledge of medical-surgical nursing. Their performance will be evaluated taking into consideration the application of clinical judgment, regulatory aspects, and the provision of quality health care and safety.

(Pre-requisites: NURS 5100, NURS 5110, NURS 5120, NURS 5130, NURS 5200, NURS 5210, NURS 5220, EDUC 6012, EDUC 6014) (Co-requisites: NURS 6010)

# NURS 6020: Advanced Medical-Surgical Nursing II: 2 credits

In this course, students will continue to discuss and develop the competencies of the medical-surgical nurse specialist in the care of adults and elders with pathophysiological alterations in diverse health scenarios. They will integrate the health assessment, advanced physical examination and diagnostic reasoning skills, and the planning, implementation and evaluation of therapeutic interventions as nurse specialists. They will develop the expertise in advanced nursing management of the following systems: endocrine, gastrointestinal, renal, immunological, hematological, oncological, neurological, musculoskeletal, and female and male reproductive systems.

(Pre-requisites: NURS 5100, NURS 5110, NURS 5120, NURS 5130, NURS 5200, NURS 5210, NURS 5220, NURS 6000, NURS 6010, NURS 6011P, NURS 6011\*) (Co-requisites: NURS 6021P/NURS 6021\*, EDUC 6014)

# NURS 6021P/6021\*: Advanced Medical-Surgical Nursing Practice II: 1 credit

In this course, students will compare the competencies and expectations as medical-surgical nurse specialists in the role of educator in different scenarios: academic, personal development and patient education. They will apply the knowledge and research findings related to the principles of the teaching-learning process, curriculum development, and the effective use of educational technology to design and implement a teaching session. They will also analyze the ethical and legal aspects related to the role of the nurse as educator. The course includes a 45-hour theoretical teaching practice.

(Pre-requisites: NURS 5100, NURS 5110, NURS 5120, NURS 5130, NURS 5200, NURS 5210, NURS 5220, NURS 6000, NURS 6010, NURS 6011P, NURS 6011\*) (Co-requisites: NURS 6020, EDUC 6014)

#### NURS 6035P/6035: The Role of Nursing Educator: Seminar and Internship I: 3 credits

In this course the student will apply concepts and skills in curriculum development, classroom and evaluation methods in an educator role within the student's area of specialization. Also, will plan, guide, use technology in teaching and evaluate learning activities in a variety of educational settings. Promote interprofessional education in educational settings integrating Quality and Safety Education. The course includes 45-hours of teaching practice. (*Pre-requisites: NURS 5100, NURS 5110, NURS 5120, NURS 5130, NURS 5200, NURS 5210, NURS 5220, EDUC 5200, EDUC 6012, EDUC 6014*)

# NURS 6045P/6045: The Role of Nursing Educator: Seminar and Internship II: 3 credits

In this course, students will integrate the knowledge and related competitions of the nurse educator's role in various areas: academics, personal development and patient education. They will apply the knowledge and results from research related to principles of the teaching and learning process, curricular development and effective use of educational technology to design and carry out a teaching session. Additionally, they will analyze the ethical and legal aspects associated with the role of the nurse educator. The course includes a 45-hour teaching practice.

(Pre-requisites: NURS 5100, NURS 5110, NURS 5120, NURS 5130, NURS 5200, NURS 5210, NURS 5220, EDUC 5200, EDUC 6012, EDUC 6014)

## PLAN 6010: Operations Management: 3 credits

In this course students apply the concepts and skills necessary for the design and selection processes for the management of operations in manufacturing environments and services. They will analyze the importance of proper management of the supply chain to achieve customer satisfaction. They will identify statistical methods for quality control processes.

#### PLAN 6015: Strategic Management: 3 credits

In this course, students will analyze theoretical concepts and fundamentals of strategic management in different organizations. Additionally, they will analyze three main areas: strategic management models, strategy formulation, and the roles related to strategic management. They will also analyze the management and administration of strategies in organizations.

#### PLAN 6020: Strategic Planning: 3 credits

In this course, students will analyze the strategic planning theories at a corporate level. They will evaluate the different models of strategic planning from the perspective of its evolution, relevance, importance, and benefits. They will develop a strategic plan in all of its parts. They will analyze the factors that could cause the failure of strategic plans and design strategies to avoid it. They will create a plan to implement strategic plans, evaluation measures, and control mechanisms.

(Pre-requisites: PLAN 6015)

#### PLAN 6030: Quantitative Analysis for Decision Making: 3 credits

In this course, students will analyze the theoretical fundamentals for the decision-making process through quantitative means, from an administrative perspective. They will examine different types of prognoses and their use in decision-making. They will apply diverse methods, explain how they work, and interpret results. They will also evaluate various quantitative models and apply simulation techniques for decision-making and problem-solving.

(Pre-requisite: STAT 5210)

# PLAN 6040: Supply Chain Administration: 3 credits

In this course the students will analyze the concepts, processes and strategies used in the development and management of the supply chain. The course includes the strategic sourcing process and the critical elements of the supply chain. Students apply techniques to select, measure and evaluate suppliers. They describe the various information systems used in the supply chain.

(Pre-requisite: PLAN 6010)

#### **REME 5100: Research Methodology: 3 credits**

In this course the student will discuss and analyze paradigms and types of research in business administration. The course makes emphasis on methods and techniques of research and its design, application, interpretation and results presentation.

(Pre-requisite: STAT 5210)

# STAT 5210: Statistics: 3 credits

In this course, students will analyze and discuss the application of descriptive and inferential statistics. Also, use different types of computing systems and their application for research and decision-making in the organization. UNDERGRADUATE PROGRAMS

# ALLIED HEALTH SCIENCES DEPARTMENT

The faculty of this department offers students an education where technological and humanistic education merge with the student's social and cultural background. They also aim to prepare graduates to occupy positions at entry level in the government and the private sector in areas related to the allied health sciences professions. The Department offers Associate's Degrees in Pharmacy Technician, Dental Assistant with Expanded Functions, Medical Billing and Coding, and Physical Therapist Assistant\*.

The Pharmacy Technician, Dental Assistant with Expanded Functions and Physical Therapist Assistant\* programs provide the student with a maximum of knowledge and skills to work as assistants to professionals in the academic associate's degree program fields.

Under the laws of the Commonwealth of Puerto Rico all professions whose ultimate goals have to do with the health of people, are highly regulated. Candidates entering into the Allied Health Sciences Programs field should be aware of the various licensing, public service and other requirements of these professions.

\*The Physical Therapist Assistant Program at National University College's Bayamon Campus is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111North Fairfax Street Alejandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program / institution directly, please call 787-780-5134 Ext. 4111 or email: mtorres2@nuc.edu.

# ASSOCIATE'S DEGREE IN DENTAL ASSISTANT WITH EXPANDED FUNCTIONS

# **OBJECTIVE**

The Associate's Degree in Dental Assistant with Expanded Functions program prepares students with the necessary knowledge and skills to work in a dental office or clinic. The students will be able to perform delegated and supervised functions by the dentist in the areas of dental imaging, preventive and restorative, and infection control. The program provides students with a combination of learning experiences both in the classroom and laboratory as well as during the clinical practice in dental offices or clinics.

# **MINIMUM REQUIREMENTS:**

- 25 Credits in General Education
- 3 Credits in Core Courses
- 47 Credits in Major Courses
- 3 Credits in Elective
- 78 Total Credits

# **GENERAL EDUCATION:**

BIOL 1010*	INTRODUCTION TO BIOLOGY	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	3
OR	OR	
SOSC 1010	SOCIAL SCIENCES I	
ITTE 1031L	COMPUTER LITERACY AND LAB	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		25

#### **CORE COURSES:**

BIOL 2000*	HUMAN ANATOMY AND PHYSIOLOGY	<u>3</u>	
		3	

# **MAJOR COURSES:**

1			
	DEAS 1101L	DENTAL ANATOMY, NOMENCLATURE AND LAB.	2
	DEAS 1300	DENTAL MATERIALS SCIENCES	2
	DEAS 1311L	DENTAL MATERIALS SCIENCES LAB.	2
	DEAS 1220	ORAL ANATOMY, HEAD AND NECK	3
	DEAS 1420	DIGITIZING OF DENTAL IMAGES	3
	DEAS 1421L	DIGITIZING OF DENTAL IMAGES LAB.	2
	DEAS 1500	INSTRUMENTS AND CLINICAL SCIENCES I	2
	DEAS 1511L	INSTRUMENTS AND CLINICAL SCIENCES I LAB.	2
	DEAS 1600	ORAL PHARMACOLOGY	3
	DEAS 1811L	ORAL MICROBIOLOGY AND INFECTIONS CONTROL LAB.	2
	DEAS 2000	EXPANDED FUNCTIONS IN RESTORATIVE PRE-CLINIC SCIENCE	2
	DEAS 2011L	EXPANDED FUNCTIONS IN RESTORATIVE PRE-CLINIC SCIENCE LAB.	2
	DEAS 2031	EXPANDED FUNCTIONS PREVENTIVE SCIENCE CLINIC SEMINAR	2
	DEAS 2041P	EXPANDED FUNCTIONS PREVENTIVE SCIENCE CLINIC PRACTICE*	2
	DEAS 2051	EXPANDED FUNCTIONS RESTORATIVE SCIENCE CLINIC SEMINAR	2
	DEAS 2061P	EXPANDED FUNCTIONS RESTORATIVE SCIENCE CLINIC PRACTICE*	2
	DEAS 2600	INSTRUMENTS AND CLINICAL SCIENCE II	2
	DEAS 2611L	INSTRUMENTS AND CLINICAL SCIENCE II LABORATORY	2

DEAS 2700	HISTOLOGY, EMBRYOLOGY AND ORAL PATHOLOGY	2
DEAS 2920	PREVENTIVE DENTAL TREATMENT	2
DEAS 2921L	PREVENTIVE DENTAL TREATMENT LAB.	2
MESE 2031L	MEDICAL BILLING, ELECTRONIC RECORD AND LABORATORY	<u>2</u>
		47

#### **ELECTIVES**

#### TOTAL CREDITS

78

3

\*All general education courses with an asterisk and all core, major and electives courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Associate's Degree in Dental Assistant with Expanded Functions Practices are equivalent to two (2) internships practices of 180 hours each.

# ASSOCIATE'S DEGREE IN APPLIED SCIENCES IN CARDIORESPIRATORY CARE

# **PROGRAM DESCRIPTION**

The objective of the Associate's Degree in Applied Sciences in Cardio Respiratory Care is to prepare and develop professionals in this field who can perform at the basic level as well as the advanced level in entry level positions as Cardio respiratory Care Technician.

The professional prepared for this Program will intervene with critical care cardio respiratory patients, as well as stable patients. Among the program's goals are the following:

- 1. Develop respiratory therapists at the Associate Degree level who are aware of their responsibilities in the diagnosis, evaluation, treatment and rehabilitation of patients with cardiopulmonary conditions.
- 2. Develop respiratory therapists at the Associate Degree level who possess the necessary competencies to perform the basic and advanced modalities for Respiratory Care following the prescribed medical treatment.
- 3. Develop a respiratory care professional capable of interaction in an integrated and effective manner with patients and the health team when implementing the basic and advanced modalities of the profession.
- 24 Credits in General Education
- 16 Credits in Core Courses
- <u>47</u> Credits in Major Courses
- 87 Total Credits

# **GENERAL EDUCATION:**

		24
ITTE 1031L	COMPUTER LITERACY AND LAB	3
SOSC 1010	SOCIAL SCIENCE I	3
PSYC 2510	PSYCHOLOGY	3
MATH 1010	BASIC MATHEMATICS	3
SPAN 1020	BASIC SPANISH II	3
SPAN 1010	BASIC SPANISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 1010	BASIC ENGLISH I	3

# **CORE COURSES:**

BIOL 2010	ANATOMY AND PHYSIOLOGY I	3
BIOL 2020	ANATOMY AND PHYSIOLOGY II	3
FIS 101	PHYSICS ALLIED HEALTH	3
CHEM 2031	GENERAL CHEMISTRY	3
MICR 1000	BASIC MICROBIOLOGY	3
MICR 1011L	BASIC MICROBIOLOGY LAB	<u>1</u>
		16

# **MAJOR COURSES:**

RCP 200	CARDIOPULMONARY ANATOMY AND PHYSIOLOGY	3
RCP 201	FUNDAMENTALS OF RESPIRATORY CARE	4
RCP 202	CARDIOPULMONARY PATHOPHYSIOLOGY	3
RCP 203	PHARMACOLOGY FOR RESPIRATORY CARE	3
RCP 204	CARDIO RESPIRATORY CARE I	7
RCP 205	ELECTROCARDIOGRAPHY	3
RCP 207	MECHANICAL VENTILATION	5

RCP 208	ADVANCED CARDIOPULMONARY DIAGNOSIS	2
RCP 209	ADVANCED CARDIOPULMONARY CARE	2
RCP 210	NEONATAL AND PEDIATRIC RESPIRATORY CARE	2
RCP 211	SEMINAR	2
RCP 212	CLINICAL PRACTICE	6
RCP 213	PULMONARY FUNCTION TESTS AND ARTERIAL GASES	<u>5</u>
		47

TOTAL CREDITS

# ASSOCIATE'S DEGREE IN APPLIED SCIENCES IN CLINICAL SONOGRAPHY

### **PROGRAM DESCRIPTION**

Medical diagnostic sonographers, also known as ultrasound sonographers, use special equipment to direct high-frequency sound waves into various parts of the patient's body to record echoes that create an image used by the physician for interpretation and diagnosis. While observing the monitor during the scan, sonographers look for subtle visual clues that contrast healthy and affected areas. They must decide if the images are satisfactory for diagnostic purposes and select which images to show the doctor. The medical diagnostic sonographers can be used in obstetric and gynecologic sonography, abdominal sonography, neurosonography or ophthalmologic sonography.

The sonographers may also specialize in vascular technology or echocardiography. In addition to working directly with patients, sonographers maintain patient records and adjust and provide maintenance to the equipment

- 24 Credits in General Education
- 9 Credits in Core Courses
- 56 Credits in Major Courses
- 89 Total Credits

# **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
MATH 1010	0 BASIC MATHEMATICS	3
PSYC 2510	PSYCHOLOGY	3
SOSC 1010	SOCIAL SCIENCE I	3
ITTE 1031L	COMPUTER LITERACY AND LAB	3
		24
CORE COUL	RSES:	
BIOL 2010	ANATOMY AND PHYSIOLOGY I	3
BIOL 2020	ANATOMY AND PHYSIOLOGY II	3
FIS 101	PHYSICS ALLIED HEALTH	<u>3</u>
		9
MAJOR CO	URSES:	
BIO 120	SECTIONAL ANATOMY	3
SONO 101	ULTRASOUND	4

SONO 101	ULTRASOUND	4
SONO 102	MEDICAL AND PHYSICAL INSTRUMENTATION ULTRASOUND	3
SONO 103	INTRODUCTION TO MEDICAL SONOGRAPHY	2
SONO 104	SONOGRAPHY OF SUPERFICIAL STRUCTURES	3
SONO 105	SONOGRAPHY LABORATORY OF SUPERFICIAL STRUCTURES	3
SONO 106	ABDOMINAL SONOGRAPHY	3
SONO 107	LABORATORY OF ABDOMINAL SONOGRAPHY	3
SONO 108	GYNECOLOGICAL AND OBSTETRICAL SONOGRAPHY	3
SONO 109	LABORATORY OF GYNECOLOGICAL AND OBSTETRICAL	3

# SONOGRAPHY

		SUBTOTAL	56
SONO 203	CLINICAL PRACTICE OF SONOGRAPHY IV		<u>5</u>
SONO 202	CLINICAL PRACTICE OF SONOGRAPHY III		2
SONO 201	CLINICAL PRACTICE OF SONOGRAPHY II		2
SONO 200	CLINICAL PRACTICE OF SONOGRAPHY I		1
SONO 115	CLINICAL SEMINAR		2
SONO 114	LABORATORY PRACTICE		4
SONO 113	MEDICAL TERMINOLOGY		2
SONO 112	PATIENT MANAGEMENT AND CARE		3
SONO 111	LABORATORY OF VASCULAR SONOGRAPHY		2
SONO 110	VASCULAR SONOGRAPHY		3

# **TOTAL CREDITS**

89

# ASSOCIATE'S DEGREE IN APPLIED SCIENCES IN RADIOLOGY TECHNOLOGY

### **PROGRAM DESCRIPTION**

This program capacitates the student as a Radiologic Technologist, who is part of the health interdisciplinary team. The program provides the student with the skills necessary to perform imaging exams of conventional diagnosis, by means of the use of radiant energy to contribute to the diagnosis and treatment of patients' illness. The program covers preparation in radiology techniques and procedures, patient care, pathology, medical terminology, radiology protection, among other topics.

The program provides the knowledge necessary for the student to face the competitive market work, and can be used successfully deal for graduation examination issued by the Board of Examiners of Radiological Technologists and Radiation of Puerto Rico within the Department of Health to become a qualified Radiologic Technologist in Puerto Rico.

- 24 Credits in General Education
- 9 Credits in Core Courses
- 56 Credits in Major Courses
- **89** Total Credits

# **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3 3 3 3 3 3 3 3 3
MATH 1010	BASIC MATHEMATICS	3
PSYC 2510	PSYCHOLOGY	3
SOSC 1010	SOCIAL SCIENCE I	3
ITTE 1031L	COMPUTER LITERACY AND LAB	3
		24
CORE COURS	FC.	
BIOL 2010	ANATOMY AND PHYSIOLOGY I	3
BIOL 2020	ANATOMY AND PHYSIOLOGY II	
FIS 101	PHYSICS ALLIED HEALTH	3 <u>3</u> 9
110 101		<u>9</u>
MAJOR COUR		
RADI 200	FUNDAMENTALS OF RADIOLOGIC SCIENCES	2
RADI 201	RADIOGRAPHIC FILM PROCESSING	3
RADI 202	PRINCIPLES OF RADIOGRAPHIC EXPOSITION	3
RADI 203	CLINICAL PRACTICE I	2
RADI 204	RADIOLOGIC PROCEDURES I	3
RADI 205	SECTIONAL ANATOMY	2
RADI 206	PATIENT MANAGEMENT AND CARE	2
RADI 207	MEDICAL TERMINOLOGY	2
RADI 208	RADIOLOGIC PROCEDURES II	3
RADI 209	RADIOLOGIC PHYSICS	3
RADI 210	CLINICAL PRACTICE II	3 3 2 3 2 2 2 2 3 3 3 3 2 2 2
RADI 211	ETHICS IN RADIOLOGIC SCIENCES	2
RADI 212	BASIC PRINCIPLES OF MEDICAL PATHOLOGY I	2

RADI 213	BASIC PRINCIPLES OF MEDICAL PATHOLOGY II	2
RADI 214	CLINICAL PRACTICE III	3
RADI 215	RADIOLOGIC PROCEDURES III	3
RADI 216	CRITIQUE RADIOLOGY	3
RADI 217	RADIOLOGIC PROTECTION	2
RADI 218	PHARMACOLOGY AND MEDICATION ADMINISTRATION IN	2
	DIAGNOSTIC IMAGING	
RADI 219	INTRODUCTION TO DIAGNOSTIC-MODALITIES	2
RADI 220	SEMINAR AND CLINICAL PRACTICE IV	7
		56

# TOTAL CREDITS

# ASSOCIATE'S DEGREE IN MEDICAL BILLING AND CODING

### **OBJECTIVE**

The Associate Degree in Medical Billing & Coding Program provides the student with the necessary knowledge and skills to apply billing and coding procedures to health insurance companies.

### MINIMUM REQUIREMENTS

- 22 Credits in General Education
- <u>39</u> Credits in Major Courses
- 61 Total Credits

# **GENERAL EDUCATION:**

<b>ULIVERAL EDU</b>	CAHON		
ENGL 1010*	BASIC ENGLISH I		3
ENGL 1020	BASIC ENGLISH II		3
ITTE 1031L*	COMPUTER LITERACY AND LAB		3
HUMA 1010	HUMANITIES I		3
OR	OR		
SOSC 1010	SOCIAL SCIENCES I		
MATH 1010*	BASIC MATHEMATICS		3
SPAN 1010	BASIC SPANISH I		3
SPAN 1020	BASIC SPANISH II		3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR		1
		2	22

### **MAJOR COURSES:**

			39
		ADMINISTRATION	
	HEMA 1020	LEGAL AND ETHICAL ISSUES IN HEALTH SERVICES	<u>3</u>
	AUME 2000	MEDICAL AUDITING	3
	MEBI 1150**	ELECTRONIC MEDICAL RECORD	3
	MEBC 2050**	INTEGRATING SEMINAR: MEDICAL BILLING	3
	MEBC 2000	MEDICAL REPORTS PROCEDURES	3
	MEBC 1200	MEDICAL BILLING CODING III	3
	MEBC 1060	MEDICAL BILLING CODING II	3
	MEBC 1050	MEDICAL BILLING CODING I	3
	MEBC 1020**	MEDICAL BILLING SYSTEMS II	3
	MEBC 1010	MEDICAL BILLING SYSTEMS I	3
	MESE 1010	MEDICAL TERMINOLOGY	3
	BUMA 1050	INTROD. TO ENTREPRENEURSHIP	3
	BIOL 1200	FUNDAMENTALS OF ANATOMY AND PHYSIOLOGY	3
1			

# TOTAL CREDITS

\*All general education courses with an asterisk and all major courses must be passed with at least a "C" grade.

\*\*This course includes the use of simulator.

Program offered only online.

61

# ASSOCIATE'S DEGREE IN PHARMACY TECHNICIAN

# **OBJECTIVE**

The Associate's Degree Program in Pharmacy Technician aims to prepare students with the knowledge and skills required to work as Pharmacy Technicians, always under the direct supervision of a licensed pharmacist. Graduates from this program will be able to perform in pharmacies and hospitals as Pharmacy Technicians as per the laws and regulations of the Puerto Rico Pharmacy Board.

### **MINIMUM REQUIREMENTS:**

25 Credits in General Education
7 Credits in Core Courses
41 Credits in Major Courses
3 Credits in Elective Courses
76 Total Credits

### **GENERAL EDUCATION**

BIOL 1010	INTRODUCTION TO BIOLOGY	
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ITTE 1031L	COMPUTER LITERACY AND LAB	3
MATH 1010*	BASIC MATHEMATICS	3
HUMA 1010	HUMANITIES I	3
OR	OR	
SOSC 1010	SOCIAL SCIENCES I	
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	<u>3</u>
		25
CORE COURSE	ES	
BIOL 2000*	HUMAN ANATOMY AND PHYSIOLOGY	3
CHEM 1010*	GENERAL CHEMISTRY FOR HEALTH SCIENCES	3
CHEM 1011L*	GENERAL CHEMISTRY FOR HEALTH SCIENCES LAB.	<u>1</u>
		7

### **MAJOR COURSES:**

-			
	PHAR 1000	PHARMACEUTICAL THEORY	3
	PHAR 1050	PHARMACEUTICAL CHEMISTRY	3
	PHAR 1150	PHARMACEUTICAL MATHEMATICS I	2
	PHAR 1160	PHARMACEUTICAL MATHEMATICS II	2
	PHAR 2051L	COMPOSITION AND DISPENSING LAB.	2
	PHAR 2250	PHARMACEUTICAL LEGISLATION	3
	PHAR 2350	POSOLOGY	3
	PHAR 2361L	PHARMACY ADMINISTRATION LAB.	2
	PHAR 2560	PHARMACOLOGY I	3
	PHAR 2570	PHARMACOLOGY II	3
	PHAR 2580	PHARMACOLOGY III	3
	PHAR 2700	PHARMACY INTERNSHIP SEMINAR I	1
	PHAR 2800	PHARMACY INTERNSHIP SEMINAR II	1
	PHAR 2900	PHARMACY INTERNSHIP SEMINAR III	1

PHAR 2920	PHARMACY INTEGRATED SEMINAR	3
PHAR 2711P	PHARMACY INTERNSHIP I	2
PHAR 2811P	PHARMACY INTERNSHIP II	2
PHAR 2911P	PHARMACY INTERNSHIP III	<u>2</u>
		41
ELECTIVES:		3
	a	
TOTAL CREDIT	S	76

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Associate's Degree in Pharmacy Technician Practice is equivalent to two (2) internships of 350 hours each and one (1) of 300 hours.

# ASSOCIATE'S DEGREE IN PHYSICAL THERAPIST ASSISTANT\*\*

### **OBJECTIVE**

The program aims to prepare the student as a physical therapist assistant under the supervision of a physical therapist. The curriculum integrates theoretical knowledge, the development of technical skills and clinical experiences necessary for the formation of a competent professional with ethical attitudes who will be committed to the profession and society.

# MINIMUM REQUIREMENTS

- 22 Credits in General Education
- 12 Credits in Core Courses
- 43 Credits in Major Courses

# 77 Total Credits

# **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
MATH 1010	BASIC MATHEMATICS	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		22

# **CORE COURSES:**

BIOL 2010	ANATOMY AND PHYSIOLOGY I	3
BIOL 2020	ANATOMY AND PHYSIOLOGY II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
PSYC 2510	PSYCHOLOGY	<u>3</u>
		12

### **MAJOR COURSES:**

THER 1011L	INTRODUCTION TO PHYSICAL THERAPIST ASSISTANT AND	3
	LABORATORY	
THER 1041L	MODALITIES OF INTERVENTION OF ELECTROTHERAPY, PHYSICAL	3
	AGENTS AND LABORATORY	
THER 1040L	FUNCTIONAL MOVEMENT I AND LABORATORY	4
THER 1050L	FUNCTIONAL MOVEMENT II AND LABORATORY	4
THER 1070L	SOFT TISSUE MOBILIZATION AND LABORATORY	3
THER 1060L	THERAPEUTIC EXERCISES AND LABORATORY	4
THER 2040	PHYSICAL DYSFUNCTIONS	3
THER 2011L	DAILY LIVING ACTIVITIES AND LAB.	3
<b>THER 2050L</b>	ADVANCED REHABILITATION TECHNIQUES FOR COMPLEX PATIENT	4
	CONDITIONS AND LABORATORY	
THER 2161P	PHYSICAL THERAPIST ASSISTANT PRACTICE I	3
THER 2171P	PHYSICAL THERAPIST ASSISTANT PRACTICE II	6
THER2181	INTEGRATING SEMINAR ON PHYSICAL THERAPIST ASSISTANT	<u>3</u>
		43

### TOTAL CREDITS

77

# \*All general education, core courses and all major courses must be passed with at least a "C" grade, except for the clinical practices that must be passed with at least "B" grade.

Before beginning internship, students must have completed all prerequisites of the internship courses in accordance with the curriculum of the program.

The Practices are equivalent to a total of 570 hours. THER 2161P is 190 hours and THER 2171P is 380 hours.

\*\*The Physical Therapist Assistant Program at National University College's Bayamon Campus is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111North Fairfax Street Alejandria, Virginia 22314; telephone: 703-706-3245; email: <u>accreditation@apta.org</u>; website: <u>http://www.capteonline.org</u>. If needing to contact the program / institution directly, please call 787-780-5134 Ext. 4111 or email: <u>mtorres2@nuc.edu</u>.

### **Admission Requirements:**

- Have a minimum admission index of 3.00 and a minimum admission transfer index of 300 and a grade point average of 3.00 for transfers.
- Provide evidence of Negative Criminal Record Certificate (issued by the Puerto Rico Police Department), certification of Hepatitis, Influenza and Chicken Pox vaccines.
- Complete the interview by a faculty member of the program.
- Complete the Physical Therapist Assistant Essentials Functions Form.
- Complete the Orientation of Special Academics Program Requirements Form, provided by the admission office.
- Be 18 years old before the first clinical course.
- Students must be full time available for this program.

### Documents that must be submitted with the admission application:

- Transcript of the academic file or certification that includes a cumulative average and a degree conferred by the college or university of origin.
- If the transcript comes from a foreign university, it will be the responsibility of the student to have the document translated to English by a certified translator and have the transcript evaluated by a credentials evaluator who is member of the National Association of Credential Evaluation Services to determine the equivalency of the credentials to credentials awarded by institutions in the United States. These documents must be sent directly to the academic dean.

Pay the admissions fee.

# NURSING DEPARTMENT

The nursing department faculty is committed to enhance the knowledge and prepare graduates to become leaders in nursing, ready to provide caring, holistic and quality nursing services in a variety of settings and with diverse populations. The programs under this department are designed to prepare graduates to occupy positions at an entry level in the government and the private sector in areas related to the nursing profession. The Department offers an Associate's Degree in Nursing as well as a Bachelor's Degree in Science in Nursing.

The nursing programs provide students with a curriculum of study that combines general education and nursing courses, as well as a variety of learning experiences in order to develop the characteristics of the professional nurse including the ability to think critically, use the problem-solving process, be responsive to the health care needs, and to contribute to improve the quality of life in this complex society.

Under the laws of the Commonwealth of Puerto Rico the nursing profession is highly regulated. Candidates entering into the nursing programs field should be aware of the various licensing, public service and other requirements of this profession.

## **BACHELOR'S DEGREE IN SCIENCE IN NURSING**

### **OBJECTIVE:**

The Bachelor's Degree in Science in Nursing prepares generalist nurses capable of carrying out professional interventions applying learned leadership and administrative skills, critical thinking, assertive communication, and ethical and responsible decision-making. The bachelor's degree curriculum emphasizes the needs of the profession, human care, teaching and knowledge integration. It aims to develop a professional nurse with the following qualifications: leadership and creativity; assertive communicator conscious of the need to distinguish between groups of different needs, populations and situations; knowledge of the clinical and psychosocial development aspects of the individual; and capable of working in different scenarios, such as with the individual, hospital and community in the primary, secondary, and tertiary levels. It also aims to contribute with our graduates to the betterment of the quality of life of our society.

# MINIMUM REQUIREMENTS

36 Credits in General Courses
22 Credits in Core Courses
64 Credits in Major Courses
122 Total Credits

### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010	BASIC MATHEMATICS	3
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		36

### **CORE COURSES:**

BIOL 1010	INTRODUCTION TO BIOLOGY	3
BIOL 2000	HUMAN ANATOMY AND PHYSIOLOGY	3
CHEM 2031	GENERAL CHEMISTRY	3
PSYC 2510	PSYCHOLOGY	3
MICR 1000	BASIC MICROBIOLOGY	3
MICR 1011L	BASIC MICROBIOLOGY LAB.	1
NUTR 1000	INTRODUCTION TO NUTRITION	2
STAT 2000	INTRODUCTION TO STATISTICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		22

MAJON COUN		
NURS 1000	NURSING THEORY AND EVOLUTION	2
NURS 1050	PHARMACOLOGY AND NURSING IMPLICATIONS	3
NURS 1061L	PHARMACOLOGY AND SKILLS LAB. FOR THE MEDICINES	2
	ADMINISTRATION	
NURS 1300	FUNDAMENTALS OF NURSING	3
NURS 1311L	FUNDAMENTALS OF NURSING LAB.	2
NURS 1321P	SIMULATION AND PRACTICE OF FUNDAMENTALS OF NURSING	1.5
NURS 2540	NURSING CARE IN MENTAL HEALTH AND PSYCHIATRY	2
NURS 2541P	PRACTICE OF NURSING CARE IN MENTAL HEALTH	1.5
	AND PSYCHIATRY	
NURS 2550	NURSING INTERVENTIONS WITH ADULT AND ELDER I	3 2
NURS 2551P	SIMULATION AND PRACTICE OF NURSING INTERVENTIONS WITH THE	2
	ADULT AND ELDER I	
NURS 2620	NURSING INTERVENTION IN MOTHERAND NEWBORN	3
NURS 2621P	SIMULATION AND PRACTICE OF NURSING WITH THE MOTHER	1.5
	AND NEWBORN	
NURS 2630	NURSING INTERVENTIONS IN ADULT AND ELDER II	3
NURS 2631P	SIMULATION AND PRACTICE OF NURSING INTERVENTIONS WITH	2
	THE ADULT AND ELDER II	
NURS 2710	NURSING INTERVENTIONS WITH THE CHILD AND ADOLESCENT	3
NURS 2721P	SIMULATION AND PRACTICE OF NURSING INTERVENTION WITH THE	1.5
	CHILD AND ADOLESCENT	
NURS 2730	INTEGRATING SEMINAR OF NURSING	2
NURS 3006	TRANSITION OF THE ROLE OF NURSES IN CURRENT SOCIETY	3
NURS 3015	PHYSICAL ASSESSMENT	3
NURS 3040	INFORMATICS IN HEALTHCARE SYSTEMS	3
NURS 3050	RESEARCH IN NURSING	3 3 3 3
NURS 3055	LEADERSHIP AND MANAGEMENT	3
NURS 3130	CRITICAL INTERVENTIONS IN PROFESSIONAL NURSING	3
	WITH ADULTS	
NURS 4000	GLOBAL AND NATIONAL HEALTH POLICIES	3
NURS 4020	NURSING INTERVENTIONS WITH FAMILIES AND COMMUNITIES	3
NURS 4021P	PRACTICE IN NURSING INTERVENTIONS WITH FAMILIES AND	<u>2</u>
	COMMUNITIES	
		64

### TOTAL CREDITS

\*All courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Bachelor's Degree in Science in Nursing Practices are equivalent to 67.5 hours (1.5 credits) and 90 hours (2 credits) each.

122

### **BACHELOR'S DEGREE IN SCIENCE IN NURSING (RN TO BSN)**

#### **OBJECTIVE**

The Bachelor's Degree in Science in Nursing (RN to BSN) option prepares generalist nurses capable of carrying out professional interventions applying learned leadership and administrative skills, critical thinking, assertive communication, and ethical and responsible decision-making. The bachelor's degree curriculum emphasizes the needs of the profession, human care, teaching and knowledge integration. It aims to develop a professional nurse with the following qualifications: leadership and creativity; assertive communicator conscious of the need to distinguish between groups of different needs, populations and situations; knowledge of the clinical and psychosocial development aspects of the individual; and capable of working in different scenarios, such as with the individual, hospital and community in the primary, secondary, and tertiary levels. It also aims to contribute with our graduates to the betterment of the quality of life of our society.

### **MINIMUM REQUIREMENTS:**

18 Credits in General Education 8 Credits in Core Courses 26 Credits in Major Courses **52 Total Credits** 

Note: For a description of additional courses/credits required to complete the 122 total credits of the Bachelor's Degree program, please refer to the next two pages of this document.

# **GENERAL EDUCATION:**

ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3 3
SOSC 1010	SOCIAL SCIENCES I	3 3 <u>3</u>
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		18
CORE COURS	ES:	
CHEM 2031	GENERAL CHEMISTRY	3
NUTR 1000	INTRODUCTION TO NUTRITION	2
STAT 2000	INTRODUCTION TO STATISTICS	2 <u>3</u> 8
		8
MAJOR COUR	SES	
NURS 3006	TRANSITION OF THE ROLE OF NURSES IN CURRENT SOCIETY	3
NURS 3015	PHYSICAL ASSESSMENT	3
NURS 3040	INFORMATICS IN HEALTHCARE SYSTEMS	3
NURS 3050	RESEARCH IN NURSING	3 3 3 3
NURS 3055	LEADERSHIP AND MANAGEMENT	3
NURS 3130	CRITICAL INTERVENTIONS IN PROFESSIONAL NURSING	3
	WITH ADULTS	
NURS 4000	GLOBAL AND NATIONAL HEALTH POLICIES	3
NURS 4020	NURSING INTERVENTIONS WITH FAMILIES AND COMMUNITIES	3
NURS 4021P/	PRACTICE IN NURSING INTERVENTIONS WITH FAMILIES AND	<u>2</u>
NURS 4021**	COMMUNITIES	
		26
TOTAL CRED	ITS	52

\*All courses must be passed with at least a "C" grade. \*\*For online offering.

Before beginning course NURS 4021P/4021, students must have completed all prerequisites of this course in accordance with the curriculum of the program.

Course NURS 4021P/4021 credits are equivalent to 90 hours (2 credits) hours each.

Any person interested in practicing a regulated profession such as Nursing should contact the appropriate State regulatory agency with regard to any additional requirements.

# **Admission Requirements:**

Complete and submit the admission application.

Have an associate degree in nursing from an accredited institution that is recognized by the United States Department of Education or by an official agency from the country of origin.

Have a minimum GPA of **2.25** or its equivalent, according to the grading system of the institution of origin. Show proficiency in computer literacy.

Have a permanent RN license in United States or Puerto Rico and show evidence that such license is active.

\*All students must keep their license active during their time of study.

Notice:

Given this program requires all applicants to have an active, permanent RN license in the United States or Puerto Rico to be admitted to the program and requires all students to keep their license active during their time of study, this program is not designed to prepare graduates to obtain licensure as an RN.

Applicants interested in programs designed to prepare graduates to obtain licensure as an RN should consider NUC's Associate Degree in Nursing or the Bachelor Degree in Science in Nursing.

### Documents that must be submitted with the admission application:

Transcript of the academic file or certification that includes a cumulative average and a degree conferred by the college or university of origin.

If the transcript comes from a foreign university, it will be the responsibility of the student to have the document translated to English by a certified translator and have the transcript evaluated by a credentials evaluator who is member of the National Association of Credential Evaluation Services to determine the equivalency of the credentials to credentials awarded by institutions in the United States. These documents must be sent directly to the academic dean.

Pay the admissions fee.

# Transfer of credits for the Bachelor's Degree in Science in Nursing (RN to BSN) Program

Academic Degree: Bachelor's Degree in Science in Nursing (RN to BSN)Terms:4 full-timeTotal credits:RN to BSN -52 creditsCredits required for graduation:122 credits

The conferred Associate's Degree in Nursing by an accredited institution, and the permanent and active RN license will be awarded as a prior learning and equivalent of the 70 credits Associate's Degree in Nursing at National University College. The student will be required to take all the 52 credits of the Bachelor's Degree in Sciences in Nursing (RN to BSN) program. No additional courses will be transferred, without exception.

### ASSOCIATE'S DEGREE IN NURSING

### **OBJECTIVE**

The Associate's Degree in Nursing Program focuses in preparing entry level nurses with the knowledge and skills needed for positions in a community hospital, laboratory, doctor's office or elderly care facility.

The objective of the Associate's Degree in Nursing is geared towards those students interested in applying their knowledge, abilities, skills and strategies to collaborate and participate in the planning and providing patient-centered care, integrate safety while employing evidence-based practice, into nursing care and practice in a variety of settings. The graduates will apply their abilities, skills and fundamentals in the procedure of the natural sciences and human behavior, always under the direct supervision of a nurse, general physician, or specialist.

### **MINIMUM REQUIREMENTS:**

18 Credits in General Courses
14 Credits in Core Courses
<u>38 Credits in Major Courses</u> **70 Total Credits**

#### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010	BASIC MATHEMATICS	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	<u>3</u>
		18
CORE COURS	SES:	
BIOL 1010	INTRODUCTION TO BIOLOGY	3
BIOL 2000	HUMAN ANATOMY AND PHYSIOLOGY	3
MICR 1000	BASIC MICROBIOLOGY	3
MICR 1011L	BASIC MICROBIOLOGY LAB.	1
PSYC 2510	PSYCHOLOGY	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		14

# MAJOR COURSES:

NURS 1000	NURSING THEORY AND EVOLUTION	2
NURS 1050	PHARMACOLOGY AND NURSING IMPLICATIONS	3
NURS 1061L	PHARMACOLOGY AND SKILLS LAB. FOR THE MEDICINES	2
	ADMINISTRATION	
NURS 1300	FUNDAMENTALS OF NURSING	3
NURS 1311L	FUNDAMENTALS OF NURSING LAB.	2
NURS 1321P	SIMULATION AND PRACTICE OF FUNDAMENTALS OF NURSING	1.5
NURS 2540	NURSING CARE IN MENTAL HEALTH AND PSYCHIATRY	2
NURS 2541P	PRACTICE OF NURSING CARE IN MENTAL HEALTH	1.5
	AND PSYCHIATRY	
NURS 2550	NURSING INTERVENTIONS WITH ADULT AND ELDER I	3
NURS 2551P	SIMULATION AND PRACTICE OF NURSING INTERVENTIONS WITH THE	2
	ADULT AND ELDER I	

NURS 2620	NURSING INTERVENTION IN MOTHERAND NEWBORN	3
NURS 2621P	SIMULATION AND PRACTICE OF NURSING WITH THE MOTHER	1.5
	AND NEWBORN	
NURS 2630	NURSING INTERVENTIONS IN ADULT AND ELDER II	3
NURS 2631P	SIMULATION AND PRACTICE OF NURSING INTERVENTIONS WITH	2
	THE ADULT AND ELDER II	
NURS 2710	NURSING INTERVENTIONS WITH THE CHILD AND ADOLESCENT	3
NURS 2721P	SIMULATION AND PRACTICE OF NURSING INTERVENTION WITH THE	1.5
	CHILD AND ADOLESCENT	
NURS 2730	INTEGRATING SEMINAR OF NURSING	2
		38
TOTAL CREDIT	TS	70

\*All courses must be passed with at least a "C" grade. Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program. The Associate's Degree in Nursing Practices are equivalent 67.5 hours (1.5 credits) and 90 hours (2 credits)

hours each.

# BUSINESS ADMINISTRATION AND TECHNOLOGY DEPARTMENT

The Business Administration and Technology Department provides students with the opportunity to develop the ability and skills in the principles and practice of these fields. It aims to develop in the students an understanding of the management and technology situations while they have the opportunity of acquiring skills such as problem solving, teamwork, communication, memory, self management and administrative techniques. This Department offers Associate's Degrees in Accounting, Business Administration, Entrepreneurship, Network Technology, Electrical Engineering Technology and Office Systems, and Bachelor's Degrees in Business Administration, Office Systems Administration and Network Technology.

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN ACCOUNTING

### **OBJECTIVE**

The Bachelor's Degree Program in Business Administration with major in Accounting provides students with the knowledge and skills necessary for an entry level position in the Business Administration field, with an emphasis in Accounting. It also prepares the student with skills to analyze, investigate, synthetize and interpret the accounting cycle focusing on costs, contributions, and forensic auditing for the decision-making process.

# MINIMUM REQUIREMENTS

- 40 Credits in General Education
- 42 Credits in Core Courses
- 33 Credits in Major Courses
- 6 Credits in Elective Courses

### **121 Total Credits**

#### **GENERAL EDUCATION:**

		40
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
SPAN 2040	WRITING AND COMPOSITION	3
SPAN 1020	BASIC SPANISH II	3
SPAN 1010*	BASIC SPANISH I	3
MATH 1010*	BASIC MATHEMATICS	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
SOSC 1020	SOCIAL SCIENCES II	3
SOSC 1010	SOCIAL SCIENCES I	3
HUMA 1020	HUMANITIES II	3
HUMA 1010	HUMANITIES I	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 1010*	BASIC ENGLISH I	3
BISC 1010	BIOLOGICAL SCIENCES	3

### **CORE COURSES:**

BUAD 1050	MULTICULTURALISM	3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3050*	ETHICS IN BUSINESS	3
BUAD 4000*	INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
ECON 2000*	MICRO ECONOMICS	3
ECON 3200*	MACRO ECONOMICS	3
FINA 2100*	FINANCE AND CASH FLOW	3
MATH 1050*	BUSINESS MATHEMATICS	3
MATH 2080*	QUANTITATIVE METHODS	3
MKTG 1010	MARKETING PRINCIPLES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		42

ELECTIVES		6
ELECTIVES		33
ACCO 4500	FORENSIC ACCOUNTING	<u>3</u>
ACCO 4400	ADVANCED ACCOUNTING	3
ACCO 4220	PRINCIPLES OF AUDITING	3
ACCO 3420	INTRODUCTION TO COST ACCOUNTING	3
ACCO 3150	INTERMEDIATE ACCOUNTING II	3
ACCO 3320 <sup>1</sup>	FEDERAL TAXES	
OR	OR	
ACCO 2200 <sup>1</sup>	PUERTO RICAN TAXES	3
ACCO 2270L	COMPUTERIZED ACCOUNTING AND LAB.	4
ACCO 2100	INTERMEDIATE ACCOUNTING I	3
ACCO 1050	INTRODUCTION TO ACCOUNTING II	4
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4

### TOTAL CREDITS

Residents of Puerto Rico must enroll in ACCO 2200. Residents outside of Puerto Rico must enroll in ACCO 3320 Federal Taxes. Residents of Puerto Rico must enroll in ACCO 3320 Federal Taxes as Elective Course.

\*All general and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

This program will be offered through the on ground and online delivery mode. Electives depend on the academic offering available in each term. Students should consult with their academic advisor.

121

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN BUSINESS INTELLIGENCE

### **OBJECTIVE**

The Bachelor's Degree program in Business Administration with major in Business Intelligence, prepares the student with the basic knowledge and skills to gather, extract, analyze and visualize data. Transforming this data into valuable knowledge, will help students to develop and implement integral solutions within the company. This will allow the creation of plans that will help the organizations in reaching their goals and objectives.

### **MINIMUM REQUIREMENTS:**

- 40 Credits in General Education
- 50 Credits in Core Courses
- 24 Credits in Major Courses
- 6 Credits in Electives
- 120 Total Credits

### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		40

### **CORE COURSES**

STAT 2000	INTRODUCTION TO STATISTICS	3 50
MKTG 1010	MARKETING PRINCIPLES	3
MATH 2080	QUANTITATIVE METHODS	3
MATH 1050	BUSINESS MATHEMATICS	3
FINA 2100	FINANCE AND CASH FLOW	3
ECON 3200	MACRO ECONOMICS	3
ECON 2000	MICRO ECONOMICS	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
BUAD 4000	INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
BUAD 3050	ETHICS IN BUSINESS	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 1020	BUSINESS INFORMATION SYSTEMS	3
ACCO 3520	BUSINESS INFORMATION SYSTEMS	4
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4

		6
ELECTIVES		24
BUIN 4010	APPLICATIONS FOR BUSINESS ANALYSIS	<u>3</u>
BUIN 4000	DATA WAREHOUSING, DATA MINING AND DATA ANALYSIS	3
BUIN 3010	WEB ANALYTICS	3
BUIN 3000	MS EXCEL FOR BUSINESS INTELLIGENCE	3
BUIN 2010	BUSINESS ANALYTICS	3
BUIN 2000	DECISION SUPPORT SYSTEMS	3
BUIN 1020	INTRODUCTION TO DATA BASE	3
BUIN 1015	INTRODUCTION TO BUSINESS INTELLIGENCE	3

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade.

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN GENERAL BUSINESS

# **OBJECTIVE**

The Bachelor's Degree in Business Administration with major in General Business, provides students with the necessary knowledge, skills and abilities to apply management principles to contemporary business problems, manage organizations and use business theories according to their relevance and application to the global world.

### **MINIMUM REQUIREMENTS:**

- 40 Credits in General Education
- 50 Credits in Core Courses
- 24 Credits in Major Courses
- <u>6</u> Credits in Electives
- **120** Total Credits

### **GENERAL EDUCATION:**

		40
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
SPAN 2040	WRITING AND COMPOSITION	3
SPAN 1020	BASIC SPANISH II	3
SPAN 1010	BASIC SPANISH I	3
MATH 1010*	BASIC MATHEMATICS	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
SOSC 1020	SOCIAL SCIENCES II	3
SOSC 1010	SOCIAL SCIENCES I	3
HUMA 1020	HUMANITIES II	3
HUMA 1010	HUMANITIES I	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 1010	BASIC ENGLISH I	3
BISC 1010	BIOLOGICAL SCIENCES	3

### **CORE COURSES**

ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 1050	INTRODUCTION TO ACCOUNTING II	4
BUAD 1050	MULTICULTURALISM	3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3050	ETHICS IN BUSINESS	3
BUAD 4000	INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
ECON 2000	MICRO ECONOMICS	3
ECON 3200	MACRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3
MATH 1050	BUSINESS MATHEMATICS	3
MATH 2080	QUANTITATIVE METHODS	3
MKTG 1010	MARKETING PRINCIPLES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		50

TOTAL CREDITS		120
ELECTIVES		6
ELECTIVES		24
HURE 1070	INTERNATIONAL LABOR LAW	<u>3</u>
HURE 1060	MANAGING ORGANIZATIONAL CHANGE	3
HURE 1030	FUNDAMENTALS OF BUSINESS COACHING	3
BUIN 1010	PRINCIPLES OF INFORMATION SYSTEMS	3
BUAD 2070	ENTREPRENEURSHIP	3
BUAD 2050	BUSINESS LAW	3
BUAD 2030	ECOMMERCE	3
BUAD 2010	POLICIES AND BUSINESS STRATEGY	3

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN HUMAN RESOURCES

# **OBJECTIVE**

The Bachelor's Program in Business Administration with major in Human Resources qualifies the student with the required knowledge, skills and abilities to work in the administration and management of the Human Resources in global and local companies. It also prepares the student to perform the planning, organization, leadership and administrative functions in the Human Resources in a strategic way and according to the company objectives.

### **MINIMUM REQUIREMENTS:**

- 40 Credits in General Education
- 50 Credits in Core Courses
- 24 Credits in Major Courses
- 6 Credits in Electives
- **120** Total Credits

# **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3 3 3
HUMA 1010	HUMANITIES I	
HUMA 1020	HUMANITIES II	3 3 3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SOSC 1010	SOCIAL SCIENCES I	3 3 3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3 3
SPAN 2040	WRITING AND COMPOSITION	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u> 40
		40
<b>CORE COURS</b>	ES	
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 1050	INTRODUCTION TO ACCOUNTING II	4
BUAD 1050	MULTICULTURALISM	3 3 3 3 3 3 3 3 3 3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3050	ETHICS IN BUSINESS	3
BUAD 4000	INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	
ECON 2000	MICRO ECONOMICS	3
ECON 3200	MACRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3
MATH 1050	BUSINESS MATHEMATICS	3
MATH 2080	QUANTITATIVE METHODS	3 3 3 3 3 3 3 3
MKTG 1010	MARKETING PRINCIPLES	
STAT 2000	INTRODUCTION TO STATISTICS	3

50

HURE 1040 HURE 1050	COMPENSATION AND BENEFITS SUPERVISORY STRATEGIES	3
HURE 1050	MANAGING ORGANIZATIONAL CHANGE	3
HURE 1070	INTERNATIONAL LABOR LAW	3
HURE 1080	BUSINESS CONFLICT MEDIATION	<u>3</u>
ELECTIVES		24
		6
TOTAL CREDITS		120

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade.

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN HEALTHCARE MANAGEMENT

# **OBJECTIVE**

The Bachelor's Degree in Business Administration with major in Healthcare Management prepares students with the knowledge and skills necessary to apply management principles in administration, assume strategic positions, both operational or personnel in any healthcare organization.

# MINIMUM REQUIREMENTS

- 40 Credits in General Education Courses
- 50 Credits un Core Courses
- 24 Credits in Major Courses
- 6 Credits in Elective Courses
- 120 Total Credits

### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		40

# **CORE COURSES**

INTRODUCTION TO ACCOUNTING I	4
MANAGERIAL ACCOUNTING	4
MULTICULTURALISM	3
FUNDAMENTS OF MANAGEMENT	3
HUMAN RESOURCES ADMINISTRATION	3
COMPARED MANAGEMENT	3
ETHICS IN BUSINESS	3
INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
INTRODUCTION TO BUSINESS	3
MICRO ECONOMICS	3
MACRO ECONOMICS	3
FINANCE AND CASH FLOW	3
BUSINESS MATHEMATICS	3
QUANTITATIVE METHODS	3
MARKETING PRINCIPLES	3
INTRODUCTION TO STATISTICS	3
	50
	MANAGERIAL ACCOUNTING MULTICULTURALISM FUNDAMENTS OF MANAGEMENT HUMAN RESOURCES ADMINISTRATION COMPARED MANAGEMENT ETHICS IN BUSINESS INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION INTRODUCTION TO BUSINESS MICRO ECONOMICS MACRO ECONOMICS FINANCE AND CASH FLOW BUSINESS MATHEMATICS QUANTITATIVE METHODS MARKETING PRINCIPLES

	TOTAL CREDITS		120
	ELECTIVES		6
			24
	HEMA 1040	INFORMATION SERVICES IN HEALTH SERVICE ORGANIZATIONS	<u>3</u>
	HEMA 1030	FINANCE IN HEALTH SERVICE ORGANIZATIONS	3
	HEMA 1020	LEGAL AND ETHICAL ISSUES IN HEALTH SERVICES ADMINISTRATION	3
	HEMA 1010	HEALTHCARE POLICIES PLANNING AND MANAGEMENT	3
	HEMA 1000	INTRODUCTION TO HEALTH SERVICES ADMINISTRATION	3
	BUIN 1010	PRINCIPLES OF INFORMATION SYSTEMS	3
	MGMT 1020	OPERATIONS MANAGEMENT	3
	BUAD 3190	ORGANIZATIONAL LEADERSHIP	3
1			

# TOTAL CREDITS

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN INTERNATIONAL BUSINESS

### **OBJECTIVE**

The Bachelor's Degree in Business Administration with major in International Business prepares students with the knowledge and skills necessary to perform within the international business environment. It will also prepare students to adapt to the global environment, rapidly changing through the knowledge of economic, political, legal, ethical, and international aspects of businesses.

### **MINIMUM REQUIREMENTS**

- 40 Credits in General Education Courses
- 50 Credits un Core Courses
- 24 Credits in Major Courses
- 6 Credits in Elective Courses
- **120** Total Credits

### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		40

### **CORE COURSES**

ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 3520	MANAGERIAL ACCOUNTING	4
BUAD 1050	MULTICULTURALISM	3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3050	ETHICS IN BUSINESS	3
BUAD 4000	INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
ECON 2000	MICRO ECONOMICS	3
ECON 3200	MACRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3
MATH 1050	BUSINESS MATHEMATICS	3
MATH 2080	QUANTITATIVE METHODS	3
MKTG 1010	MARKETING PRINCIPLES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		50

TOTAL CREDITS		120
ELECTIVES		6
		24
INBU 1040	LEGAL ISSUES IN INTERNATIONAL BUSINESS	<u>3</u>
INBU 1030	INTERNATIONAL AND MULTICULTURAL MANAGEMENT	3
INBU 1020	INTERNATIONAL MARKETING	3
INBU 1010	INTERNATIONAL FINANCE	3
INBU 1000	INTRODUCTION TO INTERNATIONAL BUSINESS	3
HURE 1070	INTERNATIONAL LABOR LAW	3
BUAD 2050	BUSINESS LAW	3
BUAD 2010	POLICIES AND BUSINESS STRATEGIES	3

# TOTAL CREDITS

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

# BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN MANAGEMENT

### **OBJECTIVE**

The Bachelor's Degree in Business Administration with major in Management prepares students with the necessary knowledge and skills to assume leadership positions within private, public, and non-profit sectors. The students will also carry out leadership, teamwork, and communication functions within a company. Furthermore, students will apply mathematics and research techniques in the analysis of contemporary practices in businesses.

### MINIMUM REQUIREMENTS

- 40 Credits in General Education Courses
- 50 Credits un Core Courses
- 24 Credits in Major Courses
- 6 Credits in Elective Courses

### 120 Total Credits

# **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	<u>1</u>
		40

### **CORE COURSES**

ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 3520	MANAGERIAL ACCOUNTING	4
BUAD 1050	MULTICULTURALISM	3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3050	ETHICS IN BUSINESS	3
BUAD 4000	INTEGRATIVE SEMINAR BUSINESS ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
ECON 2000	MICRO ECONOMICS	3
ECON 3200	MACRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3
MATH 1050	BUSINESS MATHEMATICS	3
MATH 2080	QUANTITATIVE METHODS	3
MKTG 1010	MARKETING PRINCIPLES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		50

TOTAL CREDITS		120
ELECTIVES		6
		24
MGMT 1020	OPERATIONS MANAGEMENT	<u>3</u>
MGMT 1010	ORGANIZATIONAL THEORY AND DESIGN	3
MGMT 1000	COMMUNICATION FOR MANAGERS	3
INBU 1030	INTERNATIONAL AND MULTICULTURAL MANAGEMENT	3
BUIN 1010	PRINCIPLES OF INFORMATION SYSTEMS	3
BUAD 3190	ORGANIZATIONAL LEADERSHIP	3
BUAD 2050	BUSINESS LAW	3
BUAD 2010	POLICIES AND BUSINESS STRATEGIES	3

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

### **BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY**

### **OBJECTIVE**

The Bachelor's Degree in Information Technology will prepare the student with the basic knowledge and skills to review and analyze the information needs of businesses, identifying problems and causes of the aforementioned within the operations of the company. Furthermore, the student will be able to apply the necessary techniques to solve common problems in the management of technology within companies.

### MINIMUM REQUIREMENTS

- 40 Credits in General Education Courses
- 48 Credits un Core Courses
- 26 Credits in Major Courses
- 6 Credits in Elective Courses
- 120 Total Credits

### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		40

### **CORE COURSES**

BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
INTE 1000	HUMAN-COMPUTER INTERFACE AND INTERACTIONS	3
INTE 2440L	NETWORK FUNDAMENTALS AND LABORATORY	3
INTE 2460L	DATA COMMUNICATIONS AND LABORATORY	3
INTE 2520L	WEB PAGE DESIGN AND LABORATORY	3
INTE 2570L	NETWORKS ADMINISTRATION AND LABORATORY	3
INTE 2740L	DIAGNOSTIC & MAINTENANCE OF COMPUTER SYSTEMS AND LAB.	3
INTE 3510L	WEB TECHNOLOGY AND LABORATORY	3
MATH 2050	APPLIED MATHEMATICS	3
PROG 1035	INTRODUCTION TO COMPUTER PROGRAMMING LOGIC	3
PROG 1140L	DATA BASE DESIGN AND LABORATORY	3
PROG 2370L	OPERATING SYSTEMS & ARCHITECTURE AND LABORATORY	3
PROG 2480L	ANALYSIS, DESIGN & IMPLEMENTATION SYSTEMS AND LABORATORY	3
PROG 3375L	OBJECT ORIENTED PROGRAMMING AND LABORATORY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		48

INAS 1000	INTRODUCTION TO INFORMATION ASSURANCE AND SECURITY	3
INTE 1010	INFORMATION TECHNOLOGY STRATEGIC PLANNING	3
INTE 1020	INFORMATION TECHNOLOGY INFRASTRUCTURE MANAGEMENT	3
INTE 1030	INFORMATION TECHNOLOGY PERFORMANCE ANALYSIS AND DESIGN	3
INTE 1040	INFORMATION TECHNOLOGY PROJECT MANAGEMENT	4
INTE 4125L	INTRODUCTION TO ELECTRONIC COMMERCE AND LABORATORY	3
INTE 4200	NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT INTEGRATION SEMINAR	4
PROG 3425L	DATA BASE MANAGEMENT AND LABORATORY	<u>3</u>
		26
ELECTIVES		6
TOTAL CREDITS		120

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

# BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY WITH MAJOR IN INFORMATION ASSURANCE AND SECURITY

### **OBJECTIVE**

The Bachelor's Degree in Information Technology with major in Information Assurance and Security prepares students with the necessary knowledge and skills to develop and implement the best practices for network security and computer systems.

# MINIMUM REQUIREMENTS

- 40 Credits in General Education Courses
- 48 Credits un Core Courses
- 26 Credits in Major Courses
- 6 Credits in Elective Courses
- 120 Total Credits

### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		40

# **CORE COURSES**

BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
INTE 1000	HUMAN-COMPUTER INTERFACE AND INTERACTIONS	3
INTE 2440L	NETWORK FUNDAMENTALS AND LABORATORY	3
INTE 2460L	DATA COMMUNICATIONS AND LABORATORY	3
INTE 2520L	WEB PAGE DESIGN AND LABORATORY	3
INTE 2570L	NETWORKS ADMINISTRATION AND LABORATORY	3
INTE 2740L	DIAGNOSTIC & MAINTENANCE OF COMPUTER SYSTEMS AND LAB.	3
INTE 3510L	WEB TECHNOLOGY AND LABORATORY	3
MATH 2050	APPLIED MATHEMATICS	3
PROG 1035	INTRODUCTION TO COMPUTER PROGRAMMING LOGIC	3
PROG 1140L	DATA BASE DESIGN AND LABORATORY	3
PROG 2370L	OPERATING SYSTEMS & ARCHITECTURE AND LABORATORY	3
PROG 2480L	ANALYSIS, DESIGN & IMPLEMENTATION SYSTEMS AND LABORATORY	3
PROG 3375L	OBJECT ORIENTED PROGRAMMING AND LABORATORY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		48

INAS 1000	INTRODUCTION TO INFORMATION ASSURANCE AND SECURITY	3
INAS 1010	WEB APPLICATION SECURITY STRATEGIES	3
INAS 1020	INFORMATION SYSTEMS CONTROL AND AUDITING	3
INAS 1030	COMPUTER FORENSICS	3
INAS 1040	INFORMATION SECURITY MANAGEMENT	3
INTE 1040	INFORMATION TECHNOLOGY PROJECT MANAGEMENT	4
INTE 4010	NETWORKS SECURITY AND AUDITING	3
INTE 4200	NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT INTEGRATION SEMINAR	<u>4</u>
		26
ELECTIVES		6
TOTAL CREDITS		120

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

#### BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY WITH MAJOR IN NETWORK ADMINISTRATION

#### **OBJECTIVE**

The Bachelor's Degree in Information Technology with major in Network Administration prepares students with the necessary knowledge and skills to identify and manage key areas of network operations and administration, including user support and troubleshooting.

#### MINIMUM REQUIREMENTS

- 40 Credits in General Education Courses
- 48 Credits un Core Courses
- 26 Credits in Major Courses
- 6 Credits in Elective Courses
- 120 Total Credits

#### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		40

#### **CORE COURSES**

BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
INTE 1000	HUMAN-COMPUTER INTERFACE AND INTERACTIONS	3
INTE 2440L	NETWORK FUNDAMENTALS AND LABORATORY	3
INTE 2460L	DATA COMMUNICATIONS AND LABORATORY	3
INTE 2520L	WEB PAGE DESIGN AND LABORATORY	3
INTE 2570L	NETWORKS ADMINISTRATION AND LABORATORY	3
INTE 2740L	DIAGNOSTIC & MAINTENANCE OF COMPUTER SYSTEMS AND LAB.	3
INTE 3510L	WEB TECHNOLOGY AND LABORATORY	3
MATH 2050	APPLIED MATHEMATICS	3
PROG 1035	INTRODUCTION TO COMPUTER PROGRAMMING LOGIC	3
PROG 1140L	DATA BASE DESIGN AND LABORATORY	3
PROG 2370L	<b>OPERATING SYSTEMS &amp; ARCHITECTURE AND LABORATORY</b>	3
PROG 2480L	ANALYSIS, DESIGN & IMPLEMENTATION SYSTEMS AND LABORATORY	3
PROG 3375L	OBJECT ORIENTED PROGRAMMING AND LABORATORY	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		48

#### MAJOR COURSES

INTE 4010	NETWORKS SECURITY AND AUDITING	4
INTE 4125L	INTRODUCTION TO ELECTRONIC COMMERCE AND LAB.	3
INTE 4200	NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT INTEGRATION SEMINAR	4
ITNA 1000	IMPLEMENTING AND MANAGING A NETWORK	3
ITNA 1010	PROTOCOLS AND COMMUNICATIONS TCP/IP	3
ITNA 1020	NETWORK TROUBLESHOOTING	3
ITNA 1030	WIRELESS AND MOBILE COMPUTING	3
ITNA 1040	ADVANCED NETWORK ADMINISTRATION	<u>3</u>
		26
ELECTIVES	ELECTIVES	
TOTAL CREDITS		120

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

#### BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY WITH MAJOR IN SOFTWARE ANALYSIS AND DEVELOPMENT

#### **OBJECTIVE**

The Bachelor's Degree in Information Technology with major in Software Analysis and Development prepares students with the necessary knowledge and skills for the application of methodologies for software development to help solve problems within companies. This degree will also enable students to create applications using various programming languages with an additional focus on systems development, databases, and web technology.

#### MINIMUM REQUIREMENTS

- 40 Credits in General Education Courses
- 48 Credits un Core Courses
- 26 Credits in Major Courses
- 6 Credits in Elective Courses
- 120 Total Credits

#### **GENERAL EDUCATION:**

DAGIC ENCLICITI	3
BASIC ENGLISH I	5
BASIC ENGLISH II	3
CONVERSATIONAL ENGLISH	3
HUMANITIES I	3
HUMANITIES II	3
COMPUTER LITERACY AND LABORATORY	3
BASIC MATHEMATICS	3
UNIVERSITY ENVIRONMENT SEMINAR	1
SOCIAL SCIENCES I	3
SOCIAL SCIENCES II	3
BASIC SPANISH I	3
BASIC SPANISH II	3
WRITING AND COMPOSITION	<u>3</u>
	40
	CONVERSATIONAL ENGLISH HUMANITIES I HUMANITIES II COMPUTER LITERACY AND LABORATORY BASIC MATHEMATICS UNIVERSITY ENVIRONMENT SEMINAR SOCIAL SCIENCES I SOCIAL SCIENCES II BASIC SPANISH I BASIC SPANISH II

#### **CORE COURSES**

BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
INTE 1000	HUMAN-COMPUTER INTERFACE AND INTERACTIONS	3
INTE 2440L	NETWORK FUNDAMENTALS AND LABORATORY	3
INTE 2460L	DATA COMMUNICATIONS AND LABORATORY	3
INTE 2520L	WEB PAGE DESIGN AND LABORATORY	3
INTE 2570L	NETWORKS ADMINISTRATION AND LABORATORY	3
INTE 2740L	DIAGNOSTIC & MAINTENANCE OF COMPUTER SYSTEMS AND LAB.	3
INTE 3510L	WEB TECHNOLOGY AND LABORATORY	3
MATH 2050	APPLIED MATHEMATICS	3
PROG 1035	INTRODUCTION TO COMPUTER PROGRAMMING LOGIC	3
PROG 1140L	DATA BASE DESIGN AND LABORATORY	3
PROG 2370L	OPERATING SYSTEMS & ARCHITECTURE AND LABORATORY	3
PROG 2480L	ANALYSIS, DESIGN & IMPLEMENTATION SYSTEMS AND LABORATORY	3
PROG 3375L	OBJECT ORIENTED PROGRAMMING AND LABORATORY	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		48

#### **MAJOR COURSES**

ELECTIVES TOTAL CREDITS		120
		6
		26
PROG 3425L	DATA BASE MANAGEMENT AND LABORATORY	<u>3</u>
PROG 3365L	C# PROGRAMMING AND LABORATORY	3
PROG 2280L	VISUAL BASIC PROGRAMMING AND LABORATORY	3
ITSA 1030	ADVANCED WEB APPLICATION PROGRAMMING	4
ITSA 1020	SOFTWARE DEVELOPMENT FOR MOBILE DEVICES	3
ITSA 1010	SOFTWARE QUALITY CONTROL AND TESTING	3
INTE 4200	INTEGRATION SEMINAR	4
NITE 4200	NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT	4
INTE 4125L	INTRODUCTION TO ELECTRONIC COMMERCE AND LAB.	3

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

#### BACHELOR'S DEGREE IN NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT

#### **OBJECTIVE**

The Bachelor's Degree in Network Technology and Applications Development program will equip students to configure, manage, and audit communications networks. They will develop the skills needed to apply several programming languages, manage relational databases, and design dynamic websites that integrate and manage various web technologies.

#### MINIMUM REQUIREMENTS

- 40 Credits in General Education
- 49 Credits in Core Courses
- 25 Credits in Major Courses
- 6 Credits in Electives Courses
- **120** Total Credits

#### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		40

#### **CORE COURSES**

cond cochor		
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
BUMA 1000	INTRODUCTION TO BUSINESS	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
MATH 2050*	APPLIED MATHEMATICS	3
INTE 2440L	NETWORK FUNDAMENTALS AND LABORATORY	3
INTE 2460L*	DATA COMMUNICATIONS AND LAB.	3
INTE 2520L*	WEB PAGE DESIGN AND LABORATORY	3
NITE 27401	DIAGNOSTIC & MAINTENANCE OF COMPUTER SYSTEMS AND	2
INTE 2740L	LABORATORY	3
PROG 1035	INTRODUCTION TO COMPUTER PROGRAMMING LOGIC	3
PROG 1140L*	DATA BASE DESIGN AND LABORATORY	3
PROG 2280L	VISUAL BASIC PROGRAMMING AND LABORATORY	3
PROG 2370L*	<b>OPERATING SYSTEMS &amp; ARCHITECTURE AND LABORATORY</b>	3
PROG 2390L	INTRODUCTION TO JAVA SCRIPT AND LABORATORY	3
PROG 2480L*	ANALYSIS, DESIGN & IMPLEMENTATION SYSTEMS AND LABORATORY	3
PROG 3360L	PHYTHON PROGRAMMING AND LABORATORY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		49

#### **MAJOR COURSES**

INTE 2570L*	NETWORKS ADMINISTRATION AND LAB.	3
INTE 3510L*	WEB TECHNOLOGY AND LABORATORY	3
INTE 4010	NETWORKS SECURITY AND AUDITING	3
INTE 4125L	INTRODUCTION TO ELECTRONIC COMMERCE AND LABORATORY	3
INTE 4200 <sup>1</sup> OR	NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT	4
INTE 4161P <sup>1</sup>	INTEGRATION SEMINAR	
	INFORMATION TECHNOLOGY PRACTICE	
PROG 3365L	C# PROGRAMMING AND LABORATORY	3
PROG 3375L	OBJECT ORIENTED PROGRAMMING AND LABORATORY	3
PROG 3425L	DATA BASE MANAGEMENT AND LABORATORY	<u>3</u>
		25
ELECTIVES		6
TOTAL CREDITS		120

Students enrolled in the on ground modality or hybrid program must take the INTE 4161P – Information Technology Practice course. Students enrolled in the full online modality program must take the INTE 4200 – Network Technology and Applications Development Integration Seminar.

\*All general education and core courses with an asterisk and, all major and elective courses must be passed with at least a "C" grade.

This program will be offered through the on ground and online delivery mode.

Electives depend on the academic offering available in each term. Students should consult with their academic advisor.

#### For students enrolled in the on ground modality or hybrid program:

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Bachelor's Degree in Network Technology and Applications Development Practice is equivalent to 225 hours.

#### **BACHELOR'S DEGREE IN OFFICE SYSTEMS ADMINISTRATION**

#### **OBJECTIVE:**

The Bachelor's Degree in Office Systems Administration will develop in the student the necessary skills and knowledge to fulfill the business requirements of an office professional in the automated office. The student will demonstrate a high professionalism, leadership, and high humanistic and ethical sense, in addition to the performance of the profession's tasks. The student will also perform administrative duties, make effective decisions, participate in the solution of different office situations, supervise other employees, and assist the executive in managerial functions assigned.

#### **MINIMUM REQUIREMENTS:**

- 36 Credits in General Education
- 22 Credits in Core Courses
- 62 Credits in Major Courses
- 6 Credits in Electives Courses
- **126 Total Credits**

#### **GENERAL EDUCATION:**

BIOL 1010	INTRODUCTION TO BIOLOGY	3
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HIST 1010	HISTORY OF PUERTO RICO	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
MATH 1010	BASIC MATHEMATICS	3
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020*	BASIC SPANISH II	<u>3</u>
		36
CORE COURS	SES:	
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 2250	COMPUTERIZED ACCOUNTING	3

ACCO 2250	COMPUTERIZED ACCOUNTING
ACCO 2261L	COMPUTERIZED ACCOUNTING LAB.
BUAD 2250	HUMAN RELATIONS
ENGL 2000	BUSINESS ENGLISH
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR
SPAN 2000*	BUSINESS SPANISH
STAT 2000	INTRODUCTION TO STATISTICS

#### **MAJOR COURSES:**

BUAD 2050	BUSINESS LAW	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUMA1000	INTRODUCTION TO BUSINESS	3
MKTG 1010	MARKETING PRINCIPLES	3
OFSY 1201L	BASIC TYPING AND LAB.	3
OFSY 1250	SPEEDWRITING IN SPANISH	3
OFSY 1301L	DOCUMENTS PRODUCTION I & LAB.	3
OFSY 1351L	DOCUMENTS PRODUCTION II & LAB.	3
OFSY 1400	DOCUMENTS CONTROL	3
OFSY 2101L	DICTATION & TRANSCRIPTION OF SPANISH SPEEDWRITING AND LAB.	3
OFSY 2201L	DICTATION & TRANSCRIPTION OF ENGLISH SPEEDWRITING AND LAB.	3
OFSY 2450	ADMINISTRATION & OFFICE TECHNIQUES	3
OFSY 2661L	PLANNING AND TECHNIQUES OF TRAINING AND LAB.	3
OFSY 2730	WORD PROCESSING AND ELECTRONICS PRESENTATIONS I	3
OFSY 2731L	WORD PROCESSING AND ELECTRONICS PRESENTATIONS I LAB.	1
OFSY 2740	WORD PROCESSING AND ELECTRONICS PRESENTATIONS II	3
OFSY 2741L	WORD PROCESSING AND ELECTRONICS PRESENTATIONS II LAB.	1
OFSY 2751L	ELECTRONIC BUSINESS WRITING AND LAB.	3
OFSY 3901L	SIMULATED OFFICE AND LAB.	3
OFSY 3851P	OFFICE SYSTEMS PRACTICE AND INTEGRATING SEMINAR	4
PROG 2300	USE AND MANAGEMENT OF SPREADSHEET	3
PROG 2311L	USE AND MANAGEMENT OF SPREADSHEET LAB.	<u>2</u>
		62
ELECTIVES		6
		U

#### **ELECTIVES**

#### **TOTAL CREDITS**

\*All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Bachelor's Degree in Office Systems Administration Practice is equivalent to 200 externship hours and 25 seminar hours.

#### ASSOCIATE'S DEGREE IN BUSINESS ADMINISTRATION

#### **OBJECTIVE**

The Associate's Degree in Business Administration qualifies the student with the required knowledge and the necessary basic skills to recognize business problems and theories for its implementation in the modern business world.

#### **MINIMUM REQUIREMENTS:**

- 22 Credits in General Education
- 47 Credits in Major Courses

#### 69 Total Credits

#### **GENERAL EDUCATION:**

	0.11101.0	
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	
OR		
SOSC 1010	SOCIAL SCIENCES I	3
ITTE 1031L	COMPUTER LITERACY AND LAB.	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	<u>3</u>
		22

#### **MAJOR COURSES:**

ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 1050	INTRODUCTION TO ACCOUNTING II	4
BUAD 1050	MULTICULTURALISM	3
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3010	COMPARED MANAGEMENT	3
BUAD 3050	ETHICS IN BUSINESS	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
ECON 2000	MICRO ECONOMICS	3
ECON 3200	MACRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3
MATH 1050	BUSINESS MATHEMATICS	3
MATH 2080	QUANTITATIVE METHODS	3
MKTG 1010	MARKETING PRINCIPLES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		47

#### TOTAL CREDITS

\*All general education courses with an asterisk and all core and major courses must be passed with at least a "C" grade.

Program offered only online.

#### ASSOCIATE'S DEGREE IN ACCOUNTING

#### **OBJECTIVE**

The Associate's Degree in Accounting prepares students with basic knowledge and skills needed to perform the tasks associated with the profession of accounting such as bookkeeping and financial statement analysis. This program provides learning experiences through the use of technology to ensure student success in modern companies.

#### MINIMUM REQUIREMENTS

- 22 Credits in General Education
- 39 Credits in Major Courses
- 3 Credits in Elective

#### **64 Total Credits**

#### **GENERAL EDUCATION**

ENGL 1010	BASIC ENGLISH I	33
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	
OR		
SOSC 1010	SOCIAL SCIENCES I	33
ITTE 1031L	COMPUTER LITERACY AND LAB.	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3 <u>3</u> 22
		22
MAJOR COUR	SES	
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 1050	INTRODUCTION TO ACCOUNTING II	4
ACCO 2100	INTERMEDIATE ACCOUNTING I	3
ACCO 2200 <sup>1</sup>	PUERTO RICAN TAXES	33
11000 2200	OR	5
ACCO 3320 <sup>1</sup>	FEDERAL TAXES	
ACCO 2270L	COMPUTERIZED ACCOUNTING AND LAB.	4
BUAD 2000	FUNDAMENTS OF MANAGEMENT	3
BUAD 3050	ETHICS IN BUSINESS	3
BUMA 1000	INTRODUCTION TO BUSINESS	3 3 3 3 3 3 3 3 3 3 3
ECON 2000	MICRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3
MATH 1050	BUSINESS MATHEMATICS	3
STAT 2000	INTRODUCTION TO STATISTICS	
		39
ELECTIVES		3
		C C

#### TOTAL CREDITS

<sup>1</sup>Residents of Puerto Rico must enroll in ACCO 2200. Residents outside of Puerto Rico must enroll ACCO 3320 Federal Taxes.

\*General education courses with an asterisk and all major and elective courses must be passed with at least a "C" grade. Program offered only online.

Electives depend on the academic offering available in each term. Students should consult with their academic advisor.

#### ASSOCIATE'S DEGREE IN BUSINESS ADMINISTRATION WITH MAJOR IN ENTREPRENEURSHIP

#### **OBJECTIVE**

The Associate's Degree in Business Administration with major in Entrepreneurship prepares the student with basic administrative and managerial skills. This course considers the new trends, changes, and realities in our economy; therefore, it offers an alternative for the student to acquire the basic knowledge in planning, implementing, developing, and operating the student's own business.

#### MINIMUM REQUIREMENTS

- 22 Credits in General Education
- 45 Credits in Major Courses

67 Total Credits

#### **GENERAL EDUCATION**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	
OR		
SOSC 1010	SOCIAL SCIENCES I	3
ITTE 1031L	COMPUTER LITERACY AND LAB.	3
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3 3 1 3 <u>3</u> 22
		22
MAJOR COUR		
ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
ACCO 1050	INTRODUCTION TO ACCOUNTING II	4
ACCO 2200 <sup>1</sup>	PUERTO RICAN TAXES	3
	OR	
ACCO 3320 <sup>1</sup>	FEDERAL TAXES	
BUAD 3000	HUMAN RESOURCES ADMINISTRATION	3
BUAD 3050	ETHICS IN BUSINESS	3
BUMA 1000	INTRODUCTION TO BUSINESS	3
BUMA 1050	INTRODUCTION TO ENTREPRENEURSHIP	3
BUMA 2000	BUSINESS REGULATIONS AND PERMISSIONS	3 3 3 3 3 3 3
BUMA 2050	SMALL BUSINESS PLANNING	
BUMA 2150	SMALL BUSINESS PROPOSAL AND DEVELOPMENT	4
ECON 2000	MICRO ECONOMICS	3
FINA 2100	FINANCE AND CASH FLOW	3 3 3 3
MATH 1050	BUSINESS MATHEMATICS	3
MKTG 1010	MARKETING PRINCIPLES	3

#### TOTAL CREDITS

<sup>1</sup>Residents of Puerto Rico must enroll in ACCO 2200. Residents outside of Puerto Rico must enroll in ACCO 3320.

\*All general education courses with and asterisk and all major courses must be passed with at least a "C" grade.

This program will be offered through the on ground and online delivery mode.

45

#### ASSOCIATE'S DEGREE IN ELECTRICAL ENGINEERING TECHNOLOGY WITH RENEWABLE ENERGY

#### **OBJECTIVE**

The objective of this program is to provide the student the necessary skills in the field of Electrical Engineering Technology with Renewable Energy. The graduates of this Program will be able to work as Electrical Power Technicians, assistants or installers of electrical renewable systems, electrical wiring, and modern systems of electrical illumination, among others. They will also be able to offer maintenance to equipment and electrical devices based on the National Electrical Code (NEC) as well as interpreting residential, commercial or industrial electrical diagrams, and work with programmable logic controllers (PLC'S). The curriculum is designed to prepare the student not only in his area but also in the verbal communication both in Spanish and English based on the ethical norms of his profession for the benefit of the progress and quality of life of his community and country.

#### **MINIMUM REQUIREMENTS:**

- 16 Credits in General Education
- 21 Credits in Core Courses
- 40 Credits in Major Courses
- <u>3</u> Credits in Elective
- 80 Total Credits

#### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	
OR		
SOSC 1010	SOCIAL SCIENCES I	3
ITTE 1010	COMPUTER LITERACY AND LAB.	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
SPAN 1010	BASIC SPANISH I	<u>3</u>
		16

#### **CORE COURSES:**

SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
MATH 2010*	BASIC MATHEMATICS FOR ENGINEERING TECHNOLOGY	3
ELEC 1030*	BASIC ELECTRONICS	4
ELEC 1041L*	BASIC ELECTRONICS LAB.	2
ELEC 2400*	INTRO. TO INDUSTRIAL ELECTRONICS	3
ELEC 2411L*	INTRO. TO INDUSTRIAL ELECTRONICS LAB.	1
ELEC 2850	PROGRAMMABLE LOGIC CONTROLLERS (PLC)	3
ELEC 2861L	PROGRAMMABLE LOGIC CONTROLLERS LAB. (PLC)	1
ENGL 2160	TECHNICAL ENGLISH	<u>3</u>
		21

#### **MAJOR COURSES:**

ELEC 1010	BASIC ELECTRICITY	4
ELEC 1021L	BASIC ELECTRICITY LAB.	2
ELEN 1050	TRIPHASICS ELECTRICAL CIRCUITS ANALYSIS	3
ELEN 2310	ELECTRICAL MACHINERIES	3
ELEN 2311L	ELECTRICAL MACHINERIES LAB.	2
ELEN 2320	ELECTRICAL REGULATIONS AND WIRING	3
ELEN 2321L	ELECTRICAL REGULATIONS AND WIRING LAB.	2

ELEN 2430	CONVENTIONAL AND RENEWABLE, ELECTRIC POWER SYSTEMS	3
ELEN 2431L	CONVENTIONAL AND RENEWABLE, ELECTRIC POWER SYSTEMS LAB.	1
ELEN 2450	RENEWABLE ENERGY PRINCIPLES	3
ELEN 2461L	RENEWABLE ENERGY PRINCIPLES LAB.	1
ELEN 2470	MODERN SYSTEMS OF ELECTRICAL ILLUMINATION	2
ELEN 2471L	MODERN SYSTEMS OF ELECTRICAL ILLUMINATION LAB.	1
ELEN 2550	ELECTRICAL SYSTEMS PROTECTION	3
ELEN 2551L	ELECTRICAL SYSTEMS PROTECTION LAB.	1
ELEN 2600	INDUSTRIAL SECURITY	3
ELEN 2901P	ELECTRICAL PRACTICE*	<u>3</u>
		40
ELECTIVES		3

#### **ELECTIVES**

#### **TOTAL CREDITS**

\*All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Associate's Degree in Electrical Engineering Technology with Renewable Energy Practice is equivalent to 225 hours.

#### ASSOCIATE'S DEGRE IN ELECTRONICS ENGINEERING TECHNOLOGY IN TELECOMMUNICATIONS

#### **OBJECTIVE**

The Associate's Degree in Electronics Engineering Technology in Telecommunications provides the student the relevant knowledge and skills tools in the field of electronics in Telecommunications. The graduates will be capable of obtaining entry level positions in Telecommunications industries and related areas as electronics technicians. The program satisfies the needs of the electronics industry in telecommunications including areas such as PLC and electronic equipment repair. The curriculum includes knowledge and advanced technical skills in areas such as radars, satellites, radio signals and microwaves, networks and structural cabling. Students may develop the needed skills in order to obtain the FCC licenses.

#### **MINIMUM REQUIREMENTS:**

- 18 Credits in General Education
- 7 Credits in Core Courses
- 58 Credits in Major Courses
- 3 Credits in Elective Courses
- 86 Total Credits

#### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	3
OR		
SOSC 1010	SOCIAL SCIENCES I	
HUMA 1020	HUMANITIES II	3
OR		
SOSC 1020	SOCIAL SCIENCES II	
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
		18

#### **CORE COURSES:**

SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR
TEEN 2150*	TECHNICAL ENGLISH FOR ELECTRONICS
MATH 2010*	BASIC MATHEMATICS FOR ENGINEERING TECHNOLOGY

#### **MAJOR COURSES:**

ELEC 1010	BASIC ELECTRICITY	4
ELEC 1021L	BASIC ELECTRICITY LAB.	2
ELEC 1030	BASIC ELECTRONICS	4
ELEC 1041L	BASIC ELECTRONICS LAB.	2
ELEC 1050	DIGITAL ELECTRONICS	4
ELEC 1061L	DIGITAL ELECTRONICS LAB.	2
ELEC 1350	OPERATING SYSTEMS FOR ELECTRONICS	3
ELEC 1361L	OPERATING SYSTEMS FOR ELECTRONICS LAB.	2
ELEC 2450	TELECOMMUNICATIONS	3
ELEC 2461L	TELECOMMUNICATIONS LAB.	1
ELEC 2550	MICROWAVE SIGNALS, DEVICES AND TRANSMISSION	3
ELEC 2561L	MICROWAVE SIGNALS, DEVICES AND TRANSMISSION LAB.	1
ELEC 2650	TELECOMUNICATIONS II	3

ELEC 2661L	TELECOMUNICATIONS II LAB.	1
ELEC 2750	ELECTRONIC EQUIPMENT REPAIR	3
ELEC 2761L	ELECTRONIC EQUIPMENT REPAIR	2
	LAB.	
ELEC 2820	SATELLITE AND RADAR TECHNOLOGY	3
ELEC 2831L	SATELLITE AND RADAR TECHNOLOGY LAB.	1
ELEC 2850	PROGRAMMABLE LOGIC CONTROLLERS (PLC)	3
ELEC 2861L	PROGRAMMABLE LOGIC CONTROLLERS (PLC) LAB.	1
ELEC 2891	REGULATIONS SEMINAR AND FCC ELEMENTS	1
ELEC 2901P	ELECTRONICS PRACTICE*	3
INTE 2500	LOCAL AREA NETWORKS	4
INTE 2511L	LOCAL AREA NETWORKS LAB.	<u>2</u>
		58
ELECTIVES		3
TOTAL CREDITS		86

#### This program is not currently offered for new students

\*All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Associate's Degree in Electronics Engineering Technology in Telecommunications Practice is equivalent to 135 hours.

## ASSOCIATE'S DEGREE IN NETWORK TECHNOLOGY AND APPLICATIONS DEVELOPMENT

#### **OBJECTIVE**

The Associate's Degree in Network Technology and Applications Development will equip students with the basic skills to work with the architecture and administration of communication networks. Also, students will recognize the process of applications development in various programming languages and will design websites.

#### MINIMUM REQUIREMENTS

- 28 Credits in General Education
- 43 Credits in Major Courses
- 3 Credits in Elective Courses
- 74 Total Credits

#### **GENERAL EDUCATION:**

BISC 1010	BIOLOGICAL SCIENCES	3
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	3
ITTE 1031L	COMPUTER LITERACY AND LABORATORY	3
MATH 1010	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	<u>3</u>
		28

#### **MAJOR COURSES**

ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
BUMA 1000	INTRODUCTION TO BUSINESS	3
INTE 2440L	NETWORK FUNDAMENTALS AND LABORATORY	3
INTE 2460L	DATA COMMUNICATIONS AND LAB.	3
INTE 2520L	WEB PAGE DESIGN AND LABORATORY	3
INTE 2570L	NETWORKS ADMINISTRATION AND LAB.	3
INTE 2740L	DIAGNOSTIC & MAINTENANCE OF COMPUTER SYSTEMS AND	3
IINIE 2/40L	LABORATORY	5
MATH 2050	APPLIED MATHEMATICS	3
PROG 1035	INTRODUCTION TO COMPUTER PROGRAMMING LOGIC	3
PROG 1140L	DATA BASE DESIGN AND LABORATORY	3
PROG 2280	VISUAL BASIC PROGRAMMING AND LABORATORY	3
PROG 2370L	OPERATING SYSTEMS & ARCHITECTURE AND LABORATORY	3
PROG 2390L	INTRODUCTION TO JAVA SCRIPT AND LABORATORY	3
PROG 2480L	ANALYSIS, DESIGN & IMPLEMENTATION SYSTEMS AND LAB.	<u>3</u>
		43

#### ELECTIVES

#### TOTAL CREDITS

\*All major and elective courses must be passed with at least a "C" grade.

This program will be offered through the on ground and online delivery mode. Electives depend on the academic offering available in each term. Students should consult with their academic advisor.

3

#### ASSOCIATE'S DEGREE IN INSTRUMENTATION

#### **OBJECTIVE**

The Associate's Degree in Instrumentation will provide the students the necessary knowledge and skills to be able to obtain an entry level position in all types of industries of products or services with automated processes such as: pharmaceuticals, electronics, manufacturing, health, communications, and telecommunications. The program will prepare the student with the necessary skills to perform successfully in the areas of calibration, hydraulic, programming, management and maintenance of Programmable Logic Controller (PLC), and management of robotic arms.

#### **MINIMUM REQUIREMENTS:**

- 15 Credits in General Education
- 10 Credits in Core Courses
- 57 Credits in Major Courses
- 3 Credits in Electives

85 Total Credits

#### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
HUMA 1010	HUMANITIES I	3
OR		
SOSC 1010	SOCIAL SCIENCES I	
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	<u>3</u>
		15
CORE COURI	ES:	
TEEN 2150*	TECHNICAL ENGLISH FOR ELECTRONICS	3

TEEN 2150*	TECHNICAL ENGLISH FOR ELECTRONICS
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR
MATH 2010*	BASIC MATHEMATICS FOR ENGINEERING TECHNOLOGY
MATH 2020*	PRE-CALCULUS FOR ENGINEERING TECHNOLOGY

#### **MAJOR COURSES:**

ELEC 1010	BASIC ELECTRICITY	4
ELEC 1021L	BASIC ELECTRICITY LAB.	2
ELEC 1030	BASIC ELECTRONICS	4
ELEC 1041L	BASIC ELECTRONICS LAB.	2
ELEC 1050	DIGITAL ELECTRONICS	4
ELEC 1061L	DIGITAL ELECTRONICS LAB.	2
ELEC 2200	INTROD. TO THE MICROPROCESSORS	3
ELEC 2211L	INTROD. TO THE MICROPROCESSORS LAB.	1
ELEC 1350	OPERATING SYSTEMS FOR ELECTRONICS	3
ELEC 1361L	OPERATING SYSTEMS FOR ELECTRONICS LAB.	2
ELEC 2350	INTRODUCTION TO ROBOTICS	3
ELEC 2361L	INTRODUCTION TO ROBOTICS LAB.	1
ELEC 2400	INTRODUCTION TO THE INDUSTRIAL ELECTRONICS	3
ELEC 2411L	INTRODUCTION TO THE INDUSTRIAL ELECTRONICS LAB.	1
ELEC 2850	PROGRAMMABLE LOGIC CONTROLLERS (PLC)	3
ELEC 2861L	PROGRAMMABLE LOGIC CONTROLLERS (PLC) LAB.	1
INST 2450	INTRODUCTION TO PNEUMATICS AND HYDRAULICS	3
INST 2461L	INTRODUCTION TO PNEUMATICS AND HYDRAULICS LAB.	2
PHYS 1010	BASIC PHYSICS	3

INST 2700	INSTRUMENTATION CONTROLS AND STANDARDS	2
INST 2711L	INSTRUMENTATION CONTROLS AND STANDARDS LAB.	1
INST 2800	INTRODUCTION TO CALIBRATION	3
INST 2811L	INTRODUCTION TO CALIBRATION LAB.	1
INST 2901P	PRACTICE AND SEMINAR IN INSTRUMENTATION	<u>3</u>
		57
ELECTIVES		3

#### TOTAL CREDITS

85

#### This program is not currently offered for new students

\*All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

Before beginning internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program.

The Associate's Degree in Instrumentation Practice is equivalent to 165 hours.

#### ASSOCIATE'S DEGREE IN OFFICE SYSTEMS WITH MAJOR IN MEDICAL SECRETARY

#### **OBJECTIVE**

The Associate's Degree in Office Systems with major in Medical Secretary will provide students the knowledge and skills needed in the automated medical office environment. Students will be working with concepts of medical terminology, procedures and administration of automated medical plans systems, within an integral and balanced education to offer an efficient service to the client.

#### **MINIMUM REQUIREMENTS:**

- 24 Credits in General Education
- 19 Credits in Core Courses
- 38 Credits in Major Courses
- 3 Credits in Elective Courses
- 84 Total Credits

#### **GENERAL EDUCATION:**

BIOL 1010	INTRODUCTION TO BIOLOGY	3
ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
OR		
SOSC 1010	SOCIAL SCIENCES I	
MATH 1010*	BASIC MATHEMATICS	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020*	BASIC SPANISH II	<u>3</u>
		24

#### **CORE COURSES:**

ACCO 1000	INTRODUCTION TO ACCOUNTING I	4
BIOL 2000	HUMAN ANATOMY AND PHYSIOLOGY	3
BUAD 2250	HUMAN RELATIONS	3
PROG 2300	USE AND MANAGEMENT OF SPREADSHEET	3
PROG 2311L	USE AND MANAGEMENT OF SPREADSHEET LAB.	2
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SPAN 2000*	BUSINESS SPANISH	<u>3</u>
		19

#### **MAJOR COURSES:**

MESE 1010	MEDICAL TERMINOLOGY	3
MESE 2500	MANUAL MEDICAL BILLING	3
MESE 2600L	ELECTRONIC MEDICAL BILLING AND LAB.	3
<b>MESE 2700</b>	MEDICAL AUDITING	3
OFSY 1201L	BASIC TYPING AND LAB.	3
OFSY 1250	SPEEDWRITING IN SPANISH	3
OFSY 1301L	DOCUMENTS PRODUCTION I AND LAB.	3
OFSY 1351L	DOCUMENTS PRODUCTION II AND LAB.	3
OFSY 1400	DOCUMENTS CONTROL	3
OFSY 2450	ADMINISTRATION AND OFFICE TECHNIQUES	3
OFSY 2730	WORD PROCESSING AND ELECTRONIC PRESENTATIONS I	3
OFSY 2731L	WORD PROCESSING AND ELECTRONIC PRESENTATIONS I LAB.	1
OFSY 2851P	OFFICE PRACTICE AND INTEGRATING SEMINAR*	<u>4</u>

# 38 ELECTIVES 3 TOTAL CREDITS 84

\*All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

The Associate Degree in Office Systems with Major in Medical Secretary Practice is equivalent to 200 practice hours and 25 contact seminar hours.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

### **EDUCATION DEPARTMENT**

The Education Programs will develop in students the professional skills, pedagogical content knowledge, and active methods of teaching and learning that will enable future educators to be active, effective and reflective. At the same time, they will educate on respect for differences and human diversity and to develop comprehensive educational leaders in all their potential, with ethical values and committed to excellence in education and in the promotion of lifelong learning for all students.

#### BACHELOR'S DEGREE IN EDUCATION WITH MAJOR IN HEALTH EDUCATION

#### **OBJECTIVE**

The Bachelor's degree in Education with Major in Health Education has the objective to develop in the students skills and knowledge in the area of Health Education. The students will develop as professionals capable of collaborating with the changing processes that will enhance their own lives and those of others. The courses in Health Education will emphasize the development of the different skills and attitudes that make a creative, critical, and flexible mind possible. The students will attain a higher sense of leadership, humanistic and ethical values and will be able to harmoniously integrate education and health. Will be able to develop promotion programs in health education that will strengthen both public and private education and will be able to deliver courses and conferences both in the classrooms and in community forums.

#### MINIMUM REQUIREMENTS

- 40 Credits in General Education
- 17 Credits in Core Courses
- 59 Credits in Major Courses
- 9 Credits in Elective Courses
- 125 Total Credits

#### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HIST 1010	HISTORY OF PUERTO RICO	3
HIST 4020	HISTORY OF UNITED STATES	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
MATH 1010	BASIC MATHEMATICS	3
ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
SOSC 1030	SOCIAL SCIENCES, TENDENCIES AND PERSPECTIVES	4
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2020	WRITING AND COMPOSITION	<u>2</u>
		40

#### **CORE COURSES:**

BIOL 1010	INTRODUCTION TO BIOLOGY	3
BIOL 2000	HUMAN ANATOMY AND PHYSIOLOGY	3
ITTE 4211L	INTEGRATING TECHNOLOGY IN THE CURRICULUM AND WORKSHOP	2
ITTE 4230	ASSISTIVE TECHNOLOGY	2
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SEMI 2009	SEMINAR OF PRESENT ISSUES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		17

#### **MAJOR COURSES:**

MAJON COURS	LO.	
EDUC 2020	PSYCHOLOGY OF HUMAN DEVELOPMENT	3
EDUC 2030	THEORIES OF INSTRUCTION	3
EDUC 3120	TEACHING METHODOLOGY	3
EDUC 3140	SOCIOLOGICAL FOUNDATIONS OF EDUCATION	3
EDUC 3150	PHILOSOPHICAL FOUNDATIONS OF EDUCATION	3
EDUC 3160	EXCEPTIONAL POPULATION	3
EDUC 3170	CURRICULUM DESIGN AND REVISION	3
EDUC 4000	PROPOSAL DEVELOPMENT	2
EDUC 4130	MEASUREMENT, EVALUATION AND ASSESSMENT	3
HEED 1020	FOUNDATION OF EDUCATION FOR HEALTH	3
HEED 1040	NUTRITION, SCHOOL AND COMMUNITY	3
HEED 1500	FIRST AID	3
HEED 2050	ENVIRONMENTAL HEALTH EDUCATION	3
HEED 2060	PERSONALITY DYNAMICS AND MENTAL HEALTH	3
HEED 2080	HEALTH EDUCATION DURING ADULTHOOD AND OLD AGE	3
HEED 3010	HEALTH AND QUALITY OF LIFE	3
HEED 3020	HEALTH EDUCATION COUNSELING	3
HEED 4040	HUMAN SEXUALITY AND EDUCATION	3
HEED 4120	TEACHING METHODOLOGY OF HEALTH EDUCATION	3
HEED 4311P	INTERDISCIPLINARY EXPERIENCES	<u>3</u>
		59
ELECTIVES		9

#### **TOTAL CREDITS**

#### This program is not currently offered for new students

All courses must be passed with at least a "B" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Bachelor's Degree in Education with Major in Health Education Practice is equivalent to 300 hours internship in an Educational Center.

#### BACHELOR'S DEGREE IN EDUCATION WITH MAJOR IN PRESCHOOL EDUCATION

#### **OBJECTIVE**

The Bachelor's Degree in Education with major in Preschool Education has the objective of offering the student the opportunity of developing as a professional of early childhood. This program will develop a professional capable of assuming the role of educational leader, teacher and entrepreneur, and provide the necessary knowledge to establish his own business as needed in this area.

#### **MINIMUM REQUIREMENTS:**

- 40 Credits in General Education
- 23 Credits in Core Courses
- 62 Credits in Major Courses
- 6 Credits in Elective Courses
- 131 Total Credits

#### **GENERAL EDUCATION:**

ENGL 1010	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HIST 1010	HISTORY OF PUERTO RICO	3
HIST 4020	HISTORY OF UNITED STATES	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010	BASIC MATHEMATICS	3
SOSC 1030	SOCIAL SCIENCES, TENDENCIES AND PERSPECTIVES	4
SPAN 1010	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2020	WRITING AND COMPOSITION	<u>2</u>
		40

#### **CORE COURSES:**

BUMA 1050	INTRODUCTION TO ENTREPRENEURSHIP	3
BUMA 2050	SMALL BUSINESS PLANNING	3
BUMA 2150	SMALL BUSINESS PROPOSAL AND DEVELOPMENT	4
ITTE 3111L	DEVELOPMENT OF MULTIMEDIA MATERIALS AND WORKSHOP	2
ITTE 4211L	INTEGRATING TECHNOLOGY IN THE CURRICULUM AND WORKSHOP	2
ITTE 4230	ASSISTIVE TECHNOLOGY	2
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SEMI 2009	SEMINAR OF PRESENT ISSUES	3
STAT 2000	INTRODUCTION TO STATISTICS	3
		23

#### **MAJOR COURSES:**

EDUC 3250 EDUC 3290	HEALTH, NUTRITION AND SECURITY IN THE PRESCHOOL MANAGEMENT RECREATION PROGRAMS FOR CHILDHOOD SERVICE	3 3
		3
EDUC 2250		
EDUC 3230	THE LANGUAGE ARTS IN THE PRESCHOOL CHILD	3
		3 3
EDUC 3180 EDUC 3190	LEADERSHIP AND CREATIVITY	3
EDUC 3180	ETHICAL AND LEGAL ASPECTS IN EDUCATION	3
EDUC 3173	CHILD	3
EDUC 3175	DESIGN AND REVISION OF THE CURRICULUM OF THE PRESCHOOL	3
EDUC 3160	EXCEPTIONAL POPULATION	3
EDUC 3150	PHILOSOPHICAL FOUNDATIONS OF EDUCATION	3
EDUC 3140	SOCIOLOGICAL FOUNDATIONS OF EDUCATION	3
EDUC 3120	TEACHING METHODOLOGY	3
EDUC 3050	EARLY OBSERVATION AND INTERVENTION	3
EDUC 3030	MOTOR SKILLS IN EARLY EDUCATION	3
EDUC 2040	THE PROCESS OF ACTIVE GAME IN THE CHILD LEARNING	3
EDUC 2040	FUNDAMENTALS OF EARLY EDUCATION	3
		3
EDUC 2020 EDUC 2030	PSYCHOLOGY OF HUMAN DEVELOPMENT THEORIES OF INSTRUCTION	

**TOTAL CREDITS** 125

# *This program is not currently offered for new students* All courses must be passed with at least a "B" grade.

Before beginning internship, students must have completed all prerequisites of this internship course in accordance with the curriculum of the program.

The Bachelor's Degree in Education with Major in Preschool Education Practice is equivalent to 225 hours.

## **GENERAL EDUCATION DEPARTMENT**

The General Education Program is comprised by a core of courses that are required in all of our undergraduate programs. They are designed to develop in our graduates the skills, knowledge and attitudes necessary to function as responsible citizens in contemporary society, and with a commitment for continuous learning throughout their whole life.

NUC identifies the following institutional learning goals necessary to build a solid foundation for the academic experience at the undergraduate level:

#### **Professional competence**

Capacity to apply creatively the knowledge and skills of their respective studies disciplines to actual and future scenarios for their own continuous development, self-employment, their profession and their fellow citizens in the local or global geographic area in which they decide to live and work.

#### **Communication skills**

Capacity to master Spanish properly as their first language and English as a second language.

#### **Critical and Creative Thinking**

Capacity to analyze, apply critically and creatively their professional competencies in the management of complex situations, decision making, problem solving, understanding, adapting, and generating changes, while at the same time managing them effectively.

#### Logic mathematical reasoning

Capacity to utilize quantitative and qualitative information in the problem solving process.

#### Information Literacy (Digital competency)

Capacity to apply in an ethical and critical manner the knowledge and skills related to the development and processes in information and digital environments in an effective and efficient way, considering the personal, professional, and citizen dimensions.

#### Ethical and moral behavior

Capacity to reason ethically and morally when facing complex situations, making informed decisions, and solving problems, showing respect towards laws, intellectual honesty, social responsibility, ethical judgment, respect to life and environment conservation.

#### **Respect to diversity**

Capacity to recognize and value the richness of human experiences, understanding the multicultural, gender, political, and social differences and the capacities that enrich living together without incurring in discriminatory practices in the globalized world.

The General Education Department includes the following courses:

CODE	TITLE	CREDITS	
BIOL 1010	INTRODUCTION TO BIOLOGY		3
BISC 1010	BIOLOGICAL SCIENCES		3
ENGL 1010	BASIC ENGLISH I		3
ENGL 1020	BASIC ENGLISH II		3
ENGL 2050	CONVERSATIONAL ENGLISH		3
HIST 1010	HISTORY OF PUERTO RICO		3
HIST 4020	HISTORY OF UNITED STATES		3
HUMA 1010	HUMANITIES I		3
HUMA 1020	HUMANITIES II		3
ITTE 1010	COMPUTER LITERACY		3
ITTE 1011L	COMPUTER LITERACY LAB.		1
ITTE 1031L	COMPUTER LITERACY AND LAB		3
MATH 1010	BASIC MATHEMATICS		3
SEMI 1001	UNIVERSITY ENVIRONMENT SEM	INAR	1
SOSC 1010	SOCIAL SCIENCES I		3
SOSC 1020	SOCIAL SCIENCES II		3
SOSC 1030	SOCIAL SCIENCES: TENDENCIES A	AND PERSPECTIVES	4
SPAN 1010	BASIC SPANISH I		3
SPAN 1020	BASIC SPANISH II		3
SPAN 2020	WRITING AND COMPOSITION		2
SPAN 2040	WRITING AND COMPOSITION		3

BIOL 1010 course is considered a core course in Health Science Allied Programs.

#### **BACHELOR'S DEGREE IN CRIMINAL JUSTICE**

#### **OBJECTIVE**

The Bachelor's Degree in Criminal Justice develops in students a professional attitude, while acquiring the fundamental knowledge of the components of the criminal justice system and its functions so that they can effectively perform in different work scenarios.

The student will analyze the causes of crime, antisocial behavior of an individual, and the application of penalties to behavior considered deviant; while safeguarding the rights given to the accused and protecting the victim of a crime in a way that meets current and emerging needs, related to security issues of their country.

#### MINIMUM REQUIREMENTS

38 Credits in General Education
12 Credits in Core Courses
61 Credits in Major Courses
<u>9 Credits in Electives</u>
120 Total Credits

#### **GENERAL EDUCATION**

ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3 3 3 3
HUMA 1020	HUMANITIES II	3
ITTE 1010	COMPUTER LITERACY	
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	3 3 <u>3</u> <b>38</b>
		38
CORE COURS	SES:	
ETHI 1010*	ETHICS AND PROFESSIONALISM	3
PSYC 2510*	PSYCHOLOGY	3
POLS 3110*	POLITICAL SCIENCE	3
STAT 2000*	INTRODUCTION TO STATISTICS	<u>3</u> 12
		12
MAJOR COUR	SFS.	
JUST 1010	INTRODUCTION TO ORGANIZATION AND ADMINISTRATION IN	3
3051 1010	CRIMINAL JUSTICE	5
JUST 1025	FUNDAMENTALS OF PENAL LAWS	3
JUST 1025	SPECIAL PENAL LAWS	3 3
JUST 1040	INTRODUCTION TO CRIMINOLOGY	3
JUST 1040	EVIDENCE	3 3 3 3
JUST 2010	INTERVIEW AND INTERROGATION	3
JUST 2020	RULES OF CRIMINAL PROCEDURE	3
JUST 2020	VICTIMOLOGY	3
3001 2030		5

JUST 3000	CIVIL RIGHTS	3
JUST 3003	JUVENILE JUSTICE SYSTEM	3
JUST 3005	DRUG ADDICTION AND CRIME	3
JUST 3015	FUNDAMENTALS OF PENOLOGY AND THE RIGHTS OF THE PRISONER	3
JUST 3020	REHABILITATION AND TREATMENT OF THE DELINQUENT	3
JUST 3610	WHITE COLLAR CRIMES AND FRAUD DETECTION	3
PSYC 3510	SOCIAL PSYCHOLOGY	3
PSYC 3520	PSYCHOPATHOLOGY	3
JUST 4000	SOCIAL INVESTIGATION METHODOLOGY	4
JUST 4010	INTEGRATION SEMINAR OF CRIMINAL JUSTICE	<u>6</u>
		61
ELECTIVES		9

#### TOTAL CREDITS

\* All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

#### BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN CYBER CRIMES

#### **OBJECTIVE**

The Bachelor's program in Criminal Justice with Major in Cyber Crimes prepares the student with the necessary knowledge, skills and abilities to immerse themselves in the field. They will learn research management, data collection, analysis and interpretation, processes for document presentation, crime adjudication, and post-processing of cybercrimes such as fraud, identity theft, cyber terrorism, and other computer crimes committed worldwide.

#### MINIMUM REQUIREMENTS

- 38 Credits in General Education
- 52 Credits in Core Courses
- 21 Credits in Major Courses
- 9 Credits in Elective
- **120 Total Credits**

#### **GENERAL EDUCATION:**

ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		38

#### **CORE COURSES:**

ETHI 1010	ETHICS AND PROFESSIONALISM	3
JUST 1010	INTRODUCTION TO ORGANIZATION AND ADMINISTRATION IN	3
	CRIMINAL JUSTICE	
JUST 1025	FUNDAMENTALS OF PENAL LAWS	3
JUST 1040	INTRODUCTION TO CRIMINOLOGY	3
JUST 1050	EVIDENCE	3
JUST 2010	INTERVIEW AND INTERROGATION	3
JUST 2020	RULES OF CRIMINAL PROCEDURE	3
JUST 2030	VICTIMOLOGY	3
JUST 3003	JUVENILE JUSTICE SYSTEM	3
JUST 3120	FEDERAL JURISDICTION	3
JUST 3610	WHITE COLLAR CRIMES AND FRAUD DETECTION	3
JUST 4000	SOCIAL INVESTIGATION METHODOLOGY	4
JUST 4010	INTEGRATION SEMINAR OF CRIMINAL JUSTICE	6
POLS 3110	POLITICAL SCIENCE	3
PSYC 2510	PSYCHOLOGY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		52

#### **MAJOR COURSES:**

CYCR 4010	CYBER CRIMES: OPERATING SYSTEMS AND ARCHITECTURE, AND LAB.	3
CYCR 4020	APPLICABLE LAW TO CYBER CRIMES	3
CYCR 4030	NETWORKS SECURITY IN CYBER CRIMES	3
CYCR 4040	INTRODUCTION TO CYBER CRIMES	3
CYCR 4050	COMPUTER FORENSICS I	3
CYCR 4060**	COMPUTER FORENSICS II	3
JUST 2050	CRIMINAL INVESTIGATION	<u>3</u>
		21
ELECTIVES		9
TOTAL CREDIT	ΓS	120

#### TOTAL CREDITS

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade.

\*\*This course includes the use of simulator.

This program will be offered through the on ground and online delivery mode.

#### BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN FORENSIC INVESTIGATION

#### **OBJECTIVE**

The Bachelor's program in Criminal Justice with Major in Forensic Investigation prepares the student with basic knowledge and skills necessary for the use of science and/or technology in the investigation and establishment of facts or evidence to be used in criminal cases or other investigative procedures.

#### MINIMUM REQUIREMENTS

- 38 Credits in General Education
- 52 Credits in Core Courses
- 21 Credits in Major Courses
- 9 Credits in Elective
- **120 Total Credits**

#### **GENERAL EDUCATION:**

ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		38

#### **CORE COURSES:**

ETHI 1010	ETHICS AND PROFESSIONALISM	3
JUST 1010	INTRODUCTION TO ORGANIZATION AND ADMINISTRATION IN	3
	CRIMINAL JUSTICE	
JUST 1025	FUNDAMENTALS OF PENAL LAWS	3
JUST 1040	INTRODUCTION TO CRIMINOLOGY	3
JUST 1050	EVIDENCE	3
JUST 2010	INTERVIEW AND INTERROGATION	3
JUST 2020	RULES OF CRIMINAL PROCEDURE	3
JUST 2030	VICTIMOLOGY	3
JUST 3003	JUVENILE JUSTICE SYSTEM	3
JUST 3120	FEDERAL JURISDICTION	3
JUST 3610	WHITE COLLAR CRIMES AND FRAUD DETECTION	3
JUST 4000	SOCIAL INVESTIGATION METHODOLOGY	4
JUST 4010	INTEGRATION SEMINAR OF CRIMINAL JUSTICE	6
POLS 3110	POLITICAL SCIENCE	3
PSYC 2510	PSYCHOLOGY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		52

#### **MAJOR COURSES:**

INTRODUCTION TO FORENSIC INVESTIGATION	3
FORENSIC PHOTOGRAPHY	3
COLLECTION AND ANALYSIS OF PHYSICAL EVIDENCE	3
CRIME SCENE PROCESSING	3
RESEARCH AND ANALYSIS OF POST MORTEM EXAMINATIONS	3
CLASIFICATION AND PROCESSING OF FINGERPRINTS	3
CRIMINAL INVESTIGATION	<u>3</u>
	21
	9
	FORENSIC PHOTOGRAPHY COLLECTION AND ANALYSIS OF PHYSICAL EVIDENCE CRIME SCENE PROCESSING RESEARCH AND ANALYSIS OF <i>POST MORTEM</i> EXAMINATIONS CLASIFICATION AND PROCESSING OF FINGERPRINTS

#### TOTAL CREDITS

120

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade.

This program will be offered through the on ground and online delivery mode.

#### BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN HOMELAND SECURITY

#### **OBJECTIVE**

The Bachelor's program in Criminal Justice with Major in Homeland Security prepares the student with the necessary theoretical knowledge, leadership skills, legal knowledge, investigative and communication skills, and innovative technological advances needed for the protection of U.S. security, as well as in unincorporated territories.

#### MINIMUM REQUIREMENTS

- 38 Credits in General Education
- 52 Credits in Core Courses
- 21 Credits in Major Courses
- 9 Credits in Elective
- **120 Total Credits**

#### **GENERAL EDUCATION:**

ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		38

#### **CORE COURSES:**

00111 000110		
ETHI 1010	ETHICS AND PROFESSIONALISM	3
JUST 1010	INTRODUCTION TO ORGANIZATION AND ADMINISTRATION IN	3
	CRIMINAL JUSTICE	
JUST 1025	FUNDAMENTALS OF PENAL LAWS	3
JUST 1040	INTRODUCTION TO CRIMINOLOGY	3
JUST 1050	EVIDENCE	3
JUST 2010	INTERVIEW AND INTERROGATION	3
JUST 2020	RULES OF CRIMINAL PROCEDURE	3
JUST 2030	VICTIMOLOGY	3
JUST 3003	JUVENILE JUSTICE SYSTEM	3
JUST 3120	FEDERAL JURISDICTION	3
JUST 3610	WHITE COLLAR CRIMES AND FRAUD DETECTION	3
JUST 4000	SOCIAL INVESTIGATION METHODOLOGY	4
JUST 4010	INTEGRATION SEMINAR OF CRIMINAL JUSTICE	6
POLS 3110	POLITICAL SCIENCE	3
PSYC 2510	PSYCHOLOGY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		52

#### **MAJOR COURSES:**

HOSE 1010	FORENSIC PSYCHOLOGY	3
HOSE 2020	INTRODUCTION TO HOMELAND SECURITY	3
HOSE 2030	HOMELAND SECURITY AGENCIES	3
HOSE 3040	TERRORISM	3
HOSE 3050	AVIATION SECURITY	3
HOSE 4060	CYBER SECURITY	3
JUST 3000	CIVIL RIGHTS	<u>3</u>
		21
ELECTIVES		9
TOTAL CREDITS		120

#### TOTAL CREDITS

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

#### **BACHELOR'S DEGREE IN CRIMINAL JUSTICE WITH MAJOR IN HUMAN SERVICES**

#### **OBJECTIVE**

The Bachelor's program in Criminal Justice with Major in Human Services prepares the student with the necessary skills, abilities, and knowledge regarding solutions and mechanisms used in populations that need assistance as to rights and services offered to victims of crimes, substance abusers, young offenders and people confined to community inclusion. This program will enable the student to work in a variety of institutional and community settings within criminal justice systems.

#### MINIMUM REQUIREMENTS

- 38 Credits in General Education
- 52 Credits in Core Courses
- 21 Credits in Major Courses
- 9 Credits in Elective
- **120 Total Credits**

#### **GENERAL EDUCATION:**

ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
HUMA 1010	HUMANITIES I	3
HUMA 1020	HUMANITIES II	3
ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SOSC 1020	SOCIAL SCIENCES II	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	3
SPAN 2040	WRITING AND COMPOSITION	<u>3</u>
		38

#### **CORE COURSES:**

00111 000110		
ETHI 1010	ETHICS AND PROFESSIONALISM	3
JUST 1010	INTRODUCTION TO ORGANIZATION AND ADMINISTRATION IN	3
	CRIMINAL JUSTICE	
JUST 1025	FUNDAMENTALS OF PENAL LAWS	3
JUST 1040	INTRODUCTION TO CRIMINOLOGY	3
JUST 1050	EVIDENCE	3
JUST 2010	INTERVIEW AND INTERROGATION	3
JUST 2020	RULES OF CRIMINAL PROCEDURE	3
JUST 2030	VICTIMOLOGY	3
JUST 3003	JUVENILE JUSTICE SYSTEM	3
JUST 3120	FEDERAL JURISDICTION	3
JUST 3610	WHITE COLLAR CRIMES AND FRAUD DETECTION	3
JUST 4000	SOCIAL INVESTIGATION METHODOLOGY	4
JUST 4010	INTEGRATION SEMINAR OF CRIMINAL JUSTICE	6
POLS 3110	POLITICAL SCIENCE	3
PSYC 2510	PSYCHOLOGY	3
STAT 2000	INTRODUCTION TO STATISTICS	<u>3</u>
		52

# **MAJOR COURSES:**

HUSE 1010	DRUG ADDICTION AND LEGAL-ETHICAL ASPECTS	3
HUSE 2020	YOUNG OFFENDERS	3
HUSE 2030	SERVICES IN CORRECTIONAL INSTITUTIONS AND REHABILITATION	3
HUSE 3040	SERVICES FOR DOMESTIC VIOLENCE VICTIMS	3
HUSE 3050	SERVICES FOR CRIME VICTIMS	3
HUSE 4060	RESTORATIVE JUSTICE	3
JUST 3000	CIVIL RIGHTS	<u>3</u>
		21
ELECTIVES		9
TOTAL CREDITS		120

\*All general education courses with an asterisk and all core, major and elective courses must be passed with at least a "C" grade. Program offered only online.

# ASSOCIATE'S DEGREE IN CRIMINAL JUSTICE

### **OBJECTIVE**

The Associate's Degree Program in Criminal Justice will develop in the student the basic knowledge necessary to understand and identify the functions of the criminal justice system. Furthermore, it will enable the student with the fundamental concepts applicable to Criminal Law, procedures, evidence, and knowledge of the criminology theories so that the student can develop himself in different work scenarios.

# MINIMUM REQUIREMENTS

- 26 Credits in General Education
- 9 Credits in Core Courses
- 33 Credits in Major Courses
- <u>3</u> Credits in Elective
- 71 Total Credits

### **GENERAL EDUCATION**

ENGL 1010*	BASIC ENGLISH I	3
ENGL 1020	BASIC ENGLISH II	3
ENGL 2050	CONVERSATIONAL ENGLISH	3
ITTE 1010	COMPUTER LITERACY	3
ITTE 1011L	COMPUTER LITERACY LAB.	1
MATH 1010*	BASIC MATHEMATICS	3
SEMI 1001	UNIVERSITY ENVIRONMENT SEMINAR	1
SOSC 1010	SOCIAL SCIENCES I	3
SPAN 1010*	BASIC SPANISH I	3
SPAN 1020	BASIC SPANISH II	<u>3</u> 26
		26
CORE COUR	SES:	
ETHI 1010*	ETHICS AND PROFESSIONALISM	3
PSYC 2510*	PSYCHOLOGY	3
STAT 2000*	INTRODUCTION TO STATISTICS	<u>3</u> 9
		9
MAJOR COUL	RSES:	
JUST 1010	INTRODUCTION TO ORGANIZATION AND ADMINISTRATION IN	3
	CRIMINAL JUSTICE	
JUST 1025	FUNDAMENTALS OF PENAL LAWS	3
JUST 1030	SPECIAL PENAL LAWS	3 3 3 3 3 3
JUST 1040	INTRODUCTION TO CRIMINOLOGY	3
JUST 1050	EVIDENCE	3
JUST 2010	INTERVIEW AND INTERROGATION	3
JUST 2020	RULES OF CRIMINAL PROCEDURE	
JUST 2030	VICTIMOLOGY	3 3 3
JUST 2050	CRIMINAL INVESTIGATION	3
JUST 3000	CIVIL RIGHTS	3
JUST 3003	JUVENILE JUSTICE SYSTEM	<u>3</u>
		33

# ELECTIVES

# TOTAL CREDITS

\*All general education and core courses with an asterisk and all major and elective courses must be passed with at least a "C" grade.

3

71

# UNDERGRADUATE COURSE DESCRIPTIONS

### UNDERGRADUATE COURSE DESCRIPTIONS

#### ACCO 1000: Introduction to Accounting I: 4 credits

In this course, students will explain the fundamentals of accounting and their impact on business operations. They will examine and categorize the types of accounts to record transactions in the relevant accounting records. Additionally, they will prepare financial reports arising during and after completing the accounting cycle of the business. (*Pre-requisite: MATH 1010*)

#### ACCO 1050: Introduction to Accounting II: 4 credits

In this course, students will discuss the analysis of the accounting cycle and its impact on the financial statements. They will apply the rules of calculating the hours worked by employees and subsequent gross and net pay for each employee. They will develop skills related to the preparation and understanding of bank reconciliations and they will prepare the necessary ledger entry adjustments. They will calculate the depreciation expense of the assets of a company through different depreciation methods. They will prepare reports establishing inventory values by applying different methods used in accounting. (*Pre-requisites: ACCO 1000, MATH 1010*)

#### ACCO 2100: Intermediate Accounting I: 3 credits

In this course, students will evaluate the generally accepted accounting principles in a company. They will analyze the objectives of presenting a company's financial information. They will also prepare financial statements and explain their importance in the decision making process of investors and other users. (*Pre-requisites: ACCO 1050*)

#### ACCO 2200: Puerto Rican Taxes: 3 credits

In this course, students will analyze the fundamentals and history of the income tax system in Puerto Rico. They will describe the Internal Revenue Code to determine the tax liability of individuals and corporations. They will also prepare individual and corporate tax returns.

(Pre-requisites: ACCO 1050)

#### ACCO 2250: Computerized Accounting: 3 credits

In this course the student will become acquainted with a computerized program in which he will carry out all the duties related to accounting. Will be able to prepare reports of the field using the more advanced technological systems.

(Co-requisite: ACCO 2261L)

(Pre-requisites: ACCO 1000, ITTE 1010, 1011L, MATH 1010) (Pre-requisites for Bachelor's Degree in Office Systems Administration: ACCO 1000, MATH 1010)

#### ACCO 2261L: Computerized Accounting Lab: 2 credits

In this laboratory the student will apply the different phases within the accounting cycle such as: create accounting codes, opening a general ledger, subsidiaries, recording daily transactions in journals, and preparing financial statements, all these within a computerized program.

(Co-requisite: ACCO 2250)

(Pre-requisites: ACCO 1000, ITTE 1010, 1011L, MATH 1010) (Pre-requisites for Bachelor's Degree in Office Systems Administration: ACCO 1000, MATH 1010)

# ACCO 2270L: Computerized Accounting and Lab: 4 credits

In this course, students will analyze accounting cycles using an accounting software. They will create economic transactions in said software. Also, students will generate the necessary accounting documents and reports, whether self-employed or in a company.

(Pre-requisites: ACCO 1000, ITTE 1031L)

(Pre-requisite for the Office Systems programs: ACCO 1000)

### ACCO 2301P: Accounting Practice and Integrating Seminar: 4 credits

This course reinforces the student's knowledge in the accounting area with the experience in a practice center, by performing 210 hours of externship practice. It also includes an integrated seminar of 15 hours where the student shares experiences about the practice centers, and the analysis of its relation to the accounting courses content. External resources will be used as part of the course. Before beginning internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program. (*Pre-requisites: ACCO 1000, 1050, 2100 2200, 2250, 2261L, MATH 1010*)

# ACCO 3150: Intermediate Accounting II: 3 credits

In this course, students will analyze the composition of a company's assets. They will assess, classify, and present inventory items and determine an adequate management and control system. They will contrast the fundamental aspects of tax accounting for a corporation. They will also prepare the stockholders' equity of a corporation.

(Pre-requisites: ACCO 2100)

### ACCO 3320: Federal Taxes: 3 credits

In this course, students will analyze the Federal Internal Revenue Code. They will use the Code in light of organization's needs and different types of taxpayers. They will differentiate the forms used in the Federal Income Tax process.

(Pre-requisites: ACCO 1050)

# ACCO 3420: Introduction to Cost Accounting: 3 credits

In this course, students will examine the basic concepts of cost in the production process of manufacturing and non-manufacturing companies. They will discuss the conceptual framework a company's cost systems. Additionally, they will analyze and explain the role of cost accounting in a company's decision making process.

(Pre-requisites: ACCO 2100, 2200)

#### ACCO 3520: Managerial Accounting: 4 credits

In this course, students will analyze and explain the accounting information to plan, direct and control the operations of a business. They will evaluate the types of costs in companies and perform cost, volume, and profit analyses as a tool to facilitate decision-making. They will prepare a master budget and explain its characteristics and advantages to facilitate the planning process. In addition, they will evaluate and apply the appropriate techniques for decision-making, both short- and long-term, as well as perform an analysis of financial statements.

### ACCO 4220: Principles of Auditing: 3 credits

In this course, students will analyze and explain the basic elements and kinds of audits and the role of the CPA. Contrast the various audit reports, their presentation and the techniques to interpret them. Additionally, they will discuss professional ethics, legal elements of the audit, the evidence in the audit processes, and internal control mechanisms.

(Pre-requisites: MATH 1010, 1050, ACCO 1000, 1050)

### ACCO 4400: Advance Accounting: 3 credits

In this course, students will examine principles, practices, transactions, reports and will prepare corporate and consolidated businesses reports. They will evaluate transactions of stocks, bonds, and dividends. They will analyze the valuation of foreign currency operations of a business and the effect it has on a company when they implement the international accounting standards to their accounting process. Also, they will contrast the accounting process of partnerships, estates, trusts, and nonprofit organizations.

(Pre-requisite: ACCO 2100)

### ACCO 4500: Forensic Accounting: 3 credits

In this course, students will examine the basic concepts of forensic accounting, criminology and forensic auditor ethics. They will contrast the different types of fraud and financial crimes, cybercrimes and what the legal framework to counter them. Additionally, they will investigate fraud schemes and methods used to commit fraud and will apply investigation strategies for the collection, assessment, and recovery of embezzled funds.

(Pre-requisites: ACCO 1000, 1050, 2100, 2200, 3150, 3320 4220, 4400)

### ACCO 4601P: Accounting Practice and Practice Seminar: 4 credits

This course reinforces the student's knowledge in the accounting area with the experience in a practice center, by performing 210 hours of externship practice. It also includes an integrated seminar of 15 hours where the student shares experiences about the practice centers, and the analysis of its relation to the accounting courses contents. External resources will be used as part of the course. Before beginning internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program.

(Pre-requisites: ACCO 1000, 1050, 2250, 2261L, 2100, 2200, 3150, 3420, 4220, 4400)

# AUME 2000: Medical Auditing: 3 credits

In this course, the students will analyze the general concepts and principles of the medical audit process. They will evaluate code descriptions that apply to withholdings on remittances of payment. Students will describe the components of a medical record and the monitoring process and their evaluation. They develop quality processes in the management of information and forms to submit bills to insurers. Therefore, they will conduct a medical audit of the medical billing process.

# **BIO 120: Sectional Anatomy: 3 Credits**

This course focuses on identifying sectional anatomy images. Students learn the relationship between each of the anatomical structures. Students study ultrasound images, magnetic resonance, and computer tomographies to review and identify anatomy of the cranium, thorax, abdomen and pelvis. The course consists of 30 didactic hours and 30 hours of supervised lab experience.

### **BIOL 1010: Introduction to Biology: 3 credits**

In this course the student will explain the basic concepts of some of the key elements of this branch of science. It will analyze issues related to the different living organisms, emphasizing on the cellular, genetic, energetic, metabolic and environmental aspects.

### BIOL 1200: Fundamentals of Anatomy and Physiology: 3 credits

In this course the student will discuss the importance of the organization of the human body as well as analyze the anatomy and physiology of the diverse systems of the human body, identifying their structures and functioning. In addition, the student will analyze the interrelationship that exists between the systems of the human body.

### **BIOL 2000: Human Anatomy and Physiology: 3 credits**

This course studies the basic concepts of human anatomy and physiology and analyzes the structure and functioning of different systems as well as the organ's malfunctioning and its pathological effects on the human body. It includes the study of anatomy, functions, its anomalies and functional disorders.

(Pre-requisite: BIOL 1010)

# **BIOL 2010:** Anatomy and Physiology I: 3 credits

This course includes the study of the basic concepts of anatomy and physiology. Emphasis is given to the structure and function of the cell, the four basic tissues and the integumentary, skeletal muscular and nervous system of the human body.

### **BIOL 2020: Anatomy and Physiology II: 3 credits**

This course comprises the study of the structure and the function of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive system.

(Pre-requisite: BIOL 2010)

#### **BISC 1010: Biological Sciences: 3 Credits**

In this course, students will analyze the fundamental concepts and characteristics that distinguish living organisms, their evolutionary processes, and their interaction with other organisms and the environment. Distinguish the essential aspects for the function and development of life. Will explain the reproductive aspects of the cell and its genetic role. Also, they will evaluate different ecosystems and the effect caused by human intervention in them.

# **BUAD 1050: Multiculturalism: 3 Credits**

In this course, students will analyze the cultural diversity in companies through a historical perspective and its impact on the expansion of markets and services. Compare the characteristics of a multicultural environment and its impact on organizations. Relate cultural interactions and personality traits through communication channels. The students will also assess inputs and cultural practices and policies that bring diverse groups to organizations and how these influence the development of new strategies and processes in organizations.

#### **BUAD 2000: Fundamentals of Management: 3 Credits**

In this course, the student will critically analyze the main concepts about management and organizational management. The student will evaluate management planning, strategy and decision making. The student will develop the organizations' structure, design, and innovation. The student will discuss the fundamental elements of the management of human resources analyze the control, quality of operations, and productivity. (*Pre-requisite: BUMA 1000*)

### **BUAD 2010: Policies and Business Strategies: 3 Credits**

In this course, students will analyze the basics of strategic planning, including formulation, implementation, and evaluation. Apply strategic SWOT analysis methodology to study the internal and external environment of a company in order to achieve effective business growth. Evaluate functional, corporate, and competitive strategies that a business or company has available, as the necessary framework for making informed decisions that will impact the policies within the company. The students will also describe various international strategies for companies, implementation and evaluation, for the development of the same. (*Pre-requisites: BUMA 1000*)

#### **BUAD 2030: E-Comerce: 3 Credits**

In this course, students will analyze the basic concepts and models of electronic commerce. Evaluate the process and the technologies needed to develop a Web presence for e-commerce and marketing. Also, discuss on ethical, legal, and privacy protection aspects regarding any electronic commerce. (*Pre-requisites: ITTE 1031L*)

### BUAD 2050: Business Law: 3 credits

In this course, students will analyze the fundamental concepts and nature of business law. Evaluate legal situations of business law and its relation to the economic activities of our society. Explain the importance of information and communication technologies (ICT) in trade negotiations. Also appreciate the importance of ethics in the practice of the legal services, both globally and nationally.

### **BUAD 2070: Entrepreneurship: 3 Credits**

In this course, the student will examine entrepreneurial opportunities and the process needed to establish a business. The student will also examine the critical factors relative to conceiving, initiating and developing a business. (*Pre-requisite: BUMA 1010*)

# BUAD 2250: Human Relations: 3 credits

This course covers the way people work in organizations and how they can be motivated to work collectively and in harmony, organizational behavior models, communication, stress to which employees are submitted, discipline, equal opportunities, social ethics, sexual harassment and self concept are discussed.

### **BUAD 2351P: Practice and Integrating Seminar: 4 credits**

This course pretends to enrich the student's knowledge in the administrative and technological areas with the experience in a practice center, by performing 210 hours of externship practice. It also includes an integrated seminar of 15 hours where the student develops a proposal by analyzing the needs of technology in a company. Before beginning internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program. (*Pre-requisites: ACCO 1000, 1050, 2250, 2261L, ITTE 1010, 1011L, PROG 1150, 1161L, 2300, 2311L, 2470, 2481L*)

# BUAD 3000: Human Resources Administration: 3 credits

In this course, students will understand the principles, rules and management practices used in Human Resources. They will emphasize the planning strategies used by the human resources department, including recruitment, personnel selection and evaluation, their education, training and development, raises, transfers, discipline, remuneration, labor law and collective bargaining agreements. They will analyze these activities in light of the importance of developing an organization's human capital according to the trends of the twenty-first century.

#### **BUAD 3010: Comparative Management: 3 Credits**

In this course the student will analyze the management from an international perspective. Will evaluate the organizational culture and the transcultural communication within the international management, emphasizing the importance of understand the global market organizational behavior. The student will justify the diverse controls in the international operation management, emphasizing the marketing, production and financial areas. Also, will discuss the international perspective of the diverse leadership styles, as well as the human resources management. (*Pre-requisites: BUAD 2000*)

#### **BUAD 3050: Ethics in Business: 3 credits**

In this course, students will examine ethics as a philosophical principle distinguishing good from evil, their relationship and application to the business, financial, and professional environment. Evaluate current ethical issues and develop managerial awareness that promotes greater social responsibility through business ethics. Also, differentiate the development and implementation of codes of ethics based on the type of business or organization. Lastly, outline a code of ethics that responds to the profession they are working or studying in.

# **BUAD 3190: Organizational Leadership: 3 credits**

In this course, the student will evaluate leadership concepts applied to business administration. student will discuss the diverse leadership theories including the leadership models that derives from them. In addition, the student will examine leader individual characteristics and implications that cultural diversity has in the execution of an effective leadership role. The student will also analyze ethical concepts needed for future leader development.

#### **BUAD 4000: Integrative Seminar Business Administration: 3 Credits**

In this course the student will analyze the development of the management thought and its integration to the business area. The student will develop the structure and culture of an organization for the integration of a strategic and operational business planning. In addition, the student will argue about the direction and control processes in organizations to achieve results in a business. (*Pre-requisites: All core courses and recommended elective credits.*)

### **BUIN 1010: Principles of Information Systems: 3 Credits**

In this course, students will examine the fundamentals and various information systems. Evaluate the various components that make up an information system. Also, discuss the importance of information systems in business processes in order to support problem solving and decision making.

(Pre-requisites: ITTE 1031L)

### **BUIN 1015: Introduction to Business Intelligence: 3 Credits**

In this course, students will examine the fundamentals of business intelligence and the need to use its components for data processing. They will evaluate the steps of data integration workflow and apply them according to the need of the information required. Additionally, they will explain how to properly manage a business intelligence project.

# **BUIN 1020: Introduction to Data Base: 3 Credits**

In this course, students will analyze databases, management systems, structures to data modeling and the design process. They will use the elements of the Structured Query Language (SQL) in the structure and design of databases. They will also develop a database under a standardized model. (*Pre-requisites: BUIN 1010*)

#### **BUIN 1030: Decision Support Systems: 3 Credits**

In this course, students will analyze the decision support systems and key aspects in the process of decision making. Consider types of decision support systems based on analytical decision models. Develop and produce decision support systems, as well as an implementation plan for the same. Also, analyze the fundamental concepts of business intelligence and its integration to decision support systems. (

Pre-requisites: BUIN 1060, MATH 2080)

#### **BUIN 1040: Programs Dev. Toward Business Administration: 3 Credits**

Upon completion of this course, students will examine the fundamentals of object-oriented programming and Visual Basic language. Handle the Visual Studio platform and Microsoft.NET tools. Describe the use of logical/math structures, selection and repetition. Also, evaluate and encode functions, subroutines, arrays, and files.

(Pre-requisites: BUIN 1010, MATH 1050)

#### BUIN 1050: C++ Programming: 3 Credits

In this course, students will analyze the basic concepts of programming and C++ language. We will describe the use of logical structures and we will encode algorithms implementing control structures. We will examine the importance of functions within the C++ programming structure. Additionally, we will assess the various data structures: Arrays, pointers and classes. (*Pre-requisites: BUIN 1010, MATH 2080*)

#### **BUIN 1060: Management Science: 3 Credits**

In this course, students will examine concepts of linear programming and time series for the analysis and decision making process. Analyze the various models for distribution networks and project activities. Also, use the optimization concepts applied to inventory management and analysis of waiting lines.

(Pre-requisites: BUIN 1040, MATH 2080)

### **BUIN 1070: Data Warehousing: 3 Credits**

In this course, students will analyze the basic concepts and requirements of a data warehouse. Evaluate data preparation, information delivery, and results analysis and visualization. Describe tools for analyzing the data collected and how these help business intelligences. Also, outline the architecture and infrastructure, as well as the planning and implementation of a data warehouse.

(Pre-requisites: BUIN 1020, MATH 2080)

### **BUIN 1075: International Business: 3 credits**

In this course, students will explain the nature of international markets and the impact of globalization in the trade arena. Describe the dynamics between different countries regarding trade and economic integration agreements between countries. Evaluate the different business intelligence tools available to capitalize on opportunities in foreign markets.

### **BUIN 2000: Decision Support Systems: 3 Credits**

In this course, students will analyze the fundamentals and key aspects in the management decisionmaking process. They will examine different types of decision support systems based on decision-analytic models. They will develop a basic design for a decision support analytic system, as well as an implementation plan for the system.

(Pre-requisites: BUIN 1015)

#### **BUIN 2010: Business Analytics: 3 Credits**

In this course, students will analyze the fundamentals of business analytics focusing on the descriptive model. They will apply descriptive statistics for making business decisions. They will also design tables and graphs to organize and visualize the result obtained from data analysis. Additionally, they will examine the MS Power BI tool for extracting, transforming, and loading data (ETL) and create reports to share with interested parties within or outside the organization.

(Pre-requisites: STAT 2000; BUIN 1015)

#### **BUIN 3000: MS Excel for Business Intelligence: 3 Credits**

In this course, students will use MS Excel as a tool for data analysis. They will focus on the creation of Excel tables, graphs, and dynamic tables and graphs for transforming data, whether it be text files or is located in databases into valuable information. Additionally, they will apply basic concepts for logical, numerical, and date and time formulas and functions to transform data and obtain results. (*Pre-requisites: ITTE 1031L; BUIN 2010*)

#### **BUIN 3010: Web Analytics: 3 Credits**

In this course, students will apply web analytics to measure and maximize the value of their business. They will use tools to measure traffic and evaluate the behavior of users who visit a website. They will analyze how to integrate segmentation using dimensions to measure how certain users utilize a webpage. They will establish goals to measure the effectiveness of changes in website content and navigation. Google Analytics will be used as an analytic tool throughout the course.

#### BUIN 4000: Data Warehousing, Data Mining and Data Analysis: 3 Credits

In this course, students will analyze the fundamental concepts of a data warehouse. They will evaluate the preparation of data, information delivery, visualization, and result analysis. They will use data mining to help individuals and organizations to make better decisions. They will describe the tools for analyzing gathered data and how they help business intelligence.

(Pre-requisites: BUIN 1020, BUIN 2000)

#### **BUIN 4010: Applications for Business Analysis: 3 Credits**

In this course, students will analyze the essential elements of applications and their uses in order to perform a business analysis using the Power BI tool, which will create interactive visualizations to be used in business intelligence. They will develop reports and dashboards, without having to depend on information technology or database administration personnel. Additionally, they will use the Power Pivot, Get & Transform, Power View, and Power Map tools.

(Pre-requisites: BUIN 3000)

### BUMA 1000: Introduction to Business: 3 credits

In this course, the student will analyze the business principles and general functions, including the social, political and economic aspects that impact the business environment. The student will evaluate diverse functional areas of the human resources administration, marketing and finance, and how the general functions assist to obtain the goals defined by the business managers.

### BUMA 1050: Introduction to Entrepreneurship: 3 credits

In this course, students will analyze the general aspects, techniques and basic skills needed to develop a company. They will justify the planning and development of a business plan. Additionally, they will explain and develop an ethical and social conscience that will allow them to have good performance in the business world.

(*Pre-requisites: BUMA 1000. Does not apply to the Bachelor's Degree in Education with Major in Preschool Education Program*)

### BUMA 2000: Business Regulations and Permissions: 3 credits

In this course, students will explain the regulations and permits required by the process of establishing a business. Analyze the processes related to the creation and development of a business. Furthermore, students will discuss contractual relations, bankruptcy procedures, and employer rights.

# BUMA 2050: Small Business Planning: 3 credits

In this course, students will analyze the importance of planning in the development of a business. The student will develop a business plan. Additionally, they will evaluate the economic viability and available assistance programs for the different types of businesses.

(Pre-requisites: BUMA 1050, 2000)

(Pre-requisites for the Bachelor's Degree in Education with Major in Preschool Education Program: BUMA 1050, MATH 1010)

#### **BUMA 2150: Small Business Proposal and Development: 4 credits**

In this course, students will compare the financial alternatives available to a business and their implications. Evaluate and justify activities, operations, investing, and financing of a business. Also, prepare a business proposal of a product or service.

(Pre-requisites: BUMA 2050, FINA 2100) (Pre-requisites for the Bachelor's Degree in Education with Major in Preschool Education Program: BUMA 2050, MATH 1010)

# CHEM 1010: General Chemistry for Health Sciences: 3 credits

This course studies the composition and the properties of matter, the diverse chemical reactions and the transfer of energy associated to these reactions for inorganic and organic compounds and biomolecules. It emphasizes the basic concepts of general and organic chemistry as well as biochemistry which apply to the different scenarios of the patient's health care by studying the different cases, internet information and oral presentations.

(Co-requisite: CHEM 1011L) (Pre-requisite: MATH 1010)

**CHEM 1011L: General Chemistry for Health Sciences Lab.: 1 credit** In this course the student will develop skills and acquire knowledge in the use and holding of laboratory equipment besides applying and practicing the different concepts offered in the theoretical course.

(Co-requisite: CHEM 1010) (Pre-requisite: MATH 1010)

### CHEM 2010: General Chemistry I: 4 credits

This course offers the basic principles of Chemistry. It covers changes, properties and classification of matter. The properties of the matter, the energy, and the atomic structure, chemical formulas, the atomic theory and the periodic chart are discussed. Students are introduced to the inorganic nomenclature. It also introduces topics on temperature, heat, pressure, and solutions.

(Co-requisite: CHEM 2011L, MATH 1010)

### CHEM 2011L: General Chemistry I Laboratory: 1 credit

In this course the student will develop skills and learn the use and handling of the laboratory equipment. He will also apply and practice the theory acquired in classroom presentation.

(Co-requisite: CHEM 2010, MATH 1010)

### CHEM 2020: General Chemistry II: 4 credits

This course discusses properties, reactions, production and applications of representative and transitional elements, precipitation reactions, acid-based and redox, general concepts of nuclear chemistry and electrochemistry. Formulas, nomenclature, properties, reactions and structure of organic matters are also discussed. (*Pre-requisites: CHEM 2010, 2011L, MATH 1010*)

#### CHEM 2021L: General Chemistry II Laboratory: 1 credit

In this course, the student will develop skills and learn the use and handling of the laboratory equipment. He will also apply and practice the theory developed in classroom presentation.

(Pre-requisites: CHEM 2010, 2011L, MATH 1010)

### CHEM 2031: General Chemistry: 3 credits

In this course, the student will analyze the properties and classification of matter and the measures used in the scientific field. The student will evaluate atomic structures and the formation of chemical bonds. The student will also justify physical properties and chemical properties for an element using the periodic table. Furthermore, the student will describe various types of chemical solutions and reactions that occur in the formation of compounds. Lastly, the student will evaluate different organic compounds and biological molecules. (*Pre-requisites: BIOL 1010, 2000, MATH 1010*) (*For the Associate's Degree in Applied Sciences in Cardio Respiratory Care: Pre-requisites: BIOL 2000, MATH 1010*)

### CYCR 4010: Cyber Crimes: Operating Systems and Architecture, and Laboratory: 3 credits

In this course, the student will analyze operating systems and their integration into personal computers as well as its architecture. The student will integrate and evaluate the structure, functions, work modalities, and characteristics of different operating systems. Furthermore, the student will also design the implementation, configuration, and management of different environments, platforms, and the management plan for data recovery. (*Pre-requisites: ITTE 1010, ITTE 1011L*)

# CYCR 4020: Applicable Law to Cyber Crimes: 3 credits

In this course the students will discuss the general foundations, infrastructure, attacks and technological challenges of cybercrimes. They will also discuss cyber offenses in Puerto Rico and the federal jurisdiction, in addition to legislation and case law. Moreover, the students will explain the cybercrimes investigative process. (*Pre-requisites: CYCR 4010*)

### CYCR 4030: Networks Security in Cyber Crimes: 3 credits

In this course, students will discuss techniques and safety functions in information systems. The students will evaluate the vulnerability of information systems and the tools available to counter cyber-attacks. In addition, students will discuss about different operating systems, databases, and communication networks in which criminal activity is committed.

(Pre-requisites: ITTE 1010, ITTE 1011L)

### CYCR 4040: Introduction to Cyber Crimes: 3 credits

In this course, the student will discuss the basics of cyber-crimes, cyber-criminal profile, methods and mechanisms to commit cybercrimes, and the classification of cyber-crimes. Also, evaluate and discuss the methods used to commit identity theft, organized crime, and terrorism. In addition, the student will distinguish the importance of computer forensics at present and explain the process for the search and seizure of computer evidence.

### CYCR 4050: Computer Forensics I: 3 credits

In this course, students will examine the fundamentals of digital evidence and how digital investigations are conducted. They also examine how the digital crime scene is handled, the modus operandi of criminals who commit this type of crime and the use of digital evidence obtained through the Internet as a method of investigation in criminal cases. In addition, the students discuss the role of computers in violent crime and the way digital evidence is used as an alibi. Finally, the student will differentiate legal and illegal aspects in forensic science and its application in the field of networking. (*Pre-requisites: CYCR 4040*)

#### CYCR 4060: Computer Forensics II: 3 credits

In this course, students will discuss advanced and legal concepts on computer forensics. They will discuss procedures for subpoenas and search warrants: digital communication methods; and authentication image; hardware and forensic software; Using Linux as a forensic platform; media analysis with EnCase, Toolkit and ProDiscover; and file systems. In addition, they will draft reports for forensic analysis.

(Pre-requisites: CYCR 4050) (This course includes the use of simulator.)

### DEAS 1101L: Dental Anatomy, Nomenclature and Lab.: 2 credits

In this course the students will examine the different structures and anatomical points of the teeth and oral cavity. They identify the primary (deciduous) and permanent teeth using different dental numbering systems such as the universal system, Palmer system and IDF (International Dental Federation) system. Students examine the different anatomical structures of primary teeth (deciduous) and permanent maxillary and mandibular. They identify dental abnormalities affecting the enamel and dentin. In addition, they will develop anatomical wax models of different permanent teeth. (*Co-requisite: BIOL 1010*)

### DEAS 1220: Oral Anatomy, Head and Neck: 3 credits

In this course, students will discuss the basics of the anatomy of the head and neck such as the muscular, skeletal and nervous system with emphasis on the oral cavity. In addition, they discuss the anatomical and functional aspects of the structures and their relationship to the temporomandibular joints. (TMJ or TMD)

(Pre-requisites: BIOL 1010, DEAS 1101L) (Co-requisite: BIOL 2000)

#### **DEAS 1300: Dental Materials Sciences: 2 credits**

In this course, students will discuss the basic concepts related to dental materials. They examine and explain their properties, chemical and physical reactions, and their use in the field of dentistry. They will become familiar with the techniques used for handling of dental materials and will discuss the necessary precautions when using them.

(Co-requisite: DEAS 1311L)

### DEAS 1311L: Dental Materials Sciences Lab.: 2 credits

In this course the students will simulate the handling of dental materials used by the dentist in the dental office. They will mix, observe and explain the chemical and physical reactions that produce the materials by applying them on the dummies. In addition, they will demonstrate the necessary precautions in handling materials that are used in various processes. (*Co-requisite: DEAS 1300*)

### **DEAS 1420: Digitizing of Dental Images: 3 credits**

In this course the students will discuss the origin of the X-ray inside the machine. They will examine different strategies to protect the patient and the operator before, during and after exposure. They will contrast different intra oral and extra-oral X-ray machines, instruments and films used to take X-rays. Students will integrate the concepts of infection control when applying X-ray techniques and during processing. They will explain the process of setting up x-rays. In addition, students examine radiographic errors, causes, anatomical points and oral pathologies seen in dental X-rays. (*Pre-requisites: DEAS 1011L, DEAS 1220*) (*Co-requisite: DEAS 1421L*)

### DEAS 1421L: Digitizing of Dental Images Lab.: 2 credits

In this course the students will apply basic concepts of dental imaging scan. They apply security measures and protection of patient and operator exposure to X-rays. They will perform the process of manual, automatic and digital development. Students will explain the use of different types of radiographs. They conduct the process of making digital and conventional radiographs with mannequins. Students will describe anatomical structures and errors observed in X-rays. In addition, students categorize dental radiographs according to the anatomical area.

(Pre-requisites: DEAS 1101L, DEAS 1220) (Co-requisite: DEAS 1420)

#### **DEAS 1500: Instruments and Clinical Sciences I: 2 credits**

In this course, students will discuss the basics of four hands dentistry. They will examine dental instruments and relate them with their use in clinical dentistry. Students will describe the functions of the various equipment used in the dental office. They will discuss the various preventive and restorative procedures performed in general dentistry.

(Pre-requisites: DEAS 1101L, DEAS 1300, DEAS 1311L) (Co-requisite: DEAS 1220, DEAS 1511L, DEAS 1811L)

# DEAS 1511L: Instruments and Clinical Sciences I Lab.: 2 credits

In this course the students will examine the instruments and equipment used by the dentist in various dental procedures. They apply the process of universal precautions, disinfection unit, and placement of protective barriers and disposal of biomedical waste. Students identify the equipment and instruments according to dental procedures. In addition, they will examine different clinical procedures in the area of restoration and prevention.

(Pre-requisites: DEAS 1101L, DEAS 1300, DEAS 1311L) (Co-requisite: DEAS 1220, DEAS 1500, DEAS 1811L)

#### **DEAS 1600: Oral Pharmacology: 3 credits**

In this course the students will apply the basics of oral pharmacology. They examine drugs used in dentistry focusing on trade name, generic name, therapeutic group, indications, contraindications, adverse reactions and mechanisms of action. In addition, they discuss doses, business presentations available, common interactions, accessory labeling and storage of drugs.

(Pre-requisites: BIOL 1010, BIOL 2000, DEAS 1811L)

#### DEAS 1811L: Oral Microbiology & Infections Control Lab.: 2 credits

In this course the students will examine microorganisms that cause oral diseases. They will apply infection control techniques in dental practice. Students will explain the use of basic concepts of general microbiology and pathogenesis of microbial diseases in humans. Furthermore, they will recognize the importance of the immune system in the defense of microbial diseases and the need to maintain oral health in top condition.

(Pre-requisites: BIOL 1010, DEAS 1011L) (Co-requisite: BIOL 2000, DEAS 1220)

### DEAS 2000: Expanded Functions in Restorative Pre-Clinic Science: 2 credits

In this course, students will discuss the basics of four hands dentistry. They will examine the handling of cements techniques and dental coaters. Students will illustrate the classification of cavities and the anatomical structures that identify each tooth. They will explain the materials and equipment used to place a rubber dam and other isolation methods in dentistry. They discuss the process to restore the teeth using amalgam and resin. In addition, they will classify hand pieces, dental burs and abrasive rubbers according to use.

(Pre-requisites: DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1811L, DEAS 2600, DEAS 2611L, DEAS 2700, DEAS 2920 DEAS 2921L) (Co-requisites: DEAS 2011L, DEAS 2031, DEAS 2041P)

### DEAS 2011L: Expanded Functions in Restorative Pre-Clinic Science Lab.: 2 credits

In this course, the students will apply the basics of dentistry four hands. They will use handling techniques for cements and dental coaters. Students examine the classification of cavities and the anatomical structures that identify each tooth. They will correctly handle the materials and equipment used to place a rubber dam and other isolation methods in dentistry. Students perform the restoration processes using dental amalgam and resin parts. In addition, they will classify hand pieces, dental burs and abrasive rubbers according to use.

(Pre-requisites: DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1811L, DEAS 2600, DEAS 2611L, DEAS 2700, DEAS 2920, DEAS 2921L) (Co-requisites: DEAS 2000, DEAS 2031, DEAS 2041P)

### DEAS 2031: Expanded Functions Preventive Science Clinic Seminar: 2 credits

In this course, students will discuss situations presented in the clinical practice with the dentist. They will present the experience gained during their clinical rotation and identify ways to improve their skills in preventive dental areas: prophylaxis, fluoride treatments, clinical examination, sealants, X-rays and patient education according to the specialty. In addition, the students will review concepts and techniques that can be evaluated in the comprehensive exam.

(Pre-requisites: DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1600, DEAS 1811L, DEAS 2600, DEAS 2611L, DEAS 2700, DEAS 2920, DEAS 2921L, BIOL 1010, BIOL 2000) (Co-requisite: DEAS 2000, DEAS 2011L, DEAS 2041P)

# **DEAS 2041P: Expanded Functions Preventive Science Clinic Practice: 2 credits**

In this course the students will demonstrate mastery in the development of their skills, knowledge and professional skills in the area of prevention. They will conduct Clinical rotation in areas such as prophylaxis, fluoride treatment, clinical examinations, sealants, X-rays and patient preventive education. Under the supervision and support of general or pediatric dentist, they will perform techniques and preventive processes as a dental assistant with expanded duties.

(Pre-requisites: BIOL 1010, BIOL 2000, DEAS 1101L, DEAS 1220, DEAS1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1600, DEAS 1811L, DEAS 2600, DEAS 2611L, DEAS 2700, DEAS 2920, DEAS 2921L) (Co-requisite: DEAS 2000, DEAS 2011L, DEAS 2031)

# **DEAS 2051: Expanded Functions Restorative Science Clinic Seminar: 2 credits**

In this seminar students discuss situations that occur during the clinical practice in restorative and during rotation in the clinic to identify alternatives to improve their skills. In addition, they will review and clarify concepts and processes that are possibly evaluated in the dental assistant comprehensive exam.

(Pre-requisites: BIOL 1010, BIOL 2000, DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1600, DEAS 1811L, DEAS 2600, DEAS 2611L, DEAS 2700, DEAS 2920, DEAS 2921L, MESE 2031L) (Co-requisite: DEAS 2061P)

### DEAS 2061P: Expanded Functions Restorative Science Clinic Practice: 2 credits

In this course the students will demonstrate mastery in the development of their skills, knowledge and professional skills in the area of restoration. They will apply amalgam restoration and resin techniques with the established parameters under the supervision and support of a general or pediatric dentist. In addition, students will conduct technical and administrative processes related to their profession as a dental assistant with expanded functions.

(Pre-requisites: BIOL 1010, BIOL 2000, DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1600, DEAS 1811L, DEAS 2600, DEAS 2611L, DEAS 2700, DEAS 2920, DEAS 2921L, MESE 2031L) (Co-requisite: DEAS 2051)

# DEAS 2600: Instruments and Clinical Science II: 2 credits

In this course the students will identify dental instruments used in various fields of dentistry. They will classify the instruments and identify the specialized dental procedures in pediatric dentistry, endodontics, periodontics, oral surgery, orthodontics and prosthodontics. They will also assess the role of the dental assistant in each of these procedures.

(Pre-requisites: DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L) (Co-requisite: DEAS 2611L, DEAS 2920, DEAS 2921L)

#### DEAS 2611L: Instruments and Clinical Science II Lab.: 2 credits

In this course the students will identify the equipment and instruments used to properly assist the dentist in performing various specialized clinical procedures in pediatric dentistry, endodontics, periodontics, oral surgery, orthodontics and prosthodontics.

(Pre-requisites: DEAS 1011L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L) (Co-requisite: DEAS 2600)

#### DEAS 2700: Histology, Embryology and Oral Pathology: 2 credits

In this course the students will analyze the basic elements of the embryological and histological development of the oral cavity. They will identify the clinical manifestations of the mechanisms of inflammation, neoplasia, wound healing and other conditions in the region of the head and neck. In addition, students will contrast the clinical and pathological conditions of the head and neck.

(Pre-requisites: BIOL 1010, 2000, DEAS 1101L, DEAS 1220, DEAS 1420, DEAS 1421L)

# **DEAS 2920: Preventive Dental Treatment: 2 credits**

In this course the students will discuss the significant historical events and legal decisions that have led to the development of preventive dentistry programs. They will organize information to facilitate dental diagnosis and preventive treatment. Students will examine various periodontal diseases and the importance of community awareness of good oral health habits. They will discuss the importance of developing an education and guidance plan for prevention and nutrition to maintain optimal oral health. In addition, students discuss appropriate oral hygiene techniques for patients with special needs.

(Pre-requisites: DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1811L) (Co-requisite: DEAS 2921L)

#### DEAS 2921L: Preventive Dental Treatment Lab.: 2 credits

Students will discuss basic concepts in the field of preventive dentistry. They will organize information to facilitate dental diagnosis and preventive treatment. They will demonstrate the process of identifying and removing plaque index and prophylaxis. Students will apply fluoride treatment and pits and fissures sealants on mannequins in the lab, as directed, to carry out the dental hygiene process of the client. They will apply disinfection and sterilization techniques to prevent and control infections in the work area. Students will

illustrate diagrams of the oral cavity, charting information of patient dental medical history. They will design educational guidelines for community awareness on prevention and proper nutrition for maintaining optimal oral health. In addition, they will demonstrate appropriate oral hygiene techniques to treat patients with special needs. This is a practice course offered in a laboratory.

(Pre-requisites: DEAS 1101L, DEAS 1220, DEAS 1300, DEAS 1311L, DEAS 1420, DEAS 1421L, DEAS 1500, DEAS 1511L, DEAS 1811L) (Co-requisite: DEAS 2920)

#### ECON 2000: Micro economics: 3 credits

In this course, students will examine basic elements of micro economics, taking into consideration economic and political problems. Justify the theory of consumer and producer behavior, emphasizing different types of markets and their agents. Evaluate models of supply and demand and their changes, the concept and model of elasticity, and state intervention. Also, explain different market structures, evaluating the efficiency, equity, and their failures.

#### ECON 3200: Macroeconomics: 3 credits

In this course, students will review the basics of macroeconomics variables related to economic growth and development. They will discuss the implications of the operation of the fiscal and monetary policy, financial and monetary systems for the stabilization of the economy. Also, they will evaluate the effects of economic policies in a global economy.

(Pre-requisites: ECON 2000)

#### EDUC 2020: Psychology of Human Development: 3 credits

This is the study of alterations or changes which arise in the human organism from conception until old age. It also analyzes the problems related to development and their repercussion in modern education, as well as the applicable theories.

### EDUC 2030: Theories of Instruction: 3 credits

This course deals with the study of the different learning theories and their adaptation to the teaching process and diverse scenarios. Different theories and approaches are analyzed and compared. The function of technology in instruction is studied.

#### EDUC 2040: Fundamentals of Early Education: 3 credits

This is an introductory course based on the evolution and development of early childhood. It includes an analytical and practical review of different programs to measure their effectiveness and integration in early childhood education.

# EDUC 2050: The Process of Active Game in the Child Learning: 3 credits

Theories of play will be studied, in relation to the holistic development and the educational process in early childhood. Focus is given to planning play activities games in and out of the classroom, considering cognitive social-emotional and kinesthetic aspects of childhood for self-discovery. Critical analysis of commercial games emphasizing computerized ones is covered. Critical analysis of studies and scientific research will occur. Emphasis is given to the role of the adult in early childhood play.

#### EDUC 3030: Motor Skills in Early Education: 3 credits

This is an introductory course in motor skills according to the development of the child at an early age. Motor skills which will develop the creative concepts of rhythm and coordination related to arts will be identified. Instructional methods and strategies that promote expressive values will be emphasized.

(Pre-requisites: EDUC 2050)

### EDUC 3120: Teaching Methodology: 3 credits

Study of the different methods and strategies used by teachers for a more effective and significant teaching and learning process. The use of technology in the teaching-learning process. Emphasis is given to the daily planning, the development of educational materials, preparing the official documents needed as a teacher, and using the computer as an educational instrument.

### EDUC 3140: Sociological Foundations of Education: 3 credits

This course studies the interrelationship between the social, cultural and political elements and their influence in the educational systems. Discussion of the matters, which affect today's education.

#### EDUC 3050: Early Observation and Intervention: 3 credits

Analysis of the nature and needs of the infant child. Discussion of direct and indirect methods of observation considering the basic areas of physical, cognitive, social and emotional development.

#### EDUC 3150: Philosophical Foundations of Education: 3 credits

This course studies the philosophical development of education and its goals, as well as the pioneer's developers of educational philosophy. Also, emphasis will be given to the educational processes and events in Puerto Rico and the world in general.

#### EDUC 3160: Exceptional Population: 3 credits

The study of the different groups that make up the exceptional population, their characteristics, teaching strategies and the different placement alternatives. Identification and analysis of the law which guarantees the education of this population.

(Pre-requisites: EDUC 2020, EDUC 2030)

### EDUC 3170: Curriculum Design and Revision: 3 credits

This course studies the principles for curriculum design and development. The relation between curriculum and instruction is discussed. Emphasis is given to the adaptation of the curriculum to the social changes. Provides experiences in the development of skills for the design of teaching units as well as course design.

(Pre-requisites: EDUC 2030, 3150)

#### EDUC 3175: Design and Revision of the Curriculum of the Preschool Child: 3 credits

Study of the principles for the design and development of curriculum at the preschool level. Relation between curriculum and instruction are discussed. This course provides experiences in the skills development in the preschool level to create learning units in the sciences, mathematics and social studies areas. Emphasis is given in the curriculum integration and an interdisciplinary focus.

(Pre-requisites: EDUC 2030, 2050, 3150, 3120, 3160, 3210, 3230)

### EDUC 3180: Ethical and Legal Aspects in Education: 3 credits

This course studies the personal and professional ethics. It includes the analysis of different laws, local and federal, that regulate the educational process and the school environment in Puerto Rico.

#### EDUC 3190: Leadership and Creativity: 3 credits

Analysis of the theories and principles, which support the contemporary concept of leadership. Emphasis on the strengthening of abilities and skills of the educational leader to work with the members of a team, inspiring them in the development and implementation of the innovative and creative activities, especially those related to the technological advances and to help others develop as leaders.

### EDUC 3230: The Language Arts in the Preschool Child: 3 credits

This course will develop in students the necessary skills to understand the process of reading-writing and fundamentals. The different arts of language shall be studied, speaking, reading, writing and listening, with major emphasis on infantile (child-like) literature as a development mean. to the standards of the Department of Education of Puerto Rico will be used as a basis for studying the different arts of language. (*Pre-requisites: SPAN 1010, 1020, EDUC 2030, 3120*)

### EDUC 3250: Health, Nutrition and Security in the Preschool: 3 credits

The course will provide knowledge in preschool nutrition, nutritional values and the implications for good health and confidence in the physician for the holistic development of the child, considering the new Nutritional Standards.

# EDUC 3290: Management Recreation Programs for Childhood Service: 3 credits

This course emphasizes the planning, administration and evaluation of recreational programs and services **geared** toward childhood. It also includes the study and analysis of philosophical, organizing and practical affairs. Knowledge of policy and regulations which rule the establishment and development of a preschool educational center should be acquired by the student.

#### EDUC 4000: Proposal Development: 2 credits

This course covers the composition skills that provide students with a working knowledge of the basic tools of written expression. It is focused on the importance of written proposals and documentation related to trainings and workshops. Special emphasis is given on the editing and revision of general and technical documents related to proposals, applying the computer and other technology resources in multimedia center. (*Pre-requisites: EDUC 3120, ITTE 1010, 1011L*)

### EDUC 4130: Measurement, Evaluation and Assessment: 3 credits

Study and analysis of the techniques and methods used to carry out measurement, evaluation and assessment in the classroom. Emphasis on the preparation, administration and interpretation of the tests and assessment techniques. Application of these techniques to diverse scenarios and populations.

(Pre-requisites: EDUC 2030, 3120, MATH 1010)

#### EDUC 4160: Teaching Methodology of Accounting: 3 credits

Study, analysis and discussion of the new contents, methodology, approaches, goals, scope, and basic competencies required to teach accounting. Application to diverse populations and scenarios. Emphasis is given to daily and course planning, writing objectives, evaluation and other tasks related to the teaching professor. (*Pre-requisites: EDUC 2020, 2030, 3120, 3140, 3150, CONT 1000, 1050, 2100, 2250, 2261L, MATH 1010, 1050*)

#### EDUC 4161L: Handling and Care of the Infant and Laboratory: 2 credits

This course covers the necessary knowledge for the appropriate care of infants in the routine aspects that lead to healthy and complete development. Aspects of hygiene, nutrition and document creation to assess/evaluate the child's development will be also integrated.

### EDUC 4170: Teaching Methodology for Preschool: 3 credits

This course is a critical exam of the theories and practices within the process of teaching and learning in preschool level. The student will practice the implementation of models, techniques and strategies. Achievement of educational objectives at this level is oriented in a holistic manner and requires real work scenario experiences. (*Pre-requisites: EDUC 2020, 2030, 3030, 3120, 3160, 3230, 3250*)

### EDUC 4551P: Clinical Experiences: 5 credits

This course covers a series of clinical experiences carefully planned and properly supervised, directed towards the applied practice of related competencies in the teaching learning process. The student will be responsible for producing a creative project in which he will demonstrate his capability for integrating education to his/her major. (Co-requisite: SEMI 4001) (Pre-requisites: *EDUC 2020, 2030, 2040, 2050, 3030, 3050, 3120, 3140, 3150, 3160, 3175, 3180, 3190, 3230, 3250, 3290, 4130, 4161L, 4170*)

#### ELEC 1010: Basic Electricity: 4 credits

This course provides the knowledge of the fundamental laws of electricity including the electrical function of typical circuits. Ohm's law, Thevenin and Norton theorems, capacitance, inductance and reactance as well as transformer applications are included. The course is divided in two parts: the study of DC current; circuits and applications and the study of AC currents; circuits and applications.

(Co-requisite: ELEC 1021L)

#### ELEC 1021L: Basic Electricity Lab.: 2 credits

This course covers a practical approach to the theory and fundamental electrical laws studied in the course ELEC 1010. It includes a series of experiments on both DC and AC circuits. Themes included are resistance combinations, DC and AC resistive circuits combinations, RC, RL, and RLC circuits, Thevenin and Norton theorems and other circuits applications.

(Co-requisite: ELEC 1010)

#### ELEC 1030: Basic Electronics: 4 credits

This course includes the electronic fundamentals that will help develop practical knowledge used in the solution of real electronic circuit problems. Some of the subjects discussed are semiconductors, transistors, amplifiers, thrystors, optoelectronic components and applications in communication systems such as sound, radio and T.V.

(*Co requisite: ELEC 1041L*) (*Pre-requisites: ELEC 1010, 1021L*)

# ELEC 1041L: Basic Electronics Lab.: 2 credits

This course includes a series of experiments directed toward the practical handling of diodes, transistors, thrystors and other electronic components. It includes the measurement of every component to verify its state, amplifier circuits and its construction, analysis, and applications.

(Co-requisite: ELEC 1030) (Pre-requisites: ELEC 1010, 1021L)

### **ELEC 1050: Digital Electronics: 4 credits**

This course provides the fundamentals of digital electronics that will help develop practical knowledge in solving real equipment situations. It includes techniques to diagnose digital circuits' failures and includes logic gates, flip flops, combinational and sequential circuits and applications.

(Co-requisite: ELEC 1061L) (Pre-requisites: ELEC 1010, 1021L)

#### ELEC 1061L: Digital Electronics Lab.: 2 credits

This course includes experiments designed to apply the fundamentals of digital electronics that will help develop practical knowledge in solving real circuits' situations. Techniques to diagnose digital circuits' failures and repair methods are discussed. Experiments include logic gates, combinational and sequential circuits, flip-flops, decoders and multiplexers.

(Co-requisite: ELEC 1050) (Pre-requisites: ELEC 1010, 1021L)

### ELEC 1350: Operating Systems for Electronics: 3 credits

This course includes the use and handling of personal computers with a graphic oriented operating system. The students are trained in the use and management of the Operating System in disc (DOS), and a graphic Operating System (GUI) to recognize their differences.

(Co-requisite: ELEC 1361L)

### ELEC 1361L: Operating Systems for Electronics Lab: 2 credits

This course trains the student in the use and management of the Operating System in disc (DOS), and a graphic Operating System (GUI) to recognize their differences.

(Co-requisite: ELEC 1350)

#### ELEC 2200: Introduction to the Microprocessors: 3 credits

This course presents the basic concepts of a microprocessor functioning, its interconnection to other elements such as memory, input and output devices and microprocessor programming. Its use as a control element for electronic equipment, programmable gates and elements of a microprocessor family are also included.

(Co-requisite: ELEC 2211L) (Pre-requisite: ELEC 1030, 1041L, 1050, 1061L)

### ELEC 2211L: Introduction to the Microprocessors Lab: 1 credit

This course includes experiments designed to develop skills in the handling and programming of a microprocessor trainer as a model of real microprocessors. Some of the themes included are algorithms, programming modes, addressing modes, pnemonic, opcodes, memory and I/O interfaces, electronic equipment control, etc.

(Co-requisite: ELEC 2200) (Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

#### ELEC 2350: Introduction to Robotics: 3 credits

This course provides the student with a wide scope of the fundamentals and applications of industrial robotics. Basic concepts of industrial robots are included, such as: typical configurations of the articulations, control and programming units, commercial specifications, implementation and applications.

(Co-requisite: ELEC 2361L) (Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

### ELEC 2361L: Introduction to Robotics Lab.: 1 credit

As a complement to the robotics course, this course provides the student with the practical skills in programming, manipulating and maintenance of robotic arms articulations in the laboratory.

(Co-requisite: ELEC 2350)

(Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

### ELEC 2400: Introduction to the Industrial Electronics: 3 credits

This course studies the basic concepts of industrial electronics such as: operational amplifiers used in industrial equipment applications and integrated circuits, industrial controls, motor operation, power and process controls, telemetry and data communications, sequential process and programmable controllers (PLC).

(Co-requisite: ELEC 2411L)

(Pre-requisite: ELEC 1030, 1041L, for the Electrical Engineering Technology with Renewable Energy Program)

(Pre-requisite: ELEC 1030, 1041L, 1050, 1061L, for the Electronics Engineering Technology in Telecommunications Program)

### ELEC 2411L: Introduction to the Industrial Electronics Lab.: 1 credit

This laboratory offers the opportunity to apply the basic concepts used in industrial applications including OPAMP's, IC's and PLC's. Experiments include operational amplifier configurations and applications, trystors and applications, motor control systems, PLC's basic ladder diagrams and industrial security.

(Co-requisite: ELEC 2400) (Pre-requisites: ELEC 1030, 1041L, for the Electrical Engineering Technology with Renewable Energy Program) (Pre-requisite: ELEC 1030, 1041L, 1050, 1061L, for the Electronics Engineering Technology in Telecommunications Program)

#### ELEC 2450: Telecommunications: 3 credits

This course provides the student with updated concepts of the telecommunication systems including transmission and reception circuits, networks, microwaves, satellite, fiber optics and wireless technology.

(Co-requisite: ELEC 2461L) (Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

### ELEC 2461L: Telecommunications Lab.: 1 credit

This course presents the students with a series of experiments including the use of a specialized telecommunications trainer. Experiments include the development of transmission and reception circuits using fiber optics, radar and telephony concepts including wireless technology, related to the telecommunications field.

(Co-requisite: ELEC 2450) (Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

### ELEC 2550: Microwave signals, devices and transmission: 3 credits

This course provides the theorical base about the devices used in the transmission and reception of microwave signals, and the theory about propagation of this type of signal. It includes themes such as RF signals, amplifier circuits and oscillators for RF, devices, transmissions signals propagation signals, propagation by diffraction, atmospheric, effects, and digital links among others.

(Co-requisites: ELEC 2561L) (Pre-requisites: ELEC 2450, 2461L

#### ELEC 2561L: Microwave signals, devices and transmission laboratory: 1 credit

This course provides the practical experimentation about the devices used the transmission and reception of microwave signals as well as the propagation of this type of signal. Experiments in amplifier circuits, oscillator circuits, RF signals, semiconductor devices, signal transmission, signal propagation by diffraction and atmospheric effects are included, among others.

(Co-requisites: ELEC 2550L) (Pre-requisites: ELEC 2450, ELEC 2461L)

#### ELEC 2650: Telecommunications II: 3 credits

This course includes the second part of the course ELEC 2450 or Telecommunications I. Themes, like modems, protocols LAN's, emergent technology and wireless communications in its first part, are included. The second part of the course includes the development of structural cabling, important in the development of modern telecommunications.

(Co-requisites: ELEC 2661L) (Pre-requisites: ELEC 2450, ELEC 2461L)

#### ELEC 2661L: Telecommunications Laboratory II: 1 credit

This course includes the practice of the second part of the laboratory ELEC 2461L: Telecommunications I Laboratory. Topics such as modems, protocols, LAN's, emergent theory, wireless communications are included in the first part. Also, included is the practice about structured cabling, including cabling systems, media, connections, support structures, junctions, endings, and practical applications.

(Co-requisites: ELEC 2650) (Pre-requisites: ELEC 2450, ELEC 2461L)

### ELEC 2750: Electronic Equipment Repair: 3 credits

This course presents the student the basic concepts of electronic equipment such as DVD's, CD's, and the new developments in electro domestic equipment such as TV's and MWO. The course includes the techniques for troubleshooting the most common failures of each studied equipment.

(Co-requisite: ELEC 2761L) (Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

# ELEC 2761L: Electronic Equipment Repair Laboratory: 2 credits

This course provides the student with the practice in electronic equipment covered in the course ELEC 2750: TV, MWO, DVD, and CD. It includes schematics reading and technical replacement manuals handling in repair and maintenance. The course includes the practice of troubleshooting techniques for the most common failures of each equipment.

(Co-requisite: ELEC 2750) (Pre-requisites: ELEC 1030, 1041L, 1050, 1061L)

#### ELEC 2820: Satellite and Radar Technology: 3 credits

This course offers the comprehensive theory of the basic principles and applications in the satellite and radar field. It covers the technological aspects and applications of satellites. It includes aspects such as orbits, trajectories, communication techniques, multiple access and linkage, remote sensorial applications, meteorology, navigation, science and the military. The fundamental radar theory, covering the basic theory, block diagrams, frequency and applications is included. Also, the MTI and Doppler pulse theory, wave propagation, antennas, transmitters and receivers are included. Important themes such as automatic tracking Doppler technology aerial radars and target recognition are also included.

(Co-requisites: ELEC 2831L) (Pre-requisites: ELEC 2450, ELEC 2461L)

### ELEC 2831L: Satellite and Radar Technology Laboratory: 1 credit

This course offers the laboratory practice complementary to the satellite and radar theory. It covers the technological aspects and applications of satellites and radars. Aspects such as, orbits, trajectories, communications, techniques, multiple access and linkages are included. Also, included are the remote sensorial and meteorology practical applications, navigation, science and military applications. Also, the course includes experiments about the Doppler pulse, wave propagation, antennas, transmitters, receivers and automatic tracking.

(Co-requisites: ELEC 2820) (Pre-requisites: ELEC 2450, ELEC 2461L)

#### ELEC 2850: Programmable Logic Controllers (PLC): 3 credits

This course prepares the student with the fundamentals of the functions and capacities of a PLC (Programmable Logic Controller). It includes the important aspects of security and operation. Also, the aspects of its connection, programming using ladder diagram, applications and maintenance (trouble shooting) are included.

(*Co-requisite: ELEC* 2861*L*)

(*Pre-requisites: ELEC 2400, 2411L, for the Electrical Engineering Technology with Renewable Energy)* (*Pre-requisites: ELEC 1030, 1041 for the Electronics Engineering Technology in Telecommunications*)

### ELEC 2861L: Programmable Logic Controllers (PLC) Lab.: 1 credit

This course provides the student with the practical knowledge about the use, applications, programming and maintenance of PLC's. The course includes the use of advanced PLC units for the interconnection of PLC to various applications of load controls and other process simulating industrial and general applications.

(Co-requisite: ELEC 2850) (Pre-requisites: ELEC 2400, 2411L, for the Electrical Engineering Technology with Renewable Energy) (Pre-requisites: ELEC 2200, 2211L, 2400, 2411L for the Electronics Engineering Technology in Telecommunications)

### ELEC 2891: Regulations seminar and FCC elements: 1 credit

This course presents information material and reviews for the different required elements for FCC (Federal Communications Commission) for the telecommunications area. Also, included are the federal agencies regulations concerning this area of technology. (*Pre-requisites:* ELEC 2650, ELEC 2661L)

#### **ELEC 2901P: Electronic Practice: 3 credits**

This course includes the application of the electronic knowledge and techniques in a manufacturing or service environment. The student, by means of a cooperative agreement, will be evaluated in a real industrial environment, at the same time that he develops his occupational techniques. Before beginning internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program. (*Pre-requisites: ELEC 2500, 2511L, 2750, 2761L, 2350, 2361L, 2450, 2461L, 2850, 2861L*)

# ELEN 1050: Thriphasics Electrical Circuits Analysis: 3 credits

This course will present the student the concepts of monophasic and Thriphasics electrical circuits analysis applying the concepts of vectorial analysis of electromagnetic forces. The student will obtain additional knowledge to understand the generation and maintenance of potency of Thriphasics systems. The corresponding physics laws that apply to electrical forces circuits such as Lentz, Ampere, Faraday, and other laws will be reviewed.

#### ELEN 2310: Electrical Machineries: 3 credits

The course of Electrical Machineries provides students with knowledge about the different forms of producing energy in alternators and the devices, mechanisms and machinery used in the transmission, distribution and consumption of alternate current. The student will study apparent reactive and real power, step-up and step-down transformers, monophasic, polyphasic and synchronous motors, voltage regulators synchronous converters and direct current machinery.

(Co-requisite: ELEC 2311L) (Pre-requisites: ELEC 1010, 1021L)

#### ELEN 2311L: Electrical Machineries Lab.: 2 credits

In the laboratory of electrical machinery, the student will develop the skills and abilities in the installation and management of the different machineries of direct and alternate current such as: DC Generators, triphasic and monophasic alternators, distribution transformers (step-down), monophasic and triphasic motors, voltage regulators, synchronous converters, motors and DC equipment.

(Co-requisite: ELEN 2310) (Pre-requisites: ELEC 1010, 1021L)

### ELEN 2320: Electrical Regulations and Wiring: 3 credits

The course on regulations and electrical wiring will provide the student knowledge about the reading and interpretation of blueprints and electrical diagrams. Studies on regulations and laws that rule the electrical installations (residential, commercial, and industrial) are included. Regulations, analysis and usage of the different devices and materials used in electrical installations are studied. Also included are the design methods utilizing the regulations of the National Electrical Code (NEC), NEMA, UL, OSHA and those of the Electrical Energy Authority (AEE).

(Co-requisites: ELEN 2321L) (Pre-requisites: ELEC 1010, 1021L)

#### ELEN 2321L: Electrical Regulations and Wiring Laboratory: 2 credits

The laboratory of regulations and electrical wiring and installations will provide the necessary knowledge so the students will install the devices and electrical equipment (residential, commercial and industrial), guided by the interpretation of the electrical blue prints and diagrams. The student will apply the regulations and analyze the different devices and materials used in the electrical installations. The student will design and install the devices based on the regulations of the National Electrical Code (NEC), NEMA, UL, OSHA and the current regulations of the Electrical Energy Authority.

(Co-requisites: ELEN 2320) (Pre-requisites: ELEC 1010, ELEC 1021L)

### ELEN 2430: Conventional and Renewable, Electric Power Systems: 3 credits

The course on Electrical Power Systems provides the student knowledge about the conventional and renewable electrical system in Puerto Rico and its operation, starting with the different generation systems, transformation, transmission, distribution and consumption of the electrical energy including machinery, equipment, tools and devices; not only in triphasics but also in monophasic systems.

(Co-requisites: ELEN 2431L) (Pre-requisites: ELEN 2310, 2311L)

#### ELEN 2431L: Conventional and Renewable, Electric Power Systems Lab.: 1 credit

In this laboratory, the student will make experiments related with the electrical transition and distribution system, triphasics generation, phases sequence, transmission lines, power transformations, alternators simulation, reactive power compensation in transmission lines, and safety considerations in the electrical power system.

(Co-requisites: ELEN 2430) (Pre-requisites: ELEN 2310, ELEN 2311L)

#### ELEN 2450: Renewable Energy Principles: 3 credits.

This course provides the practical concepts for the development and use of the renewable energy systems such as: solar, eolic, hydraulic, biomass, ocean-thermal, and geo-thermal, among others.

(*Co-requisites:* ELEN 2461L)

(Pre-requisites: ELEN 2430, 2431L for Electric, ELEC 1030, 1041L for Electronic)

### ELEN 2461L: Renewable Energy Principles Lab.: 1 credit

This course provides the basic concepts for the development and use of the renewable energy systems, such as solar, eolic, hydraulic, ocean-thermal and geo-thermal, among others.

(Co-requisites: ELEN 2450)

(Pre-requisites: ELEN 2430, 2431L - for Electric, ELEC 1030, 1041L - for Electronic)

#### ELEN 2470: Modern Systems of Electrical Illumination: 2 credits

This course provides the student with the competencies necessary to understand and analyze the different techniques used in the design of modern systems of illumination and exterior. The course includes: studies in the basic units used, physical principles of functioning, vapor lamps, mercury lamps, sodium lamps, description of luminaries, lighting control, application to interior and exterior illumination, safety considerations in the installation and repair of interior and exterior illumination systems.

(Co-requisites: ELEN 2471L) (Pre-requisites: ELEN 2320, 2321L)

### ELEN 2471L: Modern Systems of Electrical Illumination Lab.: 1 credit

This course will provide the student with the necessary competencies to understand and analyze the different techniques used in the design of interior and exterior illumination systems. During the course, the student will have the opportunity to implement diverse types of wiring and combinations to obtain adequate illumination environments. In addition, he/she will acquire the necessary knowledge to prepare, analyze and give preventive maintenance to the illumination circuits. (*Co-requisites*: ELEN 2470) (*Pre-requisites*: ELEN 2320, 2321L)

### ELEN 2550: Electrical Systems Protection: 3 credits

In this course, the student will study the adequate procedures to detect failures in the different control electrical systems and their correction afterwards. Supervision methods will be established for the preservation and maintenance program for electrical equipment.

(Co-requisite: ELEN 2551L) (Pre-requisites: ELEN2430, 2431L)

### ELEN 2551L: Electrical Systems Protection Lab.: 1 credit

Theoretical-practical type of course for (professional) formation, with the general objective of rendering a global vision of the protection equipment mostly used in the Power Electrical Systems in a way the student will be able to select the most adequate protections and determine the necessary adjustments in a particular application, and also to understand and utilize the normalized symbology applied in the control and protection blueprints of these systems. The course considers expositive classes with the assistance of audiovisuals, complemented by the handling of notes and exercise guides, some of which are developed in class and the others are developed by the student individually. In addition, in the practice component, laboratory experiences will be developed in which the behavior of different protections is studied in simulated electrical systems under different operational conditions.

(*Co-requisites*: ELEN 2550) (*Pre-requisites*: ELEN 2430, 2431L)

#### ELEN 2600: Industrial Security: 3 credits

The student will acquire the knowledge and basic concepts related to safety and health in the Pharmaceutical Industry, Services and Manufacturing Electronics. The preventive and remedy solutions to confront physical accidents caused by electrical charges, inhalation of toxic gases and others. The regulations of the Department of Labor and OSHA applicable to these industries will be reviewed.

### ELEN 2901P: Electrical Practice and Seminar: 3 credits

In this, the knowledge and electrical techniques in a manufacturing or service environment will be applied. The student, by means of a cooperative agreement, will be evaluated in a real industry environment at the same time that he will develop his occupational skills. (*Pre-requisites: ELEC 1010, 1021L, ELEN 2310, 2311L, 2320, 2321L, 2430, 2431L, 2450, 2461L, 2550, 2551L*)

### ENGL 1010: Basic English I: 3 credits

In this course, the students will demonstrate proper use of the English language with a primary focus on syntax, grammar, punctuation, and spelling. Students will distinguish verb tenses in sentences and paragraphs. Also, the students will produce clear, well developed and well organized sentences, messages, paragraphs, and short compositions using correct capitalization, punctuation and syntax. Also students will argue about a variety of contexts such as reading and media materials on the Internet, short stories and library resources.

#### ENGL 1020: Basic English II: 3 credits

In this course students will increase their listening, reading, writing, and speaking skills in English as a second language. Students will demonstrate an understanding of the elements of grammar, literature and the development of the writing, reading, and listening abilities as well as the speaking skills. Also they will apply critical thinking skills in reading and writing.

(Pre-requisite: ENGL 1010)

#### ENGL 2000: Business English: 3 credits

In this course, students will practice verbal and written expression skills for use in business and professional context by increasing their business vocabulary and introducing them to specific oral and written skills required in the business environments. Special emphasis is given to business vocabulary, letters, memoranda, writing and reading as coordinated skills for written compositions and other written documents.

(Pre-requisite: ENGL 1020)

#### **ENGL 2050: Conversational English: 3 credits**

In this course, students will review their writing knowledge and apply rules of Grammar for writing affirmative statements, negative statements, and questions in the present, past, and future verb tenses in preparation for conversation. They will analyze English pronunciation, intonation and word stress in context.

Students will then evaluate idiomatic phrases and verbal idioms according to meaning and applicability for oral and written discourse. Also, the students will develop in writing and defend orally a position on a topic through persuasive speech, where they will showcase their skills in pronunciation, word stress, intonation, and general oral communication. (*Pre-requisite: ENGL 1020*)

# ENGL 2160: Technical English: 3 credits

This course is designed to enable the students to communicate both orally and written using technical English language including terms and devices names related to the engineering technology field. It includes technical vocabulary needed in the development of technical reports, memos, letters, resumes, etc. Also included are the development steps for a formal technical report.

# EXCL 1000L: Basic Excel: 3 credits

In this course, students will apply basic skills for working with Excel tools. They will manage different calculation sheets to organize data using formulas and functions. In addition, they will graph data, insert tables, and write professional reports. (*Pre-requisite: ITTE 1011L*)

# ETHI 1010: Ethics and Professionalism: 3 credits

In this course, students will analyze the fundamental concepts, philosophical principles, and the importance of the study of ethics, as a discipline, in a globalized society. Evaluate the role of ethics in human reality, taking into account the values, morals, and virtues that we have as a society. Furthermore, students will examine the ethical, moral standards, and rules that govern the actions and decision-making in the workplace.

# FIS 101: Physics Allied Health: 3 credits

The Health Allied Physics course is focused on the concepts of physics with a vision toward health. It provides a study of the basic concepts of matter, energy, space, movement, pressure and the inter-relationship among these concepts. Emphasis is given to the laws that apply to gases and their application in health sciences. The course consists of 45 hours.

### FINA 2100: Finance and Cash Flow: 3 credits

In this course, students will analyze most convenient financing alternatives and cash control techniques for efficient business management. Discuss and prepare financial reports that provide direction in the process of decision making. Also, explain risk measures and return of investments, as well as the valuation of different types of bonds.

(Pre-requisites: MATH 1010)

# FINA 2710: Money and Banking: 3 Credits

This course is the study and analysis of money, its development within the financial institution structures and its valuation in the market. It emphasizes the money and economic policy as an instrument that affects the administration of assets, liabilities, capital, interest rates, investment market, and banking services.

### FOIN 1010: Introduction to Forensic Investigation: 3 credits

In this course, the student will discuss the fundamental concepts and historical development of forensic investigations. The student will analyze the role of the forensic investigator, the types of evidence collected by them, and the difference between a forensic investigator and a criminalist.

### FOIN 2020: Forensic Photography: 3 credits

In this course, the student will discuss the historical and technological development of forensic photography. The student will analyze the responsibility of the forensic photographer in a crime scene and during the legal process. The student will also justify the use of photography in the process used to identify evidence and establish its importance in criminal proceedings.

(Pre-requisite: FOIN 1010)

### FOIN 2030: Collection and Analysis of Physical Evidence: 3 credits

In this course, the student will analyze the importance of physical evidence in a forensic investigation, as well as the correct techniques used to conserve and protect the physical evidence. The student will discuss the mechanism used to perform a presumptive blood analysis and select the correct technique to collect blood samples and control samples. The student will distinguish the different classes and characteristics of evidence and the steps used to collect and process documents. The student will also descriptively discuss the gathered evidence.

(Pre-requisite: FOIN 1010)

#### FOIN 3040: Crime Scene Processing: 3 credits

In this course, the student will analyze the measures used to process a crime scene, identify the techniques used to search for and find evidence in a crime scene, and discuss the requirements for obtaining a search warrant. (*Pre-requisite: FOIN 1010*)

#### FOIN 3050: Research and Analysis of Post Mortem Examinations: 3 credits

In this course, students will analyze death, its forms and characteristics to determine the time of death. The student will evaluate various forms of traumatic deaths. Also, describe different types of trauma that a corpse presents and its importance in the process of reconstructing a scene. (*Pre-requisite: FOIN 1010*)

# FOIN 4060: Classification and Processing of Fingerprints: 3 credits

In this course, the student will discuss basic fingerprint patterns and their subcategories. The student will compare fingerprint types, the techniques used to detect and identify them, and the process of transfer, pre-transfer and post-transfer used in the recovery of latent fingerprints. The student will explain the purpose of the Automated Fingerprint Identification System (AFIS) and how it is used in criminal cases. The student will also discuss the ethical and legal aspects involved in processing fingerprints. (*Pre-requisite: FOIN 1010*)

# HEED 1020: Foundation of Education for Health: 3 credits

The philosophical, social, psychological, legal, and public health foundations that serve as a basis to develop a health education program in the school and the community will be analyzed.

### HEED 1040: Nutrition, School and Community: 3 credits

This course provides the knowledge about food, its components, and the implications of a balanced diet for good health. The new recommendations for the ingestion of food, the relation between nutrition and school performance and the educational and nutritional programs directed to different populations and the controversy areas related to nutrition are discussed.

(Pre-requisite: BIOL 1010)

### HEED 1500: First Aid: 3 credits

The techniques employed for the immediate care of a person in a medical emergency situation to prevent harm or death are studied. It includes the following cases: shocks, cardiopulmonary resuscitation, fractures, intoxication, insect bites and burns.

### HEED 2050: Environmental Health Education: 3 credits

The foundations of environmental health and their relation to Health Education will be analyzed, with the purpose of protecting life, preserving individual and community health in the following areas: air, water, soil, and food. The prevention of contamination, control and disposition of garbage and other debris, noise control, adequate treatment of food as well as sustainable development of the ecological environment will be discussed.

(Pre-requisites: BIOL 1010, HEED 1020)

### HEED 2060: Personality Dynamics and Mental Health: 3 credits

The personality from various perspectives in psychology is discussed, giving emphasis to psychoanalytical, behavioral, humanistic, cognitive and features. Analysis of the main mental health problems in Puerto Rico and their impact on individual and community health highlighting the role that health education plays in terms of their prevention and treatment. (*Pre-requisites: EDUC 2020, HEED 1020*)

### HEED 2080: Health Education During the Adulthood and Old Age: 3 credits

Study of the basic principles of gerontology and andragogy and their application to health education during adulthood and old age. The outstanding theories of the biology, psychology, education, and sociology fields about the aging process in function of the promotion of integral health are discussed.

(Pre-requisite: HEED 1020)

# HEED 3010: Health and Quality of Life: 3 credits

In this course, students will study the fundamental knowledge of natural sciences. It emphasizes the foundations of human physiology related to the structure and functioning of the human body. In particular, they are studied in relation to health. It also highlights the impact that this knowledge offers to the life quality of the human being.

#### HEED 3020: Health Education Counseling: 3 credits

Study of the philosophy and objectives of counseling and their relation to health education. By means of the media utilized, the students will be facilitated the process of identifying and managing different counseling models utilized in health education, with special attention to the intervention models in group dynamics. (*Pre-requisites: EDUC 2020, 2030, 3140, 3150, HEED 1020*)

### HEED 4040: Human Sexuality and Education: 3 credits

Analysis of the biological, psychological, legal, social, and cultural bases of human sexuality, with emphasis on the implications for sexual education. The role of the health teacher in the prevention of problems related to sexual and reproductive health will be discussed.

(Pre-requisites: BIOL 1010, 2000, EDUC 2020)

### HEED 4120: Teaching Methodology of Health Education: 3 credits

Theoretical and practical analysis of the teaching-learning process in health education. Planning, curricular analysis, teaching adaptation and implementation, and learning instruction and evaluation in the health education field are emphasized. (*Pre-requisites: EDUC 2020, 2030, 3140, 3170, 4130, HEED 1020, 1040, 2050, 2060, 2080, 3010, 3020*)

### HEED 4311P: Interdisciplinary Experiences: 3 credits

In this course the students are required to engage actively in the process of teaching and learning in a state public school or private school accredited by the relevant agencies. These experiences provided the theoretical tools, techniques, practices and methodologies to develop in the participants the knowledge, skills and attitudes that contribute to improving their teaching practice. In addition, we discuss and analyze current issues in education, as well as situations that arise in clinical experiences.

(Pre-requisite: EDUC 2020, 2030, 3140, 3160, HEED 1020, 1040, 3010, 2050, 2060, 2080, 4120, 3020, 4040)

### HEMA 1000: Introduction to Healthcare Administration: 3 credits

In this course, students will analyze the basic concepts involved in the healthcare management, the main types of healthcare systems and their constituent organizations. Students will describe the different administration components and apply these to organizations that provide healthcare services. Furthermore, students shall discuss the importance of maintaining high ethical standards and operating within the legal framework applied to healthcare services.

### HEMA 1010: Healthcare Management and Policy Planning: 3 credits

In this course, students will discuss the nature of managing healthcare service organizations. They will explain the importance of vision in the planning and administration processes of healthcare organizations. They will analyze the characteristics and responsibilities of management on several levels throughout the organization. They will discuss operational as well as personnel management decision making processes. Additionally, they will develop a strategic plan for a healthcare organization.

(Pre-requisite: HEMA 1000)

#### HEMA 1020: Ethical and Legal Issues in Healthcare Management: 3 credits

In this course, the student will analyze the basis and principles of law and the constitutional basis of a legal system. Students will evaluate the policies and legal issues involved in providing healthcare services. Students will also analyze state and federal legislation regarding the right to privacy, labor law, and healthcare services.

# HEMA 1030: Healthcare Organizational Finance: 3 credits

In this course, the students will analyze and apply basic financial concepts to healthcare service organizations. They will discuss the processes used and the financial implications of the different kinds of healthcare service organizations and the sources from where they generate income. They will evaluate the financial condition of healthcare organizations. Also, they will analyze and justify the different tools used to analyze the financial condition and make strategic decisions for these organizations.

(Pre-requisite: ACCO 3520, FINA 2100, HEMA 1000)

#### HEMA 1040: Healthcare Information Systems: 3 credits

In this course, student will discuss the importance of the use of information technologies in the healthcare services sector (HMIS). They will apply the evaluation criteria used to select the HMIS technological infrastructure that is most appropriate to the operational requirements of an organization. Students will also assess the strategic planning concepts related to technological projects within the healthcare services sector.

(Pre-requisite: BUAD 2000, BUIN 1010)

#### HIST 1010: History of Puerto Rico: 3 credits

In this course the student will analyze the events and historical development of Puerto Rican society since "Pre-Colombian" time until the XXI century. In addition, the student will explain diverse historical periods and their correlation with current events on a national level through the study of economic, political, social and cultural transformations.

#### HIST 4020: History of United States: 3 credits

The student will acquire general knowledge of the history of the United States. Through this course, students will analyze different aspects of the political, social and economic development through the historical periods of the North American society. Controversial issues and their relation with the world will also be studied. The impact of the relationship between the United States and Puerto Rico will be studied.

#### HOSE 1010: Forensic Psychology: 3 credits

In this course, the student will analyze the historical development of forensic psychology. The student will present arguments about a delinquent's psychological profile, the classifications for confessions and the mechanisms used to determine competence and/or incompetence. The student will also examine the evaluation process used to determine if the person accused of committing a crime understands the nature and consequences of their actions. The student will categorize crimes into aggressions, violent crimes, nonviolent crimes, and mass murders.

### HOSE 2020: Introduction to Homeland Security: 3 credits

In this course, the student will analyze the tasks performed by the Homeland Security Agencies of the United States to protect the nation against terrorist attacks, immigration, natural disasters, transportation, fraud, forgeries and cybersecurity. The student will examine the focus of national security policy and will differentiate between the functions regarding said system.

(Pre-requisite: HOSE 1010)

### HOSE 2030: Homeland Security Agencies: 3 credits

In this course, the student will analyze the functions, purposes and development of the agencies that make up the Homeland Security system. The student will evaluate the functions of the agencies and present arguments according to their goals and objectives.

(Pre-requisite: HOSE 2020)

# HOSE 3040 : Terrorism: 3 credits

In this course, the student will explain and analyze the historical background of terrorism around the globe, as well as the schemes used by terrorists to induce panic. The student will also identify the legal consequences of carrying out this type of criminal action.

(Pre-requisite: HOSE 2020)

# HOSE 3050: Aviation Security: 3 credits

In this course, the student will analyze and evaluate the concepts related to national aviation security, which has the purpose of reducing security risks and vulnerabilities associated with general aviation operation by focusing on threat and risk management. (*Pre-requisite: HOSE 2020*)

#### HOSE 4060: Cyber Security: 3 credits

In this course, the student will analyze and identify concepts that are related to cyber security and their historical development, the techniques used to diminish computer attacks, and the legal consequences that this type of criminal activity entails. The student will also discuss domains, the evolution of computer security, and explain the current policies on cyber security and their effects on society. (*Pre-requisite: HOSE 2020*)

### HUMA 1010: Humanities I: 3 credits

In this course, students will examine fundamental aspects of the evolution of mankind and its importance today. Explain the development of social, economic, political, religious, and cultural movements of ancient civilizations and how these have influenced the evolution and development of Western civilization. Also, evaluate the importance of values showing the evolution and development of said civilization.

### HUMA 1020: Humanities II: 3 credits

In this course the student will discuss various manifestations of Western culture from a multidisciplinary and interdisciplinary perspective. In addition, from the periodization it will examine some of the movements, values and key concepts for the formulation of social and cultural development of the historic movements, ranging from the Middle Ages to modern times.

(Pre-requisite: HUMA 1010)

### **HUMA 2101 Introduction to Humanities**

#### 3 credits

In this course the origin of the human being is studied and its evolution since the prehistory to history. It includes the study of the cultural contributions of Greece to the Western World with emphasis on the art works, literature and religion.

### HURE 1010: Recruitment and Selection: 3 Credits

In this course, students will analyze the basic functions of human resources in organizations. Design job analysis, descriptions, and specifications as required by the organization. Outline selection of personnel and recruitment processes.

(Pre-requisite: BUAD 3000)

### HURE 1020: Training and Development of Human Resources: 3 credits

In this course, students will analyze the effective design of training and employee development considering the different business needs and the particular aspects of the participants. Evaluate the need for training and the various methods used to meet them. Design a training evaluation program. Also, value employee development, challenges in career development, and the future of training and development programs.

(Pre-requisite: HURE 1010)

#### HURE 1030: Fundamentals of Business Coaching: 3 Credits

In this course, students will examine the fundamentals of business coaching and its impact on modern organizations. Contrast the various coaching processes and procedures. Design an individual coaching development plan. Also, examine the ethical, legal, and technology support available for the coaching professional. (*Pre-requisite: BUAD 3000*)

#### HURE 1040: Compensation and Benefits Management: 3 Credits

In this course, students will analyze and discuss the difference between compensation and strategic compensation, as well as labor laws affecting work compensation tactics. Consider the different types of incentives that an organization can offer its employees. Design job analysis and compensation surveys for said position. Also, evaluate those fringe benefits available to executives and flexible workforce, as well as compensation plans for these. (*Pre-requisite: HURE 1010*)

#### HURE 1050: Supervision Strategies: 3 Credits

In this course, students will analyze the challenges which face the supervision, planning, and organizing of personnel. Justify the design and implementation of control, motivation, and teamwork processes. Explain the role of the supervisor in the performance evaluations. The students will also describe the various organizational policies necessary for effective supervision. (*Pre-requisite: BUAD 3000*)

#### HURE 1060: Managing Organizational Change: 3 Credits

In this course, students will examine the fundamentals of organizational behavior and how employees' personality attributes influence it. Justify the behavior of groups in organizations, as well as structures in said organizations. The students will also argue about the various theories for organizational change, the barriers it faces, and the strategies used in the process of organizational change. (*Pre-requisite: BUAD 3000*)

### HURE 1070: International Labor Law: 3 Credits

Upon completion of this course, students will analyze the principles and evolution of international labor relations and collective bargaining processes. Evaluate the economic and social impact of the development of labor laws in international organizations. The students will also argue about the role of unions in promoting and developing labor laws. (*Pre-requisite: BUAD 3000*)

### HURE 1080: Conflict Mediation in Business: 3 Credits

In this course, students will analyze the evolution and characteristics of the mediation process as a tool in conflict resolution in the workplace. Describe elements, models, procedures and legal aspects of mediation. The students will also judge the different models and styles of negotiation used in the workplace.

(Pre-requisite: BUAD 3000)

### HURE 1090: Puerto Rico Labor Law: 3 credits

In this course, students will examine the social and historical conditions that propelled the approval and implementation of labor laws in Puerto Rico. Analyze local labor laws and their relevance in human resource management in business. Furthermore, evaluate how the administrative and judicial interpretations of labor laws affect their application in the workplace.

(Pre-requisites: BUAD 3000)

### HUSE 1010: Drug Addiction and Legal-Ethical Aspects: 3 credits

In this course, the student will discuss the basic concepts on the use and abuse of controlled substances. The student will analyze the effects and risks of using illegal substances and the theory related to the causes of addiction. Furthermore, students will learn the means for social reintegration. Evaluate the legal-ethical aspects of offering services and prevention services available in the community.

(Pre-requisite: JUST 3000)

#### HUSE 2020: Young Offenders: 3 credits

In this course, the student will analyze the basic characteristics of adolescence, as well as the psychosocial problem that adolescents face when in contact with criminal law and institutional life. Differentiate between the levels of prevention defined by youth services. Compare prevention programs for youth in special education; and adolescents at risk such as: school dropouts, early motherhood or fatherhood, use and abuse of drugs and alcohol, violent behavior and loss of freedom. The student will identify community assistance services for young offenders as well as their rights in juvenile institutions.

(Pre-requisite: JUST 3000)

#### HUSE 2030: Services in Correctional Institutions and Rehabilitation: 3 credits

In this course, the student will evaluate the service programs offered by correctional institutions and residential programs for the prisoner's social reintegration by finding job placement programs. The student will discuss laws, jurisprudence and regulations related to treatment towards rehabilitation. The student will analyze the prisoner's fundamental rights. Lastly, the student will identify family and community assistance services aimed at achieving a healthy coexistence in correctional institutions.

(Pre-requisite: JUST 3000)

#### HUSE 3040: Services for Domestic Violence Victims: 3 credits

In this course, the student will analyze the indicators of abuse and the theories of domestic violence. Evaluate the complexity and multidimensionality of abuse in intimate relationships. Discuss the laws, jurisprudence and social-legal procedures related to domestic violence. Compare the protection services provided by the state and by community service organizations. Identify the rights of victims of domestic violence during the process in which they receive services.

(Pre-requisite: JUST 3000)

# HUSE 3050: Services for Crime Victims: 3 credits

In this course, the student will analyze theories on crime and victimization and differentiate the policies of the criminal justice system and their social, political and legal implications for the crime victims and their families. The student will also examine the laws, programs, regulations, and support groups aimed at victims of crimes and their families. (*Pre-requisite: JUST 3000*)

#### **HUSE 4060: Restorative Justice: 3 credits**

In this course, the student will differentiate between concepts that are related to restorative justice, its historical development and theories as a systematic response to crime within the scope of criminal justice. The student will distinguish the foundations, characteristics or central values that explain restorative justice. The student will also compare the mechanisms used in restorative programs, as well as the future of restorative justice. (*Pre-requisite: JUST 3000*)

### INAS 1000: Introduction to Information Assurance and Security: 3 credits

In this course, students will evaluate information technologies security techniques to determine a system's level of security. They will identify malicious programs known as malware to examine the way in which they spread throughout the user's system. Students will integrate tools, technologies and standards to protect the target system's network. (*Pre-requisites: BUIN 1010*)

### INAS 1010: Web Applications Security Strategies: 3 credits

In this course, students will analyze the history of the Internet and justify the need to protect the systems that are implemented online. They will explain the meaning of malware and the different types of programs that fall under this category. They will discuss the importance of wireless technology and how it is vulnerable to hacker attacks, while performing the assessments that are necessary to obtain the desired results. (*Pre-requisites: INAS 1000, INTE 3510L*)

#### INAS 1020: Information Systems Control and Auditing: 3 credits

In this course, students will analyze the role assumed by the auditor when auditing a system and certifying that the audit has been properly documented. They will distinguish between personnel management policies and procedures using planning and research procedures. They will examine the different roles of each system to prepare their own documentation and perform the corresponding follow up. (*Pre-requisites: INAS 1010*)

### INAS 1030: Computer Forensics: 3 credits

In this course, students will apply corporate investigation techniques while participating in forensic investigations. They will verify compliance with pertinent laws while carrying out a forensics investigation and draft execution and testing plans. They will produce the digital evidence that is needed for a criminal investigation by gathering the information obtained from different operating systems.

(Pre-requisites: BUIN 1010, INTE 2570L)

#### INAS 1040: Information Security Management: 3 credits

In this course, the student will analyze the principles and the planning process involved in information security. The student will evaluate risk management and security processes of computer networks, as well as which technologies and implementation methods best respond to an organization's need to secure its information. Also, describe the professional, ethical and legal aspects of information security. (*Pre-requisites: INAS 1000, PROG 1140L*)

#### INBU 1000: Introduction to International Business: 3 credits

In this course, students will identify the nature and environment of international business. They will describe the basis for international business as well as its main concepts and theories. They will discuss the main international business agreements and the countries that participate in them. Students will justify the environment of the international financial system and its implication for commerce between nations.

(Pre-requisites: BUMA 1000, BUAD 2000)

### **INBU 1010: International Finance: 3 credits**

In this course, students will analyze the fundamental aspects of international finance. They will distinguish between factors that determine the value of currencies and how the main stock exchanges of the world function, as well as for concepts related to capital exchanges between countries and organizations that facilitate these processes. They will justify the different management decisions that are made concerning international finance, such as setting interest rates, currency exchange rate, supply and demand, and the influence of governments. Additionally, they will acquire a perspective on international finance, from a macroscopic and general outlook of the global financial environment, to the specific financial management decisions made by organizations.

(Pre-requisites: BUMA 1000, FINA 2100, MATH 1050; MATH 2080)

### INBU 1020: International Marketing: 3 credits

In this course, students will use a managerial approach to analyze the marketing programs used by organizations with a global outreach. They will evaluate business opportunities on the international market and select the most effective marketing strategies to enter said markets. The students will also discuss the different strategies that comprise the marketing mix as well as how they apply to international scenarios.

(Pre-requisites: BUMA 1000, BUAD 2000, MKTG 1010)

### INBU 1030: International and Multicultural Management: 3 credits

In this course, students will analyze the importance that applied strategic management has for international organizations with a diversified labor force. They will describe the specific characteristics of the different types of international and multicultural organizations. They will discuss the impact that cultural factors have on contemporary organizations. Additionally, they will evaluate the management tools used to make strategic corporate and functional decisions, while maintaining an internationalized and culturally diversified perspective. (*Pre-requisites: BUAD 2000*)

#### INBU 1040: Legal Issues in International Business: 3 credits

In this course, students will examine the basis and principles of mercantile law and their main applications to international transactions. They will also examine the principles of business law and their importance in the international business setting. They will discuss the role of the World Trade Organization and of fair competition beyond the regulations that govern the transactions that take place in the international markets. (*Pre-requisites: INBU 1000*)

### INGL 2101: College English I: 3 credits

English 2101 will develop in the students an awareness of the importance of English as a universal language. It will develop listening, speaking, reading, and writing skills through the practice of basic structures of the language. It will also develop reading skills through the interpretation and analysis of reading material and through the discussion of selected topics and issues.

### INST 2450: Introduction to Pneumatics and Hydraulics: 3 credits

The purpose of this course is to introduce students to the two technologies universally used in the industry and services. Study of terminology and symbology are employed in these important techniques. In addition, students are introduced to the principles of pneumatics and hydraulics. The functioning and application of the different elements that integrate the pneumatics and hydraulics circuits (compressors, cylinders, valves) are included.

(Co-requisite: INST 2461L) (Pre-requisites: PHYS 1010, ELEC 2400, 2411L)

### INST 2461L: Introduction to Pneumatics and Hydraulics Lab.: 2 credits

This course provides the practical experience for the Pneumatics and Hydraulics course and includes the laboratory experiences based on the pneumatics and hydraulics systems such as compressors, valves, cylinders. In addition, it relates to the symbology with the real aspects of the job.

(Co-requisite: INST 2450) (Pre-requisites: PHYS 1010, ELEC 2400, 2411L)

# INST 2700: Instrumentation Controls and Standards: 2 credits

This course provides the student the knowledge to identify schematics, and general characteristics of measurement principles. It includes the applications and installation of instruments and the development of a global vision for the industrial processes automation. It also includes the fundamental knowledge and concepts related to instrumentation controls and standards. The course will also include the design of a basic control system.

(Co-requisite: INST 2711L) (Pre-requisites: ELEC 2350, 2361L, INST 2450, 2461L)

### INST 2711L: Instrumentation Controls and Standards Lab.: 1 credit

This laboratory course of controls and standards emphasizes a variety of controls such as PID. It will provide the student the opportunity to interpret the instrumentation diagrams to strengthen the problem solution techniques (troubleshooting). A basic control system that includes essential components such as transmitters, level sensors, temperature monitoring and gases will be implemented.

(Co-requisite: INST 2700) (Pre-requisites: ELEC 2350, 2361L, INST 2450, 2461L)

### INST 2800: Introduction to Calibration: 3 credits

This course includes the calibration techniques, repair, and maintenance of control instruments. In this course, emphasis is made on the basic principles of instruments and their calibration considering ranges, digital/analog control elements and specifications. It includes measure instruments reading, such as temperature, pressure and calibrator process.

(Co-requisite: INST 2811L) (Pre-requisites: ELEC 2350, 2361L, INST 2450, 2461L)

### INST 2811L: Introduction to Calibration Lab.: 1 credit

This course complements the instrumentation calibration theory course for hydraulic, pneumatic, temperature processes, etc. It includes the instruments calibration techniques, measurement, sensors, as well as management and maintenance.

(Co-requisite: INST 2800) (Pre-requisites: ELEC 2350, 2361L, INST 2450, 2461L)

### INST 2901P: Practice and Seminar in Instrumentation: 3 credits

This course includes an external practice of the institution in a practice center for a minimum established period in which the students will apply the acquired concepts and skills in a real workplace environment under the supervision of a practice coordinator and the employer, who will evaluate their performance (135). Also, an integrated seminar is included (25hrs.) in which the student will develop a PLC programming project for an industrial process.

(Co-requisite: INST 2800) (Pre-requisites: ELEC 2350, 2361L, 2850, 2861L, PHYS 1010, INST 2450, 2461L, 2700, 2711L, 2800, 2811L)

# INTE 1000: Human-Computer Interface and Interactions: 3 credits

In this course, students will analyze the history of the evolution of computer system interfaces and the levels of human-computer interaction. They will identify the available sensory systems by following interface design specifications. They will develop a project based on HCI using all of the design steps and the methodologies established by analyzing the specifications.

### INTE 1010: Information Technology Strategic Planning: 3 credits

In this course, students will analyze the challenges of managing technology and information systems. They will evaluate how the information is controlled, how the data centers are managed and the hiring process. They will examine the practice of acquiring technology and how to manage the relationship with the suppliers in order to achieve agreements that are acceptable to both. They will verify that the organization's strategic plan for Information Technology is aligned with its needs. (*Pre-requisites: BUIN 1010*)

#### INTE 1020: Inf. Technology Infrastructure Management: 3 credits

In this course, students will analyze the basic concepts and evolution of the management of Information Technology infrastructure. They will examine the key elements in the management of the infrastructure for Information Technology. They will describe the process of giving service and support as well as managing the storage and security of information systems. They will also discuss the legal and ethical aspects involved in Information Technology. They will explain and design an information system.

(Pre-requisites: INTE 1010)

## INTE 1030: Inf. Technology Performance Analysis and Design: 3 credits

In this course, students will analyze the different techniques used to determine performance levels for Information Technologies. They will analyze performance problems and the appropriate evaluation techniques used by Information Technologies. They will apply performance measuring techniques and use analytical modeling techniques on information systems. They will also develop plans to improve the technology's performance using strategies and models that will increase their efficiency and effectiveness.

(Pre-requisites: STAT 2000)

#### INTE 1040: Information Technology Project Management: 4 credits

In this course, students will analyze the different metrics and measurements used in project management. They will apply project management techniques to real industry situations. They will also develop the processes that are necessary for every project (risk and scope). They will distinguish between the programs used for planning and those used to generate estimates. They will analyze quality management and the models associated with it. (*Pre-requisites: INTE 1000*)

#### INTE 2440L: Network Fundamentals and Laboratory: 3 Credits

In this course, students will analyze fundamental concepts in web design and configuration. They will identify network information protocols, topologies, and architecture. They will test the basic configuration of network devices. They will design logical addressing schemes. Additionally, they will use commands and tools to diagnose network problems.

(Pre-requisites: PROG 2370L)

## INTE 2450: Data Communications: 3 credits

This course covers general information regarding the protocols of data communication currently in use. Emphasis is given to transport systems no matter the physical medium with an example to be studied in detail: TCP/IP and the functioning of the Internet including the design, implementation and the programming of applications that use it.

(*Co-requisite: INTE 2461L*) (*Pre-requisites: ITTE 1010, 1011L, PROG 2350-2361L*)

## INTE 2460L: Data Communications and Laboratory: 3 credits

In this course, students will discuss the components of data transfer and transmission. They will differentiate between various communication protocols. They will explain the physical and wireless methods used in data communication. They will discuss communication standards and models. In addition, they will also establish safety rules to improve the quality of communication. (*Pre-requisite: INTE 2440L, ITTE 1031L, PROG 2370L*)

## INTE 2461L: Data Communications Lab: 2 credits

In this laboratory the student applies the knowledge and abilities required for the configuration, installation, maintenance, use and support to a network based in Transmission Control Protocol/Internet Protocol (TCP/IP) in Windows.

(Co-requisite: INTE 2450) (Pre-requisites: ITTE 1010, 1011L, PROG 2350-2361L)

## INTE 2500: Local Area Networks: 4 credits

This course includes the environment of a computer local area network (LAN), its nature, characteristics, infrastructure, network operation and its components. The student will learn how to select the topologies and connectivity equipment appropriate to the types of networks. Also, will apply acquired knowledge to develop and design infrastructure plans and network designs based on current technologies.

(*Co-requisite: INTE 2511L*) (*Pre-requisite: ITTE 1010, 1011L, PROG 2350, 2361L*)

## INTE 2511L: Local Area Networks Lab: 2 credits

In this laboratory the protocols are configured where emphasis is given to the Transmission Control. Also, a computer network is installed and configured which includes network adapters and the preparation of wires.

(Co-requisite: INTE 2500) (Pre-requisite: PROG 1550, 1561L)

## INTE 2510: Web Page Design: 3 credits

In this course the student will have the opportunity to learn the design, publication and maintenance of web pages utilizing tools such as FrontPage.

(Co-requisite: INTE 2521L) (Pre-requisite: ITTE 1010, 1011L)

#### INTE 2521L: Web Page Design Laboratory: 1 credit

This course includes the practice at a laboratory where the student will be able to develop skills in the design, publication and maintenance of Web pages.

(Co-requisite: INTE 2510) (Pre-requisites: ITTE 1010, 1011L)

#### INTE 2520L: Web Page Design and Laboratory: 3 credits

In this course, students will contrast basic concepts of structure design, development, maintenance, and implementation of a webpage or website. Design a webpage or website to integrate multimedia and advanced design elements. The student will also recognize the social responsibility that involves the development and publication of content on a website.

(Pre-requisites: ITTE 1031L)

## INTE 2530L: Local Area Networks and Laboratory: 3 credits

In this course, students will analyze basic structures that make up local computer networks. Compare the performance of various operating systems (Windows, Linux / UNIX, Mac OS, Novell Net Ware). Evaluate data transmission systems and local network security. The student will also create local networks for companies that include use and service policies.

(Pre-requisites: PROG 2370L)

## INTE 2560: Networks Administration: 3 credits

The student will learn the process to configure protocols and servers, create users and apply security systems. He will also learn to monitor resources and processes on a network.

(Co-requisite: INTE 2571L)

(Pre-requisites: ITTE 1010, 1011L, PROG 2350, 2361L, INTE 2500, 2511L)

#### INTE 2570L: Network Administration and Laboratory: 3 credits

In this course, students will configure and administer network operating systems. They will design and implement group and safety policies for a domain system using Windows Server TM tools. Additionally, they will configure in a web server (IIS) and install servers in the cloud (cloud computing). (*Pre-requisites: INTE 2440L*)

#### INTE 2571L: Networks Administration Lab: 1 credit

The student will manage processes, configure servers, modems, printers and protocols. He will also create users, apply system securities, supervise and audit resources.

(Co-requisite: INTE 2560)

(Pre-requisites: ITTE 1010, 1011L, PROG 2350, 2361L, INTE 2500, 2511L)

## INTE 2601P: Information Technology Practice: 4 credits

The student of the Associate's Degree in Network Technology and Applications Development will acquire knowledge and occupational skills under an industrial and business cooperative agreement. Before beginning their internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program.

(*Pre-requisites: INTE 2500, 2511L, 2560, 2571L, ITTE 1010, 1011L, PROG 1030L, 1150, 1161L, 2250, 2261L, 2350, 2361L, 2371l, 2470, 2481L, INTE 2450, 2461L, 2510, 2511L*)

## INTE 2740L: Diagnostic & Maintenance of Computer Systems and Laboratory: 3 Credits

In this course, students will examine the components of a modern computer, their function, and the assembly process. They will configure the primary and secondary components of a PC. They will review programs and tools to work on computer architecture, diagnosis, and maintenance. They will design plans to detect safety problems and computer use. They will also explain and configure operating systems and perform maintenance of software, hard disk, updates and program driver installations.

(Pre-requisites: PROG 2370L)

## INTE 3020: Repair and Maintenance of PC: 3 credits

This course permits the student to work with the architecture of the personal computers. (*Co-requisite: INTE 3031L*) (*Pre-requisites: ITTE 1010, 1011L, PROG 2350, 2361L*)

## INTE 3031L: Repair and Maintenance of PC Lab.: 1 credit

This course provides the student the opportunity to work in the diagnosis, repair and maintenance of computers. It includes the diagnostic and repair techniques of Power Supplies, Motherboards and peripherals. (*Co-requisite: INTE 3020*) (*Pre-requisites: ITTE, 1010, 1011L, PROG 2350, 2361L*)

## INTE 3040L: Diagnostic & Maintenance of PC's and Laboratory: 3 credits

In this course, the student will explain the function of a computer starting with its components and assembly process. The student will also differentiate between essential and secondary components of a PC. Perform diagnostics and maintenance using tools and programs to work with the architecture. Will design plans to detect security problems and ensure the proper use of the equipment. Perform operating system upgrades, software installations (drivers) and general maintenance.

(Pre-requisites: PROG 2270L, PROG 2370L)

#### INTE 3410: Web Technology: 3 credits

This course introduces students to information exchanging techniques through the Internet. It also prepares students in the development of systems between customers and web servers.

(Co-requisite: INTE 3411L) (Pre-requisites: ITTE 1010, 1011L, INTE 2510, 2521L)

## INTE 3411L: Web Technology Lab.: 1 credit

This course includes the practice whereby students will develop the necessary skills to implement a WEB infrastructure between clients and WEB servers. Will integrate IIS and Apache applications to comply with organizational needs.

(Co-requisite: INTE 3410) (Pre-requisites: ITTE 1010, 1011L, INTE 2510, 2521L)

## INTE 3510L: Web Technology and Laboratory: 3 credits

In this course, students will examine the advanced functions related to website development. Additionally, they will design web pages or sites using PHP codes. They will also create dynamic functions and pages using PHP scripts and integrating MySQL databases that expand the functions and services of a website.

(Pre-requisites: INTE 2520L, PROG 1030L, PROG 2370L)

## INTE 4010: Networks Security and Auditing: 3 credits

In this course, students will analyze techniques and safety and auditing functions of information systems. They will evaluate the vulnerability of physical and wireless information systems. They will analyze the tools available to counter attacks and ensure the continuity of the business. Additionally, they will differentiate between the various methods of computer auditing.

(Pre-requisite: INTE 2440L)

## INTE 4120 Introduction to Electronic Commerce: 3 credits

The student will understand how the Internet functions, and its integration into business. Will develop the necessary knowledge to market through the Internet using various tools including E-Business.

(Pre-requisite: ITTE 1010, 1011L, INTE 2510, 2521L)

## INTE 4131L: Introduction to Electronic Commerce Lab.: 1 credit

The student will apply theory knowledge in electronic commerce to create an environment of small businesses on the Internet based on a real life situation.

(Pre-requisite: ITTE 1010, 1011L, INTE 2510, 2521L)

## INTE 4125L: Introduction to Electronic Commerce and Lab.: 3 Credits

In this course students, will analyze the fundamentals and structure of an electronic business (ebusiness). Explain factors, conditions, and legal aspects when creating an electronic business. Design components of an e-commerce website. Integrate quality standards and security technologies to protect content and online business transactions. The student will also evaluate the fundamentals and general aspects of electronic commerce (e-commerce) marketing. (*Pre-Requisites: INTE 2520L*)

#### **INTE 4161P: Information Technology Practice: 4 credits**

The Practice for the Bachelor's Degree in Network Technology and Applications Development involves a corporative agreement with the industry and commerce where the student receives occupational knowledge and skills in the real world to carry out supervised work experiences.

(*Pre-requisite: ITTE 1010, 1011L, PROG 1030L, 1150, 1161L, 2250, 2261L, 2350, 2361L, 2371L, 2470, 2481L, 3350, 3361L, 3370, 3371L, 3420, 3431L, INTE 2450, 2461L, 2500, 2511L, 2560, 2571, 3410, 3411L, 4010, 3020, 3031L, 4120, 4131L)* 

#### INTE 4200: Network Technology and Applications Development Integration Seminar: 4 Credits

In this course students will develop an application with database and webpage using the skills acquired in previous concentration courses. Create a graphic interface (GUI), write the code and design the required database, as well as perform the required standardization tests. The student will also prepare performance and productivity reports of the application and its packaging. (*Pre-Requisites: INTE 2570L, INTE 3510L, PROG 3355L, PROG 3425L*)

#### ITNA 1000: Implementation and Managing a Network: 3 credits

In this course, students will evaluate the requirements for the implementation and management of networks, as well as the equipment and transfer protocols used. They will design an acquisition plan of equipment and the appropriate programs, including budget and the required safety measures. They will analyze the functions of the network administrator and their role in the network implementation process.

(Pre-requisite: BUIN 1010)

#### ITNA 1010: Protocols and Communications TCP/IP: 3 credits

In this course, students will discuss concepts of layers, making references to ISO's OSI model, including IP routing, packet structures and frames that allow communication between two computers. They will evaluate protocols covering aspects of TCP/IP technology and the details of their implementation. They will analyze cases of DHCP uses and their implementation with DNS services, emphasizing Firewalls and security protocols. (*Pre-requisite: ITNA 1000*)

## ITNA 1020: Network Troubleshooting: 3 credits

In this course, students will analyze the aspects in solving technical, logical, logistical, and security problems when implementing a network. They will develop diagnostics plans and connectivity tests using different tools for multiple platforms. They will justify performance measurement routine tests according to information collected to minimize problems and maximize service.

(Pre-requisite: INTE 2530L, ITNA 1010)

## ITNA 1030: Wireless and Mobile Computing: 3 credits

In this course, students will evaluate the resources required to establish a wireless network. They will design a wireless network along with the wired network to ensure consistency. They will select the best security scheme for the wireless network. Also, they will test the network under various operating environments to ensure platform independence.

(Pre-requisite: INTE 2530L, ITNA 1010)

#### ITNA 1040: Advanced Network Administration: 4 credits

In this course, students will configure advanced options in the Windows Server setting. They will discuss and apply concepts related to the management and maintenance of servers and file services, and configure DNS services, routing, remote access, policies at an infrastructure level, active directory, and group policies. Additionally, they will provide special attention to configurations for high availability, configure solutions for files and storage (NAS) and create what is known as a disaster recovery plan. (*Pre-requisite: INTE 4010, ITNA 1020, INTE 2570L*)

## ITSA 1010: Software Quality Control and Testing: 3 credits

In this course, students will analyze the needs of hardware and software environments and their management practices. They will develop design tutorials, checklists for code inspections and compliance with project standards. They will justify configuration management conducting base control settings, change and reports of configuration status by using audit techniques and methodology.

(Pre-requisite: PROG 2270L)

## ITSA 1020: Software Development for Mobile Devices: 3 credits

In this course, students will discuss the development of applications for mobile devices. They will analyze most used platforms on today's market, with emphasis on the development of mobile and mobile applications/apps. They will develop techniques using original platform frames and frames created by third parties to promote interoperability between development environments.

(Pre-requisites: PROG 3355L, PROG 3375L)

## 1030: Advanced Web Application Programming: 4 credits

In this course, students will explain the request and response procedures that occur between a clientserver. They will examine the technology that facilitates creating mobile applications for the web. They will prepare development environments that contain all the necessary tools and functions for the development of mobile web applications. Students will design the backup and restore processes for all components of a mobile web application. Also, they will develop a mobile web application using various code languages, structures and styles to maximize its functionality.

(Pre-requisites: PROG 3355L, PROG 3425L)

## ITTE 1010: Computer Literacy: 3 credits

In this course the student will explain basic concepts of information systems and the history of computers. Will develop skills in the use and handling of the computer and its components. Will explain the use of the Internet, its services and will publish an electronic portfolio. Also, will identify equipment and basic software for data communications and technological assistance. (*Co-requisite: ITTE 1011L*)

## ITTE 1011L: Computer Literacy Lab.: 1 credit

In this course, the student will develop basic skills of system programs: operating system, utilities and application programs: word processing, graphic presentation programs and electronic spreadsheet. In addition, will use Internet browsers and its services, such as: email, design of electronic portfolios and databases. (*Corequisite: ITTE 1010*)

## ITTE 1031L: Computer Literacy and Laboratory: 3 credits

In this course students will analyze the history and transcendental aspects of technology in today's age. Assess the components and development of information and communication technologies (ICT). Discuss the advantages and disadvantages of online resources. And also demonstrate the use and management of basic programs widely used in corporate, academic, and personal environments.

## ITTE 3111L: Development of Multimedia Materials and Workshop: 2 credits

Basic concepts in design of multimedia materials. Study of the strategies to create multimedia presentations. Analysis of the software available in the market for the design of multimedia materials.

(Pre-requisites: ITTE 1010,1011L, EDUC 2030,3120)

## ITTE 4211L: Integrating Technology in the Curriculum and Workshop: 2 credits

Development of abilities and skills in students in the evaluation, selection and acquisition of technological equipment for educational purpose. Use and management of computer applications, to create program and instructional activities. This course studies the structure and functioning of technological equipment and its integration to the curriculum. It also analyzes the nature and characteristics of modern electronic systems

(Pre-requisites: ITTE 1010,1011L, EDUC 2020, 2030, 3120)

## ITTE 4230: Assistive Technology: 2credits

This course pursues to develop consciousness in future teachers of the existence and use of technology adapted to the learning of populations with hearing, visual cognitive and mobility impairments, among others. (*Pre-requisite: EDUC 2020*)

## JUST 1010: Introduction to Organization and Administration in Criminal Justice: 3 credits

In this course students will discuss different models of Criminal Justice System and public policy for social control and crime prevention. In addition, it will study and evaluate the operation and effectiveness regarding their laws and penalties.

## JUST 1025: Fundamentals of Penal Laws: 3 credits

In this course, students will review basic principles of criminal law and its resources. Similarly, the student will identify the elements of the offense and the factors used as defense mechanisms for the relief of criminal responsibility.

## JUST 1030: Special Penal Laws: 3 credits

In this course, students will analyze fundamentals and principles for the establishment of special criminal laws. Describe special criminal laws and their relation to the operation of the Criminal Justice System. Furthermore, students will also review jurisprudence where special criminal laws have been applied. (*Pre-requisite: JUST 1025*)

## JUST 1040: Introduction to Criminology: 3 credits

In this course, students will discuss basic concepts of criminology, historical background, evolution and vision of the crime, and some auxiliary sciences to study criminology. Similarly, the student will analyze approaches, models and criminological theories that identify and define deviant behavior.

## JUST 1050: Evidence: 3 credits

In this course, students will examine the rules governing the admissibility of evidence in court proceedings. Furthermore, students will examine the procedural rules relating to procedures for the presentation of evidence to evaluate whether there is sufficient evidence to establish a crime.

(Pre-requisites: JUST 1010, JUST 1040)

#### JUST 2010: Interview and Interrogation: 3 credits

In this course students will study and analyze the techniques of interviewing and interrogation and related issues such as psychology, legal aspects and the different techniques to effectuate. It also determines the importance of the interview and interrogation as the main sources in a criminal investigation process.

(Pre-requisites: ETHI 1010, SPAN 1010)

(Pre-requisites for the Bachelor's degree in Criminal Justice with majors in Cyber Crimes and Forensic Information: None)

#### JUST 2020: Rules of Criminal Procedure: 3 credits

In this course the student will analyze the basic concepts of criminal procedure rules. Also discuss aspects of the investigation, probable cause and search warrants. Discuss various procedural stages of the criminal action before the courts and post-judgment proceedings and sentencing.

## JUST 2030: Victimology: 3 credits

In this course the student will analyze and discuss the basic concepts of victimology, and the relationship between victim and victimizer. Consider the nature and extent of the phenomenon of victimization and how it affects the family and society in general. Identify agencies that provide services to victims of crime and what to do when dealing with a situation of this nature.

## JUST 2050: Criminal Investigation: 3 credits

In this course the student will discuss general aspects and the importance of the criminal investigation process regarding the performance, structure, the role of the criminal justice system and the conviction of a defendant accused of committing a crime. Discuss case studies where you will apply concepts of forensic science, identification of suspects, evidence and crime. (*Pre-requisites: JUST 2010, 2020*)

#### JUST 3000: Civil Rights: 3 credits

In this course, students will analyze the rules and principles governing relations between individuals, public and corporate. Similarly, identify the basic fundamental rights and duties of human beings established both in the State Constitution and in the Constitution of the United States of America. Recognize case law related to the rights and duties of man both on the provisions in the local and federal levels.

#### JUST 3003: Juvenile Justice System: 3 credits

In this course the student will analyze the theoretical models that define deviant behavior in adolescents and young adults as reflected in public policy and criminology in order to prevent and address the problem of juvenile delinquency. Also examine and evaluate the criminal laws governing criminal conduct on children and how they are processed. (*Pre-requisites: JUST 1025, 1030*) (*Pre-requisites for Bachelor's degree in Criminal Justice with majors in Cyber Crimes, Forensic Investigation, Homeland Security and Human Service: JUST 1025*)

#### JUST 3005: Drug Addiction and Crime: 3 credits

In this course, students will analyze and discuss the prevalence of drug use and types of drugs available on the market. Also, the student will identify theories related to the use, abuse and drug addiction. Analyze the relationship between drug abuse and crime and the stages of dependency on drugs, the fight against drugs, treatments for drug addiction and other aspects of prevention.

## JUST 3015: Fundamentals of Penology and the Rights of the Prisoner: 3 credits

In this course, students will examine fundamental concepts of penology, its evolution, characteristics, and composition of the penitentiary system. Contrast the constitutional rights of people confined in Puerto Rico and the United States of America. Describe the statutory rights of inmates granted by legislation, jurisprudence, and regulations. The students will also review the programs and services for the social reintegration of the confined population. (*Pre-requisites: JUST 1010, 1025, 1030, 2020, 3000*)

## JUST 3020: Rehabilitation and Treatment of the Delinquent: 3 credits

In this course, students will examine the basic principles and measures of treatment programs for social reintegration of delinquents. Discriminate on the etiology and intervention methods for rehabilitation and social reintegration. Also, compare the factors in the rehabilitation and social reintegration of young offenders and delinquents with mental disorders. (*Pre-requisites: JUST 3015, SOSC 1010, PSYC 2510*)

#### **JUST 3100: Conflict Mediation: 3 credits**

In this course, the student will analyze the conceptual framework and historical background of conflict resolution. The student will also evaluate the conflict theories, mediation models and the mediator's role in conflict resolution. Furthermore, the student will examine participants' strategies and appropriation, and the professional's ethical and moral aspects during negotiation; as well as current laws and alternate methods of the judicial system for conflict resolution.

#### JUST 3110: Gender and the Criminal Justice Systems: 3 credits

In this course, the student will analyze fundamental concepts, schools of feminist thought, theories and biopsychosocial factors in the behavior of delinquent women in the Criminal Justice System. The student will describe the male perspective on delinquency and types of oppression against women. Also, the student will discuss about prevalent types of crime in the criminal behavior of women, factors and reasons that relate female and male crime rate. Furthermore, the student will examine rehabilitation programs and services available in women's correctional facilities.

#### **JUST 3120: Federal Jurisdiction: 3 credits**

In this course, the student will recognize the importance of the historical development and organizational structure of federal jurisdiction. The student will also analyze criminal proceedings under federal jurisdiction, the limits of said jurisdiction, and the agencies that comprise the justice system under federal jurisdiction. (*Pre-requisites: JUST 1010*)

#### JUST 3610: White Collar Crimes and Fraud Detection: 3 credits

In this course, students will analyze the origins and consequences of white collar crimes and fraud against today's society. Examine the sociological, economic, ethical, and legal impacts related to white collar crimes and fraud. Analyze the various fraud detection techniques. The students will also argue on measures to prevent white collar crimes and fraud.

(*Pre-requisite: JUST 3000*) (*Pre-requisites for Bachelor's degree in Criminal Justice with majors in Cyber Crimes, Forensic Investigation, Homeland Security and Human Service: None*)

## JUST 4000: Social Investigation Methodology: 4 credits

In this course, students will evaluate the social investigation process and its importance in the field of criminal justice. Discuss ethical issues and regulations that affect the processes of social investigation. Analyze quantitative, qualitative, and mixed research methodologies and research designs that provide more information to a specific research topic. As part of the activities, develop a research proposal in one of the areas of Criminal Justice Studies.

(Pre-requisites: JUST 3015, PSYC 2510, SOSC 1020, STAT 2000)

(Pre-requisites for Bachelor's degree in Criminal Justice with majors in Cyber Crimes, Forensic Investigation, Homeland Security and Human Service: PSYC 2510, SOSC 1020, STAT 2000)

## **JUST 4010: Integration Seminar of Criminal Justice: 6 credits**

In this seminar, students will demonstrate the skills, abilities, and knowledge acquired and/or developed during the course of their education in the Criminal Justice Program. In a reciprocal and multidirectional exchange, the student will also analyze information in different formats and apply the knowledge acquired from a social perspective within the criminal justice system. As part of course requirements, students will develop a research project which will analyze a contemporary problem in their area of specialization.

(Pre-requisites for Bachelor Degree in Criminal Justice: JUST 1050, JUST 2030, JUST 2050, JUST 3005, JUST 3015, JUST 4000)

(*Pre-requisites for Bachelor Degree in Criminal Justice with majors in Cyber Crimes and Forensic Investigation: 1050, 2030, 2050, 4000*)

(*Pre-requisites for Bachelor Degree in Criminal Justice with majors in Homeland Security and Human Services: 1050, 2030, 3000, 4000*)

#### MATH 1010: Basic Mathematics: 3 credits

In this course, students will explain the features of numerical systems and their application to everyday life. Differentiate the concepts of fractions, ratios, and percentages and their various forms of representation. Generalize about solving linear equations and inequalities in one variable. The students will also consider measuring fundamentals and basic concepts of Euclidean geometry. Furthermore, describe the basics of polynomials.

#### MATH 1050: Business Mathematics: 3 credits

In this course, students will model problems of business administration using basic concepts of algebra and geometry. Solve simple and compound interest problems, rate changes, annuities, and percentages. Also, integrate the principles of geometry in the study of supply, demand, and present value annuity curves. (*Pre-requisite: MATH 1010*)

#### MATH 2010: Basic Mathematics for Engineering Technology: 3 credits

This course provides the basic knowledge of algebra and how it can be applied to the concepts and needs of the theory and practice in the electronics field. It includes algebraic equations, inequalities, exponentials, polynomials and graphics.

## MATH 2020: Pre-calculus for Engineering Technology: 3 credits

This course provides to the student the necessary foundations of pre-calculus for the application to the processes and calculations in the instrumentation technology area and applications. It includes equations systems applications, logarithmic, exponentials and trigonometric functions, as well as geometrics and algebraic vectors. Also, it emphasizes problems of numeric systems conversion.

(Pre-requisite: MATH 2010)

## MATH 2050: Applied Mathematics: 3 credits

In this course, students will analyze different problems and situations encountered in information systems using as a basis the set theory, propositional logic, and Boolean algebra. Solve combinatorial problems and successions. Also, examine various abstract structures using graphs and trees in order to explain and implement them.

(Pre-requisite: MATH 1010)

#### MATH 2080: Quantitative Methods: 3 Credits

In this course, students will integrate the analysis of polynomial, exponential, rational, and radical functions in problems focused on business administration. The students will solve linear optimization problems using matrix algebra and linear programming principles. Also will determine which mathematical model best characterize a data set. (*Pre-requisites: MATH 1010, 1050*)

#### MEBC 1010: Medical Billing Systems I: 3 credits

In this course, the student will analyze the fundamental concepts related to medical billing systems. Evaluate provision methods in processing billing. Demonstrate the proper management of medical billing forms to select the type of insurance coverage and distinguish important features of health insurance.

## MEBC 1020: Medical Billing Systems II: 3 credits

In this course, the student will analyze the impact of technology in electronic billing systems. Evaluate the management process of medical billing systems for medical personnel and explain the technological evolution of the software in the field of health. Furthermore, integrate the knowledge and skills of the electronic reconciliation process and claims to secondary health plans while using billing software. (*Pre-requisite: MEBC 1010*). (*This course includes the use of simulator.*)

#### MEBC 1050: Medical Billing Coding I: 3 credits

In this course, the student will analyze the international classification of diseases ICD-10 and medical terminology according to the disease through studies of inpatients and outpatients. Distinguish the clinical data in health and medical records. Identify diagnostic groups and procedure codes to develop compliance strategies and obtain reimbursement and prospective payments from insurance companies.

## MEBC 1060: Medical Billing Coding II: 3 credits

In this course, the student will analyze the evolution of the CPT codes in the field of medical coding. Evaluate the ability to accurately assign diagnostic codes and procedures using the CPT Manual. Describe procedures, standards, documentation, and ethical-legal aspects in coding using the CPT. Distinguish available diagnostics and procedures outlined in the medical record (history) to determine whether the documentation is adequate for coding purposes.

(Pre-requisite: MEBC 1050)

#### MEBC 1200: Medical Billing Coding III: 3 credits

In this course, the student will evaluate the development of HCPCS codes in the field of medical coding. Demonstrate the ability to accurately assign codes to diagnoses and procedures using the CPT Manual. Identify the structure CPT / HCPCS and apply general guidelines in coding systems. Describe standards, procedures, legal and ethical aspects, forms, and documentation required by Medicare and Medicaid for HCPCS codes.

(Pre-requisites: MEBC 1050, MEBC 1060)

#### MEBC 2000: Medical Reports Procedures: 3 credits

In this course the students will analyze the components and functions of a spreadsheet. They will create and edit tables and charts in the spreadsheet for use, handling and analysis of medical information. Students will also integrate the functions and tools of the worksheet with various programs to facilitate the creation and presentation of reports and medical reports.

(Pre-requisites: MEBC 1010, MEBC 1020, MEBC 1050, MEBC 1060, MEBC 1200)

### MEBC 2050: Integrating Seminar: Medical Billing: 3 credits

In this seminar the students will integrate and demonstrate the knowledge, skills and abilities developed during their training in the associate degree program of Billing and Coding. They will also analyze the fundamental concepts related to medical billing systems. Students will examine the methods of data entry required by billing software. They will discuss the importance of diagnostic coding processes and procedures in the development of analysis of medical records and integrate the knowledge and skills of reconciliation and electronic claims process according to the requirements of medical plans.

(*Pre-requisites: MEBC 1010, MEBC 1020, MEBC 1050, MEBC 1060, MEBC 1200*) (*This course includes the use of simulator.*)

## MEBI 1011L: Medical Plans Billing and Medical Records Digitizing: 3 credits

This course offers the student a wealth of information concerning the different medical insurance plans available, as well as the different invoicing methods used in a medical office. It is expected that the student upon completion of the course will have developed the skills and knowledge of procedures necessary to promptly and efficiently transmit all medical insurance forms manually and electronically. The student will also acquire the knowledge of electronic records. (*Pre-requisites: BIOL 2010, 2020*)

## MEBI 1150: Electronic Medical Record: 3 credits

In this course the students will analyze the basics about managing electronic medical records and the basic functions of an electronic medical record. They will discuss the importance of using electronic medical record (EHR) in medical offices and hospitals. They examine compliance regulations, as well as legal and ethical principles for the use of information and technology resources in the healthcare industry. Students describe the primary objectives of Public Health related to the electronic medical record. (*This course includes the use of simulator.*)

#### MESE 1010: Medical Terminology: 3 credits

This course develops skills on the basic medical vocabulary most commonly used. It also covers roots, prefixes, and suffixes related to the health field. It studies the medical vocabulary for all the body systems. It also provides an understanding of the scientific written and spoken words commonly used in the health field.

(Pre-requisites: BIOL 1010, 2000)

## **MESE 2020: Medical Insurance Billing: 2 credits**

This course offers the student a wealth of information concerning the different medical insurance plans available, as well as the different invoicing methods used in a medical office. It is expected that the student upon completion of the course will have developed the skills and knowledge of procedures necessary to promptly and efficiently transmit all medical insurance forms manually and electronically.

(Co-requisite: SEME 2021L) (Pre-requisites: BIOL 1010, 2000)

## MESE 2021L: Medical Insurance Billing Lab.: 1 credit

This course offers the student a wealth of information concerning the different medical insurance plans available, as well as the different invoicing methods used in a medical office. It is expected that the student upon completion of the course will have developed the skills and knowledge of procedures necessary to promptly and efficiently transmit all medical insurance forms manually and electronically.

(Co-requisite: SEME 2020) (Pre-requisites: BIOL 1010, 2000)

## MESE 2031L: Medical Billing, Electronic Record and Lab.: 2 credits

In this course, students will discuss the basic concepts of manual or electronic invoicing in the office or other health service environment. Students will examine the procedures for handling billing and processing each of the health services provided to patients. In addition, they collect the information required to identify the following in their clinical record: diagnosis, procedure and treatment offered to the patient, either manually or electronically.

(Pre-requisites: BIOL 1010, BIOL 2000)

#### **MESE 2500: Manual Medical Billing: 3 credits**

This course exposes and familiarizes the student with the essential contents of the different medical plans and the manual invoicing process in the medical office. The student will develop the skill and knowledge to work with different formularies and manuals such as: CMS 1500, ICD9 and CPT and will become familiar with the information contained in these, among others.

## (Pre-requisite: BIOL 1010, 2000, MESE 1010)

## MESE 2600L: Electronic Medical Billing and Lab.: 3 credits

This course prepares the student to invoice through the medical electronic invoicing system. It uses the skills acquired for the manual medical invoicing to be applied in the electronic invoicing. The student will use the CMS 1500 formulary and the books ICD9 y CPT, among others, to carry out the invoicing.

(Pre-requisites: BIOL 1010, 2000, MESE 1010, 2500)

#### MESE 2700: Medical Auditing: 3 credits

This course has as its main purpose the analysis and management of medical accounts according to the actual laws and procedures of the main medical plans. The course will identify laws, rules and regulations that cover the medical invoicing. We will analyze clinical and invoice records covered by the laws and regulations in force and detect fraud and abuse.

(*Pre-requisites:* MESE 2500, 2600L)

#### MGMT 1000: Communication for Managers: 3 credits

In this course, students will discuss the nature and importance of communication for the success of organizations. They will analyze the role of individual characteristics and their impact on communication processes. They will use management communication principles in their work environment. Additionally, they will integrate different in-person and distance communication tools, depending on the organizational communication.

(Pre-requisites: BUAD 2000, BUMA 1000, SPAN 1020)

## MGMT 1010: Organizational Theory and Design: 3 credits

In this course, students will analyze the fundamental concepts and the different contributions of the Classical School of Management and its historical development, to contemporary management. They will evaluate organizations taking into consideration the market environment in which they operate. They will analyze the various types of organizations considering their design and structure. Additionally, they will discuss the organizational change and knowledge management.

(Pre-requisites: BUAD 2000, BUMA 1000)

#### MGMT 1020: Operations Management: 3 credits

In this course, students will describe the concepts and techniques for designing, planning and controlling operations in manufacturing and service companies. They will examine the skills in operational decision-making using various tools in the planning and control of inventory and in the elaboration of demand forecasting. Also, they will analyze the principles and theoretical assumptions presented by various exponents in the quality control of operations. (*Pre-requisites: BUAD 2000, BUMA 1000, MATH 2080*)

#### MGMT 2101: Management and Supervision of Food and Beverage I: 4 credits

In this course, the student will examine entrepreneurial opportunities and the process needed to establish a business. The student will also examine the critical factors related to conceiving, initiating, and developing a business of Food and Beverage.

## MGMT 2102: Management and Supervision of Food and Beverage II: 3 credits

This course includes, but is not limited to the financial aspects of study and analysis and marketing strategies; from the facilities and the feasibility study to the equipment and everything needed to operate in terms of patents and permits. This course will prepare, present and defend the preparation of a business plan food and drinks following the standards and provisions of the Small Business Administration and the Government Development Bank. In addition, sustainable development is addressed as part of the procedures, purchasing, manufacturing, waste management to reach a responsible corporate leadership.

(Prerequisite: MGMT 2101)

## MICR 1000: Basic Microbiology: 3 credits

Students will study the history, morphology, genetics, metabolism, microorganism, and taxonomy in its relation with humans in their environment. Knowledge and skills will be provided: pathology and the virulence in the human diseases. Students will learn how to prevent and control infections, sterilization, safety, prevention and control of toxic waste.

(Co-requisite: MICR 1011L) (Pre-requisite: BIOL 1010)

#### MICR 1011L: Basic Microbiology Lab.: 1 credit

This course provides the student the practical way to the observation and identification of the different microorganisms that cause the diseases.

(Co-requisite: MICR 1000) (Pre-requisite: BIOL 1010)

#### MKTG 1010: Marketing Principles: 3 credits

In this course, students will analyze and discuss marketing concepts, theories, and practices in a global context. Evaluate the cultural, social, economic, and political marketing dimensions taking into consideration the basics such as: product, price, promotion, and location. Design product, price, promotion, and location (distribution) strategies, to compete successfully in domestic and international markets.

## MKTG 2020: Marketing Techniques in Banking Systems: 3 credits

This course will offer the student information related to marketing concepts and practices applied to the financial services sector, joined to the general competencies, which will permit them to apply marketing strategies that generate benefits. It deals with topics such as: definition of the marketing concept, models of clients' behavior, marketing planning process, marketing strategies, communication and distribution in the sales of products and services.

#### NURS 1000: Nursing Theory and Evolution: 2 credits

In this course the student will examine the origin and evolution of the practice of nursing and its historical background. Students will explore the ethical standards, moral principles and legal regulations governing the practice of nursing as a profession and those specific to Puerto Rico. Also concepts related to the promotion and maintenance of health, the importance of computer skills, and, the integration of technology in contemporary nursing practice will be discussed.

(Co-requisites: None) (Pre-requisites: None)

#### NURS 1050: Pharmacology and Nursing Implications: 3 credits

In this course the student will analyze the basic principles of pharmacology and its implications on drug administration when providing nursing care to clients and their families. It will examine the professional standards and regulations for prescription law, administration and control of drugs in Puerto Rico and the United States and the implications for nursing practice. It will highlight the importance of the knowledge of pharmacology to safely manage drugs or medication for clients/families. It will integrate the knowledge of the different body systems and pharmacology into managing and administering medications as part of nursing practice.

(Co-requisites: NURS 1061L) (Pre-requisites: BIOL 2000, MATH 1010, NURS 1000, 1300, 1311L, 1321P)

## NURS 1061L: Pharmacology and Skills Laboratory for the Medicines Administration: 2 credits

In this course the student will integrate the nursing process into the safe administration of medications for the client at any stage of growth and development. The student will identify prescription language for the safe administration of medications. The course will develop in the student the basic skills necessary for the calculation, dosing and safe administration of medications when providing nursing care to clients and their families. Students will integrate manual and electronic documentation skills into administering medications safely. The passing grade for the Lab is 80%.

(Co-requisites: NURS 10050) (Pre-requisites: BIOL 2000, MATH 1010, NURS 1000, 1300, 1311L, 1321P)

## NURS 1300: Fundamentals of Nursing: 3 credits

In this course, the student will analyze attitudes and critical thinking skills used by a professional nurse in the process of making decisions and solving problems in providing health care to the client- family. The student will integrate the nursing process as a tool for solving the health needs of the client and family. The importance of communication to interact with the client-family, colleagues and members of the health team are studied. Students will integrate client knowledge into the nursing care to clients, family and significant others.

(Co-requisites: BIOL 2000, NURS 1311L, 1321P) (Pre-requisites: BIOL 1010, MATH 1010, NURS 1000)

## NURS 1311L: Fundamentals of Nursing Lab.: 2 credits

In this course, the student will develop the knowledge and technical skills necessary to safely perform basic nursing procedures for intervening in the health care of client and family. Students will: use the nursing process as a framework for making decisions; demonstrate the development of critical thinking skills; and, practice safe and effective basic procedures/skills. This will include the effective use of verbal and nonverbal communications and the technological/written skills for conveying healthcare information to clients, families, colleagues and members of the multidisciplinary team.

(Co-requisites: BIOL 2000, NURS 1300, 1321P) (Pre-requisites: BIOL 1010, MATH 1010, NURS 1000)

## NURS 1321P: Simulation and Practice of Fundamentals of Nursing: 1.5 credits

In the course, Simulation and Practice of Fundamentals in Nursing, the student will continue to develop and apply the basic skills necessary for the direct care of the client/family by using the program conceptual framework and the nursing process. Practice will occur in primary and secondary health care setting Students will use the 5 steps to the nursing process (assessment, diagnosis, planning, implementing and evaluating) to plan and implement care for the improvement of the client/family's health.

(Co-requisites: BIOL 2000, NURS 1300, 1311L) (Pre-requisites: BIOL 1010, MATH 1010, NURS 1000)

## NURS 2540: Nursing Care in Mental Health and Psychiatry: 2 credits

In this course, students will examine the historical evolution of psychiatric nursing and its' basic theoretical concepts and mental health. Students will examine the professional, legal and ethical responsibilities in providing holistic nursing care with a focus on mental health at the primary, secondary and tertiary levels. They will learn to have good therapeutic communication in order to establish effective relationships with client in mental health care. They will also integrate the nursing process in the management of common mental health disorders and psychiatry.

(Co-requisites: NURS 1050, 1061L, 2541P, PSYC 2510) (Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, MICR 1011L, NURS 1000, 1300, 1311L, 1321P)

## NURS 2541P: Practice of Nursing Care in Mental Health and Psychiatry: 1.5 credits

Students will apply the nursing process to provide direct care to clients with mental health and psychiatric disorders at various stages of growth and development. Students will develop nursing activities aimed at promoting, restoring and maintaining mental health. At all times a focus will be toward the ethical-legal responsibilities of the nurse when providing mental health care and psychiatric care at the primary, secondary and tertiary levels.

(Co-requisites: NURS 1050, 1061L, 2540, PSYC 2510) (Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, MICR 1011L, NURS 1000, 1300, 1311L, 1321P)

## NURS 2550: Nursing Interventions with Adult and Elder I: 3 credits.

In this course, the student will evaluate the management of individual therapeutic regimens, including activities that are used to promote health and prevent disease which affects adults and the elderly. Issues discussed relate to the concepts of oxygenation (cardiac and respiratory), inflammation, fluid/electrolyte balance, sensory/perceptual, cellular damage (surgery) and reproductive stability.

(Co-requisites: NURS 2551P)

(Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P)

## NURS 2551P: Simulation and Practice of Nursing Interventions with the Adult and Elder I: 2 credits

In this course, the student will demonstrate an evidence-based practice through clinical experiences with adults and the elderly who exhibit commonly occurring human responses to health challenges from within the concepts of oxygenation (cardiac and respiratory), inflammation, fluid/electrolyte balance, sensory/perceptual, cellular damage (surgery) and reproductive stability. Student will also demonstrate skills with therapeutic communication, nursing care planning, attention to diversity, and, the incorporation of legal/ethical considerations during nursing interventions with the adult and elderly client.

(Co-requisites: NURS 2550)

(Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P)

## NURS 2620: Nursing Intervention in Mother and Newborn: 3 credits

In this course the students will analyze the fundamental concepts, historical evolution and ethical-legal aspects in the care of the mother and newborn. Students will review the anatomy and function of the female and male reproductive system and evaluate the process of nursing intervention in the direct care of the mother and newborn. They will discern the nursing role during antepartum, childbirth, postpartum and newborn stages. This includes discussion of the anticipated physical and neurological changes and the general complications during the maternal and newborn periods.

(Co-requisites: NURS 2621P)

(Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P)

### NURS 2621P: Simulation and Practice of Nursing with the Mother and Newborn: 1.5 credits

In this course, students will demonstrate their skills in evidence-based practice through clinical experiences and the application of necessary nursing skills for assisting the mother and newborn to adapt to physiological and psychological changes that occur in childbearing and the newborn phases of development. This includes care of the high risk mother and newborn.

(Co-requisites: NURS 2620)

(Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P)

## NURS 2630: Nursing Interventions in Adult and Elder II: 3 credits

In this course, students will examine the physiological changes that occur in adults and the elderly during the aging process. They will analyze the causes and common patho-physiology that affects individual stages of adulthood and old age. Students will use the nursing process to assess, plan, implement and evaluate selected nursing interventions required for the direct care of adult and elderly with health disorders within the digestive, renal, endocrine, nervous and skeletal muscle systems.

(Co-requisites: NURS 2631P)

(Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P, 2550, 2551P)

#### NURS 2631P: Simulation and Practice of Nursing Interventions with the Adult and Elderly II: 2 credits

In this course, students will demonstrate an evidence-based practice through their clinical experiences while caring for clients with health challenges to the digestive, renal, endocrine, nervous and muscle/skeletal systems. They will apply the principles of growth and development, therapeutic communications, information management, legal/ethical behaviors and cultural sensitivity while implementing skills in the care of adults and the elderly. They will discuss the nursing process in the care of adults and elderly with functional changes of the gastrointestinal, neurological and skeletal muscle, urinary elimination and endocrine system.

(Co-requisites: NURS 2630) (Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P, 2550, 2551P)

## NURS 2710: Nursing Interventions with Children and Adolescents: 3 credits

In this course, students will describe concepts related to the health of children and adolescents, as well as the historical background and evaluation of pediatric nursing care. They will integrate the education process into the pediatric client and family in the promotion and prevention of health through different stages of growth and development. Students will integrate the process of nursing interventions to maintain and promote the physiological, psychological, social and spiritual integrity of children and adolescents.

(Co-requisites: NURS 2721P)

(Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P, 2550, 2551P)

# NURS 2721P: Simulation and Practice of Nursing Interventions with Child and Adolescent: 1.5 credits

In this course, students will demonstrate an evidence-based practice through their clinical experiences. They will apply the knowledge, skills and attitudes required of the nurse while providing care to children and adolescents. Students will assess health and fitness to collect data and write nursing plans for children and adolescents. They will present the findings of research-based health disorders in children and adolescents using the nursing process as a tool to plan and implement evidence-based care.

(Co-requisites: NURS 2710) (Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P, 2550, 2551P)

#### NURS 2730: Integrating Seminar of Nursing: 2 credits

This course provides an introduction to the Nursing Board Examination in Puerto Rico. By utilizing the concepts used by the Examining Board to organize and design the licensing exam and the client need categories of the NCLEX-RN exam, the student will fully understand the extent and scope of the licensing exam. Emphasis is given to the health concepts and levels of care found in Puerto Rico as reflected in the professional competences necessary to offer nursing care to clients, families and communities. The use of case studies/scenarios assists the student to critically think through situations.

(Co-requisites: 2630, 2631P, NURS 2710, 2721P) (Pre-requisites: BIOL 1010, BIOL 2000, MATH 1010, MICR 1000, MICR 1011L, NURS 1000, 1050, 1061L, 1300, 1311L, 1321P, 2540, 2541P, 2550, 2551P, 2620, 2621P)

#### NURS 3006: Transition of the Role of Nurses in Current Society: 3

In this course, the student will examine the historical evolution of the nursing profession, holistic concepts, nursing theories and the educational levels of nursing practice. Additionally, the student will examine critical thinking skills, which will enable him/her to make clinical judgments. The student will analyze the legal and ethical aspects and cultural diversity in the face of professional challenges; nursing roles within the changing healthcare systems; and, the use of research, evidence based practice and technology in today's nursing environment. (*Co-requisites: None*) (*Pre-requisites: NURS 1000*)

#### NURS 3015: Physical Assessment: 3 credits

In this course, students will assess the history of the role of nursing in holistic care health assessment for adult and elderly clients. They will learn about physical assessment methodology and the techniques of performing the physical exam as part of the nursing professional role. Included will be attention to documenting a clients' health history and physical exam as part of the process for clinical decision-making.

(Co-requisites: None) (Pre-requisites: NURS 1000, 1050, 1061L, 1300, 1311L, 1321P, 2540, 2541P, 2550, 2551P, 2620, 2621P, 2630, 2631P, 2710, 2721P, 2730)

#### NURS 3040: Informatics in Healthcare Systems: 3 credits

In this course, students will examine the fundamental concepts and roles of nursing professionals regarding informatics and their use. They will also analyze the management, practices and applications of information systems in clinical and educational settings; and, explain the ethical and legal controversies involved when dealing with information in a healthcare system. At the same time, they will evaluate the impact of technology and its applications in clinical, educational and research environments.

(Co-requisites: None) (Pre-requisites: NURS 1000)

## NURS 3050: Research in Nursing: 3 credits

In this course, students will evaluate the role, as well as the importance, of research in professional nursing practice, including the conducting and dissemination of research and its principles and evidence-based practice models. They will also examine the ethical and legal considerations related to the subjects within nursing research. In addition, they will describe the nursing research process and interpret evidence-based research in order to apply it to nursing practice.

(Co-requisites: None) (Pre-requisites: MATH 1010, STAT 2000)

#### NURS 3055: Leadership and Management: 3 credits

In this course, the student will analyze concepts of leadership and management, as well as the necessary tools for the fulfillment of the nursing professional role in light of new perspectives in health services administration. The student will evaluate theories and models for management practice in nursing. The student will design effective organizational structures for determining administrative and management resources applicable to nursing services. Also, the student will justify the importance of establishing effective and safe work environments in order to sustain the motivation of the nursing professional and the quality of the health services.

(Co-requisites: None) (Pre-requisites: NURS 3006)

#### NURS 3130: Critical Interventions in Professional Nursing with Adults: 3 credits

In this course, students will examine the importance of the role of nursing and holistic care in the critical care environment for adult patients and their families. They will also value the role of the nursing professional when caring for critically ill adults. Students will differentiate between diagnoses and treatments in the collaborative management of critical conditions. In addition, they will analyze the nursing skills required for care of critical and acute pathological conditions in adults that require intensive care.

(Co-requisites: None) (Pre-requisites: NURS 3015)

## NURS 4000: Global and National Health Policies: 3 credits

In this course, students will analyze the fundamental concepts related to national and global health policies and their financing. Students will evaluate the processes of providing healthcare services and the influence of ethics and legislation at a global and national level in the field of nursing. Students will also consider the ethical and legislative importance of providing services nationally and globally. Additionally, students will justify how epidemiology and Healthy People 2020 influence trends and controversies related to the global and national healthcare system, as well as alternatives to solve them.

(Co-requisites: None) (Pre-requisites: NURS 3006)

#### NURS 4020: Nursing Interventions with families and communities: 3 credits

In this course, the student will develop effective interpersonal relationships with members of a community and other professionals to deliver community health nursing services. The student will develop effective leadership through the use of research and public policies, as protector for the benefit of the health of groups and populations. The student will debate about concepts and public health principles to promote health and control risks in groups and populations through the three levels of prevention. Likewise, the student will integrate the nursing process into a group or population using the knowledge and skills in nursing to provide services that promote and protect health.

(Co-requisites: NURS 4021P, 4021\*RN-BSN) (Pre-requisites: NURS 3006, 3015, 3040, 3050, 3055)

#### NURS 4021/4021P: Practice in Nursing Interventions with families and communities: 2 credits

In this course, students will apply their knowledge of nursing, as well as their communication, interpersonal relationship and humanistic care skills. They will also put their leadership, management, teaching, and critical thinking knowledge into practice when assessing healthcare, planning, coordinating, implementing and evaluating the care given to populations and groups. In addition, they will apply their research findings. Students will also implement practices on selected populations within a community setting. (*Co-requisites: NURS 4020*) (*Pre-requisites: NURS 3006, 3015, 3040, 3050, 3055*)

#### NUTR 1000: Introduction to Nutrition: 2 credits

In this course, students will value the importance of having good nutrition for the well-being and health of the client. Consider the process of digestion, absorption, metabolism, and excretion of food and their nutrients. Analyze the influence of food in the stages of growth and development, weight control, and common health disorders. Also, discuss the role of the healthcare professional in the estimate, analysis, and interventions of the client's nutritional needs.

#### OFSY 1201L: Basic Typing and Lab: 3 credits

In this course emphasis is given to the introduction and mastery of the alphabetic, numerical and symbols using the computer. Also, emphasis in errors corrections in documents, and remediative practice, basic techniques, speed development, typing precision as well as efficient transfer of the skill to simple problems of typing productions.

#### **OFSY 1250:** Speedwriting in Spanish: 3 credits

The student will develop skills in the Spanish speedwriting system, through lecture and writing. Emphasis will be given to the correct usage of language, grammar, dictation and transcription.

## **OFSY 1301L: Documents Production I and Lab: 3 credits**

The development of basic skills of speed and precision are emphasized. At the same time, continued training will be given in the preparation of office duties such as business letters, envelopes, memoranda, outlines, reports and manuscripts. The student will practice the correct basic techniques in the production of typewriting tasks, with material in both English and Spanish languages to be considered.

(Pre-requisite: OFSY 1201L)

## **OFSY 1351L: Documents Production II and Lab: 3 credits**

Development of basic skills, such as: speed, precision and comparison. Emphasis will be given to the production of office documents such as letters with special parts, manuscripts, special reports, minutes, outlines, memoranda, acts, agendas, legal and medical documents, purchase order forms, press release, fax, balance sheet, others. The student will be required to use his own initiative in the performance of these office tasks. Different Spanish and English documents will be completed. (*Pre-requisites: OFSY 1201L, 1301L*)

## **OFSY 1400: Documents Control: 3 credits**

This course prepares students to the introduction and the study of the systems to order by an alphabetic, numeric, geographical and by subject manner; including receipts systems, classification, processing, control and disposition of documents. Emphasis is given to the data management application, using a Data Base Program.

## OFSY 2101L: Dictation and Transcription of Spanish Speedwriting and Lab.: 3 credits

This course is designed with the fundamental purpose to enable students to produce grammatically and typewritten correct and precise documents in the computer. Students will review the speedwriting theory learned by practicing dictation of letters with a variety of vocabulary and emphasis in the correct usage of language rules. The student integrates his knowledge with the correct transcription process of different documents. (*Pre-requisites: OFSY 1201L, 1250, 1301L*)

## **OFSY 2201L: Dictation and Transcription of English Speedwriting and Lab: 3 credits**

This course is a writing system that is based primarily on the English Language alphabet. Through this course the speedwriting transcription skills and English language reinforcement are emphasized. Also, the speed and good work habits are developed in the process of taking dictations.

(Pre-requisites: ENGL 1010, 1020, OFSY 1201L, 1301L)

## OFSY 2450: Administration and Office Techniques: 3 credits

The main purpose of this course is to familiarize the students with all the functions and techniques of the modern office and principles that apply to the planning, organization, direction and control of the typical activities of the different offices and in the solution of problems that appear. It also presents the applications of new equipment and the technological changes, and the effects in the administration of the office and support personnel.

## OFSY 2501L: Keyboarding and Lab: 3 credits

In this course students will develop skills in the operation and management of the keyboard. The student will learn the key touch sequence of the alphanumeric keyboard, symbols and special characters most frequently used in a personal computer. This course also emphasizes the development of speed and accuracy skills on the keyboard.

## OFSY 2661L: Planning and Techniques of Training and Lab: 3 credits

This course prepares the student with the techniques to plan, coordinate, offer and evaluate training programs for the office personnel. Emphasis is given in the identification of needs, in the selection of human and technological resources and in the coordination and presentation of training proposals. (*Pre-requisite: OFSY 2450, 2730, 2731L, SPAN 1010, 1020, ENGL 1010, 1020*)

## **OFSY 2730: Word Processing and Electronics Presentations I: 3 credits**

Introductory course to the basic functions of Word and PowerPoint programs. The student will apply the basic functions of the Word program to the preparation of diverse commercial documents. The student will be guided in the preparation of an effective presentation in PowerPoint. The student will be provided with the necessary knowledge to take the test for the certification as a Microsoft Office Specialist (MOS) in Word Core. (*Co-requisites OFSY 2731L*) (*Pre-requisites OFSY 1201L, 1301L*)

## OFSY 2731L: Word Processing and Electronics Presentations I Lab.: 1 credits

The phase of the laboratory of Word Processing and Electronic Presentations I is a resource used for the development, practice and application of the functions learned in class OFSY 2730. This course provides the basic knowledge for the student to be able to take the exam for the Certification of Microsoft Office Specialist (MOS) in Word Core.

(Co-requisites OFSY 2730) (Pre-requisites OFSY 1201L, 1301L)

## **OFSY 2740: Word Processing and Electronics Presentations II: 3 credits**

This course prepares the student in advanced techniques and functions in the Word and PowerPoint programs. The necessary concepts to create styles, schemes, tables, index and crossed references are explained, as well as to translate, review, share and protect documents, add or create Web pages, combine correspondence and create and use macros. It also includes the advance concepts of PowerPoint program. It provides the minimum knowledge required to prepare the student to take the examination for the Certification of Microsoft Office Specialist (MOS) in Word and PowerPoint Expert.

(*Co-requisite: OFSY 2741L*) (*Pre-requisite: OFSY 2730-2731L*, 1201L-1301L)

## **OFSY 2741L: Word Processing and Electronics Presentations II Lab: 1 credits**

The laboratory of the Word Processing and Electronics Presentation II course offers the student the opportunity to apply the knowledge and advanced functions of the Microsoft Word and PowerPoint programs. It provides the minimum knowledge requirements to prepare the student to take the examination for the certification of Microsoft Office Specialist (MOS) in Word and PowerPoint Expert.

(Co requisite: OFSY 2740) (Pre-requisites: OFSY 2730, 2731L, 1201L, 1301L)

## OFSY 2751L: Electronic Business Writing and Lab: 3 credits

This course prepares the student to prepare office documents directly to the computer, and make the student conscious of the importance of the language and grammar to the office professional. Also studied is the application of the learned formats to the documents prepared and the specific functions of the information processing program.

(Pre-requisites: SPAN 1010, 1020, OFSY 1201L, 1301L)

## **OFSY 2851P: Office Practice and Integrating Seminar: 4 credits**

The office practice reinforces the theory learned in the classroom in a real work scenario. It consists of a cooperative agreement between business, industry and the Institution where the student receives the occupational knowledge and skills in a real supervised job experience. This course reinforces the relation of the academic content to the workforce environment. It also includes a 25 hours seminar where the student has the opportunity to review the minimum knowledge requirements of the field. Before beginning their internship, students must have completed all prerequisites of the courses in accordance with the curriculum of the program.

Pre-requisites for Medical Secretary Program:

OFSY 1201L, 1250, 1301L, 1351L, 1400, 2101L, 2450, 2730, 2731L, 2740, 2741L, MESE 1010, 2500, 2600L, 2700, PROG 2300, 2311L, BIOL 1010, 2000, BUAD 2250)

## **OFSY 3851P: Office Systems Practice and Integrating Seminar: 4 credits**

The office practice reinforces the theory learned in the classroom in a real work scenario. It consists of a cooperative agreement between business, industry and the Institution where the student receives the occupational knowledge and skills in a real supervised job experience. This course reinforces the relation of the academic content to the workforce environment. Includes a special presentation made in Power Point to a selected audience.

(Pre-requisites: OFSY 1201L, 1250, 1301L, 1351L, 1400, 2101L, 2201L, 2450, 2730, 2731L, 2740, 2741L, 2751L, 3901L, ACCO 1000, 2250, 2261L, BUAD2050, 2250, 3000, STAT 2000, PROG 2300, 2311L)

## OFSY 3901L: Simulated Office and Laboratory: 3 credits

In this course the student will develop the analysis of different situations in the office environment and decision-making. Creativity and originality will be emphasized when presenting work and will stimulate critical thinking when analyzing real situations in the office. The importance of interpersonal relations, attitudes, ethics, planning and decision-making will be emphasized. (*Pre-requisites: OFSY 1201L, 1301L, 1250, 1351L, 1400, 2101L, 2201L, 2450, 2730, 2731L, 2751L, 2740, 2741L*)

## PHAR 1000: Pharmaceutical Theory: 3 credits

In this course the students will examine the evolution and history of the discipline of pharmacy as well as concepts of ancient and modern medicine. Will discuss issues related to professional ethics and the role of a Pharmacy Technician with functions. The student will apply basic concepts in the classification of pharmaceutical products, dosage forms, routes of administration and reading pharmaceutical abbreviations. Also, will discuss federal and states pharmacy laws, identify the parts of a prescription or medical order and labeling.

#### PHAR 1050: Pharmaceutical Chemistry: 3 credits

In this course the students will identify the different functional groups present in the chemical and molecular structure of drugs. Relate the different compounds, formulas and chemical reactions applied in practice when reading literature on drugs and their action mechanisms.

(Pre-requisites: PHAR 1000, CHEM 1010, 1011L, MATH 1010)

## PHAR 1150: Pharmaceutical Mathematics I: 2 credits

In this course the students will examine mathematical operations routinely performed in pharmaceutical systems and those related to medical orders. Will apply concepts of ratio and proportion, estimate and calculation, and significant figures to calculate and determine quantities in medical prescriptions. (*Pre-requisites: PHAR 1000, MATH 1010*)

#### PHAR 1160: Pharmaceutical Mathematics II: 2 credits

In this course the students will discuss conversion measures used in pharmacy to perform pharmaceutical calculations and solve conversion problems between systems. They examine different ways to determine the amount of drug to fill according to the instructions on the prescription.

(Pre-requisites: MATH 1010, PHAR 1000, 1150)

#### PHAR 2051L: Composition and Dispensing Laboratory: 2 credits

In this course the students will discuss the functions of the Pharmacy Technician and assess the work according to professional ethics. Students will read and prepare composition prescriptions using procedures established in the USP chapter 795 of extemporaneous compositions. They will develop skills in the management of the torsion balance and other equipment used in the preparation of prescriptions. The students will solve problems involving calculation of ingredients in a pharmaceutical composition. In addition, they will identify the aseptic techniques necessary for handling sterile preparations according to the provisions of chapter 797 USP.

(Pre-requisites: BIOL 1010, 2000, MATH 1010, PHAR 1000, 1150, 2250) (Co-requisite: PHAR 2361L)

## PHAR 2250: Pharmaceutical Legislation: 3 credits

In this course the student will apply the laws and regulations governing the operational processes of pharmacies in Puerto Rico. The student will consult other laws and health services procedures that may affect the dispensing of drugs or any other legislation affecting the practice of the profession.

(Pre-requisite: PHAR 1000)

#### PHAR 2350: Posology: 3 credits

In this course the student will study aspects related to patient dosage, advantages, disadvantages and the factors to consider when dosing. The student will solve dose calculation problems using different routes of administration and dosage forms. Also, will determine the safety of dose per body weight and infusion rate in intravenous solutions.

(Pre-requisites: BIOL 1010, 2000, MATH 1010, PHAR 1000, 1150, 1160)

#### PHAR 2361L: Pharmacy Administration Laboratory: 2 credits

In this course the student will apply the basic concepts of management and marketing in the drafting of a proposal to establish a pharmacy. The student will integrate patient information to the billing system. The course also includes transcription of prescriptions and medical orders. The student will practice the billing to health plans process, and solve mathematical problems of cost, discounts, selling price, profit margin and inventory management strategies. In addition, the student will identify different processes of storage and preservation of drugs.

(Pre-requisites: MATH 1010, PHAR 1000, 1150, 2250) (Co-requisite: PHAR 2051L)

## PHAR 2560: Pharmacology: 3 credits

In this course the students will discuss basic concepts of pharmacology. They will classify the antiinfective drugs and prescription drugs for conditions of the central nervous system by their commercial and generic name and their indications. They will discuss the contra-indications, adverse reactions and mechanism of action of each drug. (Pre-requisites: BIOL 1010, 2000, PHAR 1000)

## PHAR 2570: Pharmacology II: 3 credits

In this course students classify antineoplastic drugs, the gastrointestinal, reproductive, and urinary system, bone diseases, and natural and organic products. They will distinguish between the brand name and generic name, the therapeutic group they belong to and their indications. Students explain the contraindications, adverse reactions and mechanism of action of each drug identified. They will determine the dose, the type of interaction and modes of administration according to the condition and age of the patient. Students will label and store the drugs following the established protocol.

(Pre-requisites: BIOL 1010, 2000, PHAR 1000, 2560)

#### PHAR 2580: Pharmacology III: 3 credits

In this course the student will qualify cardiovascular drugs, blood modifiers, antiherlipidemic drugs, and drugs to treat conditions of the endocrine system by its trade name, generic name, the therapeutic group to which it belongs and their indications. Students will discuss the contra-indications, adverse reactions, mechanism of action of each drug identified. They will determine the dose, the type of interaction and management mode depending on the condition and age of the patient. They will label and store the drugs following the established protocol.

(Pre-requisites: BIOL 1010, 2000, PHAR 1000, 2560)

#### PHAR 2700: Pharmacy Internship Seminar I: 1 credit

This seminar is taken in conjunction with the course PHAR 2711P- Pharmacy Internship I. In this course the students will discuss aspects and situations experienced in the internship. Students apply knowledge, attitudes and responsibilities required in their performance as a pharmacy technician. In addition, students apply the laws and regulations governing the profession of pharmacy technician and their respective amendments in the performance of their internship.

(Pre-requisites: BIOL 1010, 2000, CHEM 1010, 1011L, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2361L, 2560) (Co-requisite: PHAR 2711P)

## PHAR 2711P: Pharmacy Internship I: 2 credits

This internship can take place in community pharmacies or hospitals. The law requires that an authorized pharmacist supervise the intern's performance as pharmacy technician. In the internship I, the student will strengthen the technical and administrative skills delegated by the pharmacist. Among other skills, the student will reinforce filling prescriptions, labeling, health plans billing, purchase orders and collation of merchandise. Students must complete 300 hours of internship at the Practice Center.

(Pre-requisites: BIOL 1010, 2000, CHEM 1010, 1011L, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2361L, 2560) (Co-requisite: PHAR 2700)

PHAR 2800: Pharmacy Internship Seminar II: 1 credit

This seminar is taken in conjunction with the course PHAR 2811P-Pharmacy Internship II. In this course, students will discuss issues and situations experienced in their pharmacy internship. They apply knowledge, attitudes and responsibilities required in their performance as a pharmacy technician. In addition, students apply the laws and regulations governing the profession of pharmacy technician and their respective amendments.

(Pre-requisites: CHEM 1010, 1011L, BIOL 1010, 2000, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2350, 2361L, 2560, 2700, 2711P) (Co-requisite: PHAR 2811P)

## PHAR 2811P: Pharmacy Internship II: 2 credits

This internship can take place in community pharmacies or hospitals. The law requires that an authorized pharmacist supervise the intern's performance as pharmacy technician. At Internship II, the students will continue to strengthen their technical and administrative skills delegated by the pharmacist. Students must complete 350 hours of internship at the Practice Center.

(Pre-requisites: CHEM 1010, 1011L, BIOL 1010, 2000, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2350, 2361L, 2560, 2700, 2711P) (Co-requisite: PHAR 2800)

## PHAR 2900: Pharmacy Internship Seminar III: 1 credit

This seminar is taken in conjunction with the course PHAR 2911P- Pharmacy Internship III. In this course, students will discuss issues and situations experienced in their pharmacy internship. They will apply knowledge, attitudes and responsibilities required in their performance as a pharmacy technician. In addition, they apply the laws and regulations governing the profession of pharmacy technician and their respective amendments.

(Pre-requisites: CHEM 1010, 1011L, BIOL 1010, 2000, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2350, 2361L, 2560, 2700, 2711P, 2800, 2811P) (Co-requisite: PHAR 2911P)

## PHAR 2911P: Pharmacy Internship III: 2 credits

This internship can take place in community pharmacies or hospitals. The law requires that an authorized pharmacist supervise the student's performance as pharmacy technician intern. In Internship III, students enrich their technical and administrative skills delegated by the pharmacist. Students must complete 350 hours of internship at the Center for Practice.

(Pre-requisites: CHEM 1010, 1011L, BIOL 1010, 2000, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2350, 2361L, 2560, 2700, 2711P, 2800, 2811P) (Co-requisite: PHAR 2900)

## PHAR 2920: Pharmacy Integrated Seminar: 3 credits

In this course students will review and strengthen the knowledge, skills and attitudes required in their functions as pharmacy technician. They will apply concepts and skills acquired in various topics such as: theoretical techniques with pharmaceutical abbreviations, pharmacy administration, pharmaceutical legislation, and pharmacology, pharmaceutical mathematics, dispensing techniques, institutional pharmacy and dosage, among others. Students will comply at all times with the ethical standards of the profession. They will complete exercises similar to those presented in the professional certification exam to practice as a pharmacy technician.

(Pre-requisites: BIOL 1010, 2000, CHEM 1010, 1011L, MATH 1010, PHAR 1000, 1050, 1150, 1160, 2051L, 2250, 2350, 2361L, 2560, 2570, 2580, 2700, 2711P, 2800, 2811P) (Co-requisite: PHAR 2900, 2911P)

## PHYS 1010: Basic Physic: 3 credits

This course includes the basic physics laws that govern the hydraulic and pneumatic industrial systems and others to be included in the program. The basic laws of temperature gases, fluids as well as the conversions of unit systems utilized in the typical instrumentation and calibration processes are included. (*Pre-requisites:* MATH 2010)

#### POLS 3110: Political Science: 3 credits

In this course, students will analyze and discuss concepts, institutions, processes, systems, and philosophy of Political Science. Critically argue about social and cultural factors that influence the development and evolution of a political culture. In addition, examine various political systems and international organizations and their influence in the social duty of a nation.

## PROG 1030L: Introduction to Computers Programming and Lab: 2 credits

In this course, students will analyze the fundamental concepts and the development of a computer program. Describe the use of data, variables, and object-oriented design in programming. Illustrate the operation of a program and data flow using flowcharts. The students will also develop a graphical interface that integrates different programming structures.

## PROG 1035: Introduction to Computer Programming Logic: 3 Credits

In this course, students will discuss fundamental concepts for developing a computer program. They will explain how a program operates and the flow of data using flowcharts. They will describe the use of data, variables, and designs focused on objects in programming. They will also develop a graphic interface that integrates various program structures.

#### PROG 1140L: Data Base Design and Laboratory: 3 credits

In this course students will analyze the concepts of a database (tables, forms, reports, queries) and explain each role in the creation of a database. Design a database, while manipulating data and producing reports. The student will also assess the necessary security measures for an organization.

(Pre-requisite: ITTE 1031L)

## PROG 1150: Data Base Design: 3 credits

This course presents the importance of database in an organization in the design, creation and handling of data and the management of software as a tool for the creation and handling of database. (Co-requisite: PROG 1161L) (Pre-requisite: ITTE 1010, 1011L)

## PROG 1161L: Data Base Design Lab: 2 credits

This course covers the use of software as tools for the creation and management of databases. (*Co-requisite: PROG 1150*) (*Pre-requisites: ITTE 1010, 1011L*)

## PROG 2250: Applications Development I: 3 credits

This course includes the study and use of the Visual Basic Language using the concept of objectoriented programming handled by events. It emphasizes on the creation of programs for the graphic user interface (GUI), which allows working in the Windows environment. The student will learn to analyze real problems at a commercial level to develop the design and the necessary programming codes in Visual Basic, which will allows running an application.

(Co-requisite: PROG 2261L) (Pre-requisites: ITTE 1010, 1011L)

## PROG 2261L: Applications Development I Lab: 2 credits

In this laboratory the student will apply the knowledge and skills acquired in the PROG 2250 course for the creation of programs for graphic user interface (GUI), which allows working with the Windows OS environment. Will develop all the analysis and design involved in resolving a commercial application to create a system which complies with the requirements of business.

(Co-requisite: PROG 2250) (Pre-requisites: ITTE 1010, 1011L)

## PROG 2270L: Applications Development I and Laboratory: 3 credits

In this course students will analyze the functions of the Visual Basic programming language with a focus on the OOD (Object Oriented Design). The development of programs in this language also includes creating GUIs (Graphical User Interface). The student will also combine programming elements and integrate them into the development of a system in order to develop effective solutions that meet the user's specific needs.

(Pre-requisite: ITTE 1031L, PROG 1030L)

## PROG 2300: Use and Management of Spreadsheet: 3 credits

This course focuses on the creation, use and management of a spreadsheet, its applications, mathematical processes, editing, functions and graphs.

(Co-requisite: PROG 2311L)

(Pre-requisites: ITTE 1010, 1011L, only for the Business Administration with major in Information Systems Students)

## PROG 2311L: Use and Management of Spreadsheet Lab: 2 credits

This course covers the use and implementation of software programs such as Excel and the handling of information files.

(Co-requisite: PROG 2300) (Pre-requisites: ITTE 1010, 1011L, only for the Business Administration with major in Information Systems Students)

## PROG 2310L: Use and Management of Spreadsheet and Laboratory: 3 credits

In this course, students will examine the basic concepts and functions of a spreadsheet. Design, modify, and edit charts and graphs in spreadsheets. Program cells with formulas, functions, and operators that allow data analysis. The student will also integrate advanced spreadsheet tools for analyzing and presenting information in alternate programs.

(Pre-Requisites: ITTE 1031L)

## PROG 2350: Operating Systems and Architecture: 3 credits

This course includes the use, handling of personal computers and their architecture. It integrates the structure, functions, modalities of work and the characteristics of different operating systems.

(Co-requisite: PROG 2361L) (Pre-requisites: ITTE 1010, 1011L)

## PROG 2361L: Operating Systems and Architecture Lab: 2 credits

This course trains the students to be able to identify and administer the physical resources of a computer through the operating system. It also takes them to the implementation, configuration and handling of different operating systems.

(Co-requisite: PROG 2350) (Pre-requisites: ITTE 1010, 1011L)

## PROG 2370L: Operating Systems and Architecture, and Laboratory: 3 credits

In this course, students will analyze operating systems and their integration into personal computers and their architecture. Integrate and evaluate the structure, functions, work patterns, and characteristics of different operating systems. Also, outline the configuration, implementation, and management of different platforms, environments, and data retrieval management plans.

(Pre-requisite: ITTE 1031L)

#### **PROG 2371L:** Electronics Presentations and Lab.: 3 credits

This course includes theory and practice in the creation of electronic presentations and publications as tools to be used in areas such as technical reports, services and other promotional documents. (*Pre-requisites: ITTE 1010, 1011L*)

#### PROG 2390: Introduction to Java Script and Laboratory: 3 Credits

In this course, students will design control structures (decision and repetition) using the concepts and components of JavaScript. They will identify various existing libraries and frameworks. They will apply programming concepts adapted to JavaScript to create dynamic webpages, integrating HTML and CSS. (*Pre-requisites: PROG 1035, INTE 2520L*)

## PROG 2470: Analysis, Design and Implementation Systems: 3 credits

This course includes the theoretical concepts for the design and implementation of commercial computerized systems in accordance with the requirements of a modern computerized system.

(*Co-requisite: PROG 2481L*) (*Pre-requisites: ITTE 1010, 1011L, 1150, 1161L*)

#### PROG 2481L: Analysis, Design and Implementation Systems Lab: 2 credits

This course includes the application of the concepts for the design and the implementation of commercial computerized systems in accordance with the requirements of a modern computerized system.

(Co-requisite: PROG 2470) (Pre-requisites: ITTE 1010, 1011L, PROG 1150, 1161L)

## PROG 2480L: Analysis, Design & Implementation Systems and Laboratory: 3 Credits

In this course, the student will explain the key concepts in the development and implementation of an information system using the Systems Development Life Cycle process (SDLC). Evaluate different methods and issues important for the development of an information system, regardless of the type of company that needs it. The student will also develop quality control in the development and implementation of an information system.

(Pre-Requisites: PROG 1140L)

## PROG 3350: Application Development II: 3 credits

This course involves students in using the characteristics, structure and functioning of the Visual Basic language. It emphasizes on the databases-oriented programming and development of advanced applications in Visual Basic. Includes concepts such as design and databases creation to add, modify or delete records from it. It emphasizes the use of the database fields for the creation of mathematical formulas that will allow producing both partial and final results. (*Co-requisite: PROG 3361L*)

## PROG 3360L: Phython Programming and Laboratory: 3 Credits

In this course, students will design different programs using the Python programming language. Through this language they will declare variables and modify their values using arithmetic operations. They will develop decision and repetition structures using different routines. They will create and administrate arrays and their elements. Additionally, they will be able to manipulate data in text files and CSV (comma-separated values) files.

(Pre-requisites: PROG 1035)

## PROG 3361L: Application Development II Lab.: 1 credit

In this lab the student will apply acquired knowledge in the PROG 3350 course to create programs for the graphical user interface (GUI) but with emphasis on connection of databases related to Visual Basic. It will develop all the analysis and design involved in resolving a commercial application to create a system that complies with the requirements needed in a relational database that is accessed through a programming language.

(Co-requisite: PROG 3350)

## PROG 3355L: Applications Development II and Laboratory: 3 credits

In this course, students will analyze the attributes and advanced programming features of Visual Basic. Develop programs integrating databases and web applications, using ADO.net, Windows Forms, Data GridView, and Crystal Reports. The student will also plan and design applications according to customer needs, taking into account the security and integrity of the content of the application.

(Pre-Requisites: PROG 2270L)

## PROG 3370: Object Oriented Programming: 3 credits

This course prepares students in the design and management of programs oriented to objects in a vanguard's language, JAVA. Emphasizes the use of a compilation JIT (Justin Time).

(Co-requisite: PROG 3371L) (Pre-requisites: ITTE 1010, 1011L, PROG 1030L)

## PROG 3371L: Object Oriented Programming Lab.: 1 credit

This course covers the programming oriented to objects as tools for the development of the applications in this environment.

(Co-requisite: PROG 3370) (Pre-requisites: ITTE 1010, 1011L, PROG 1030L)

#### PROG 3375L: Object Oriented Programming and Laboratory: 3 credits

In this course, students will identify Java as a robust programming system and versatile language. Students will learn and master the JAVA platform and language. Create and compile applications and also use graphic applications (IDE).

(Pre-Requisites: PROG 3355L)

## PROG 3420: Data Base Management: 3 credits

This course focuses on the creation, management and maintenance of databases utilizing SQL (Structure Query Language). Also, specific commands and instructions will be used to obtain useful information on databases.

(Co-requisite: PROG 3431L) (Pre-requisites: PROG 1150, 1161L)

## PROG 3431L: Data Base Management Lab.: 2 credits

This course covers the utilization of programs as tools for the creation, management and maintenance of the databases utilizing SQL (Structured Query Language)

(Co-requisite: PROG 3420) (Pre-requisites: PROG 1150, 1161L)

#### PROG 3425L: Data Base Management and Laboratory: 3 credits

In this course, students will design, manage, and provide maintenance to databases created in an SQL environment. Explain the analysis tools used in logical and relational databases in SQL. Describe characteristics of tables, forms of relationship and data modification strategies to reduce the loss of information in a database. The student will also generate and evaluate information in a database using SQL functions. (*Pre-Requisite: PROG 1140L*)

## PSYC 2510: Psychology: 3 credits

In this course the student will analyze basic concepts in the psychological study of human behavior. Also, discuss situations in everyday life, which have a significant influence on the psychosocial behavior, with emphasis on personal growth and understanding to others.

## PSYC 3510: Social Psychology: 3 credits

In this course, students will analyze concepts, precursors, and research application in psychosocial processes in the study of social behavior. Distinguish group formation processes and influence on human behavior. Also, discuss the factors that influence behavior through changes in attitudes, persuasion, aggression, racism, and violence. (*Pre-requisite: PSYC 2510*)

## PSYC 3520: Psychopathology: 3 credits

In this course, students will analyze fundamental concepts, history, theories and ethical and legal aspects of psychopathology. Examine different systems of classification and diagnosis of abnormal behavior and its relationship to criminal behavior. Furthermore, students will analyze various mental disorders that are associated with criminal behavior. (*Pre-requisites: JUST 2020, PSYC 2510, 3510*)

## **RADI-200:** Fundamentals of Radiologic Sciences: 2 Credits

This course is designed to introduce the student to the study of the quality services principles for consumer, organization and administration of a radiology department, communication and legal aspects of the profession. Additionally, the course includes the study of the x-rays history, the different radiographic procedures to perform, diagnostic imaging modalities and the student is related with the laws that regulate the profession's practice and the basic principles of radiologic protection. Also, the principles, practices and policies of health services organizations are discussed and examined. The course consists of 30 didactic hours.

## **RADI-201: Radiographic Film Processing: 3 credits**

This course is designed to provide the student the necessary knowledge about the design, structure, functioning of the radiographic room and equipment necessary to obtain a radiographic image. The basic principles of radiographic film processing, management and storage are provided as well as the characteristics and use of intensifying screens, formation of latent image and possible devices. The student also obtains the necessary knowledge to process a radiographic film manually, automatically and by other existent processing modalities. The student will have the opportunity to apply what was learned in class, through Clinical Practice I. The course consists of 45 didactic hours.

### **RADI-202:** Principles of Radiographic Exposition: 3 credits

This course is designed for the student to become acquainted with the basic factors that affect or influence the production of a radiographic image. Also, it includes the theoretical knowledge of the x-ray production, the basic radiation principles and the exposition factors. The basic principles for the preparation of a radiographic techniques chart used in diverse situations are studied. The course consists of 45 didactic hours.

## **RADI-203: Clinical Practice I: 2 Credits**

This course is designed for the student to have the opportunity to observe the activities of a Radiologic Department or Imaging Center from the office procedures to the day to day operation for observation of various radiologic exams. This permits the student to understand the Radiologic Department's function and its importance within to health care services system, before initiating the clinical phase. The course consists of 90 hours of clinical practice.

## **RADI-204: Radiologic Procedures I: 3 Credits**

This course is designed to provide the student knowledge about anatomy positions, directional plane, reference line, and palpation points used for creating a radiographic image. The student is prepared to perform routine radiographic studies, with emphasis on the upper and lower extremities. It also permits the student to analyze the exposition factors used for an optimum quality radiographic image and to use the radiologic protection principles. The course consists of 30 didactic hours and 30 hours of supervised lab experience.

#### **RADI-205: Sectional Anatomy: 2 Credits**

This course is designed for the student to learn to identify anatomy structures using as reference axial or transverse plane, sagittal, coronal, necessaries in medical images. The student recognizes the normal anatomy structures in the modalities of Computerized Tomography, Magnetic Resonance and Ultrasound. It also exposes the student to the body divisions, cavities, different anatomy layers, classification of structures, sectional plane, and to describe the relation between adjacent structures and the comparison of different anatomy sectional cuts. The course consists of 30 didactic hours.

(Pre-requisite: BIOL-2020)

## **RADI-206: Patient Management and Care: 2 Credits**

This course is designed to provide the student the opportunity to become related with the basic necessary concepts for patient assistance and care. It describes the role of the Radiologic Technologist and the intervention with the patient with different health conditions. Besides, it includes considerations for the physical and psychological needs of patients and family members, procedures for patient's routine and emergencies care and procedures for control of infections. The course consists of 15 didactic hours and 30 hours of supervised lab experience.

#### **RADI-207: Medical Terminology: 2 Credits**

This course is designed for the student to become acquainted with the language used in the medicine field, in order to communicate effectively with the different members of the health interdisciplinary team. Knowledge will be provided in the construction of specific words and terminology, related with the human body and its illnesses. Also, it provides for the study of medical symbols, radiographic orders, pathologies and illnesses related with radiographic diagnosis. The course consists of 30 didactic hours.

#### **RADI-208: Radiologic Procedures II: 3 Credits**

This course is designed for the student to continue with the learning process of patient positioning for radiographic of the shoulder girdle, thorax bones, abdomen, vertebral column and pelvic bone. The student will also identify the anatomy structures demonstrated in each projection. The course consists of 30 didactic hours and 30 hours of supervised lab experience. (*Pre-requisite: RADI-204*)

#### **RADI-209: Radiologic Physics: 3 Credits**

This course is designed for the student to become acquainted with the basic principles of: mechanics, measurement units, atomic atom, models of atom, and nucleous of atom, electricity and magnetism. Topics discussed in clued basic concepts of ionizing radiation, matter structure and how the x-rays are produced. Besides, the student gains knowledge of spectrum of radiation, interaction of radiation with matter, characteristics and functioning of x ray tubes and performance of x ray tubes. The course consists of 45 didactic hours. (*Pre-requisite: FIS-101*)

## **RADI-210: Clinical Practice II: 3 Credits**

This course is designed to provide the student the opportunity to perform simple radiographic procedures, under the supervision of the Clinical Instructor and the Professor of the course. Therefore, the student's participation is a passive one. The student has the opportunity to apply the cognitive and psychomotor concepts learned, from prior courses. Additionally, the student will interpret the medical orders, establishes of a technologist-patient relation and develops the techniques for radiographic positions, management and operation of the radiography equipment. The emphasis of this course is the study of the radiographic positions of the upper and lower extremities. The course consists of 135 hours of clinical practice.

(Pre-requisite: RADI-204, RADI-203)

## **RADI-211: Ethics in Radiologic Sciences: 2 Credits**

This course is designed for the students to become acquainted with ethic fundamentals. They will observe the philosophical and historical basis of ethics and the elements of the ethical conduct, as elements of this behavior. The students will have the opportunity to evaluate a variety of ethical dilemmas and situations within their clinical practice. The students will also know the legal terminology, concepts and principles such as malpractice, legal and professional standards, the importance of an appropriate documentation and the use of informed consent. The course consists of 30 didactic hours.

#### **RADI-212:** Basic Principles of Medical Pathology I: 2 Credits

This course is designed for the student to become familiarized with the medical pathologies and the radiologic procedures in which are observed. Students will observe the origin, signs, symptoms and treatment of the respiratory and skeletal systems' illnesses. Additionally, the students may identify in the medical orders and radiographic studies, the pathologic conditions of specific organs and systems. Also, the infections control topic is addressed. The course consists of 30 didactic hours.

## **RADI-213: Basic Principles of Medical Pathology II: 2 Credits**

This course is designed for the student to become acquainted with the origin, signs, symptoms and treatment of the following systems: gastrointestinal, urinary, cardiovascular, hematopoietic, nervous, endocrine and reproductive. The student may also identify in the order and radiographic studies, the pathologic conditions of specific organs and systems. This is a continuation of the course Principles of Medical Pathology I. The course consists of 30 didactic hours.

(Pre-requisite: RADI 212)

## **RADI-214: Clinical Practice III: 3 Credits**

This course is designed to provide the student the opportunity to perform radiographic procedures of the shoulder, vertebral column, pelvic zone, abdomen and thorax, under the supervision of the clinical instructor and the professor of the course. Additionally, the student will integrate the clinical competencies obtained from prior clinical experiences. Therefore, the student's supervision and follow up is diminished. The course consists of 135 hours of clinical practice.

(Pre-requisite: RADI-204, RADI-208, RADI-203, RADI-210)

## **RADI-215: Radiology Procedures III: 3 Credits**

This course is designed for the student to become acquainted with the radiographic techniques and positions related with cranial and facial bones, temporomandibular articulation, jaw and mastoid. The course includes special studies conducted in conventional radiology manner, such as IVP, cystograms, studies of the stomach, studies of the intestines, barium enema, and gall bladder studies. The course consists of 30 didactic hours and 30 hours of supervised lab experience.

(Pre-requisite: RADI-204, RADI-208)

## **RADI-216: Critique Radiology: 3 Credits**

This course is designed to provide the student the opportunity to become acquainted with a series of criteria that permits analysis of radiographic studies, to determine if they are of optimum or poor qualities. It also requires the discussion of the problem solving technique, to be applied to the evaluation of radiographic studies and to identify those exposition factors that may affect the quality of radiographic image. The course consists of 45 didactic hours.

(Pre-requisite: BIOL-2010, BIOL-2020, RADI-204, RADI-208, RADI-201, RADI-202, RADI-207, RADI-203, RADI-210, RADI-205)

## **RADI-217: Radiologic Protection: 2 Credits**

This course permits the student to become related with the basic properties of radiation, the maximum permissible doses per anatomic region or whole body, dosimeter and the effects of ionizing radiation in living cells. The effects of radiation in molecules, cells, tissue and body and the radio sensitivity of the different organs will be studied. The factors affecting the biological responses, including the acute and chronic effects of the radiation will be studied. It includes the studies of laws Bergonie, Thibondeau and ALARA concept. The basic concept of radiologic protection will be provided to minimize patient exposition to ionizing radiation (infant, children, adolescents, adults and elderly) public and general and the personnel working with radiation equipment. At the same time the student becomes familiarized with the requirements established by the state and federal agencies, in regards to radiologic safety and protection. The course consists of 30 didactic hours.

## RADI-218: Pharmacology and Medication Administration in Diagnostic Imaging: 2 Credits

This course is designed to familiarize the student with the names, doses, and ways of administration of the medication, generally used in the radiology department. It facilitates the student to identify and inform about the signs and symptoms of the side effects after the administration of a medication or contrast means. The course consists of 30 didactic hours.

(Pre-requisite: MATH-1010)

#### **RADI-219: Introduction to Diagnostic-Modalities: 2 Credits**

The course is designed for the student to become related with several of the specialties for the creation of diagnostic images. This includes the most recent advances in medical imaging such as: Computerized Tomography, Magnetic Resonance, Medical Sonography, Nuclear Medicine and Mammography, bone densitometry, interventional vascular and Radiotherapy. The course consists of 30 didactic hours.

#### **RADI-220: Seminar and Clinical Practice IV: 7 Credits**

This course is designed to provide the students the opportunity to perform radiographic procedures of cranium bones, facial, sinus, nasal bone, orbits, zygomatic arch, jaw and other special radiographic studies. Additionally, the student will integrate the clinical competencies obtained from prior clinical experiences. Therefore, the student should demonstrate having accomplished an independent clinical performance. As part of this course, a series of integrative seminars will be developed, to discuss relevant themes of radiology. The course consists of 315 hours' clinical practice.

(Pre-requisite: RADI-204, RADI-208, RADI-215, RADI-203, RADI-210, RADI-214)

## **RCP-200:** Cardiopulmonary Anatomy and Physiology: 3 Credits

This course is geared toward providing the students with specialized knowledge about the anatomical and physiological aspects of the cardiopulmonary system. Students learn to identify and describe the functions of the organs in this system. The course consists of 45 hours.

(Pre-requisite: BIOL-2020)

#### **RCP-201:** Fundamentals of Respiratory Care: 4 Credits

This course is designed to emphasize the primary aspects of respiratory care, the history, structure and function of related professional associations. Students will develop and apply the necessary skills to make

basic and advanced evaluations of patients, in addition to learning the correct manner to perform oxygen, humidity and aerosol therapy in routine situations as well as in emergency situations. The course consists of 30 didactic hours, 30 hours of supervised experience and 45 hours of clinical externship.

(Pre-requisite: CHEM-2031, FIS-101, BIOL-2010)

## **RCP-202: Cardiopulmonary Pathophysiology: 3 Credits**

This course has been designed to provide the students with knowledge of identification, diagnosis and management of the most common cardiopulmonary conditions. The students develop skills needed to identify and apply proper therapy in the different conditions presented for study. The course consists of 45 didactic hours.

(Pre-requisite: RCP-200, RCP-201)

#### **RCP-203: Pharmacology for Respiratory Care: 3 Credits**

This course has been designed to emphasize the importance and the development of skills in the pharmacy field. Students learn the different pharmacological modalities for treatment and management of cardiopulmonary conditions. Emphasis is given to the drugs administered to patients with pulmonary problems, giving the students the opportunity to develop the knowledge necessary to apply in the management of patients. The course consists of 45 didactic hours.

(Pre-requisite: CHEM-2031)

#### **RCP-204:** Cardio Respiratory Care I: 7 Credits

This course is geared toward the students' formation in the basic and advanced techniques used in hyperinflation therapy, chest physical therapy, and management of artificial airways. Emphasis is given to handling of the critically ill patient. The course combines theoretical preparation with performance in laboratories and clinical practice. The course consists of 45 didactic hours, 60 hours of supervised lab experience and 90 hours of clinical externship.

(Pre-requisite: RCP-200, RCP-201)

#### **RCP-205: Electrocardiography: 3 Credits**

This course has been designed to prepare the students in reading, interpreting and performing electrocardiographic patterns. It prepares the students to recognize normal EKG patterns as well as the common dysrhythmia. The course consists of 45 didactic hours.

#### **RCP-207: Mechanical Ventilation: 5 Credits**

This course is designed to prepare students in the basic and advanced aspects of mechanical ventilation. It focuses on the aspects pertaining to initiating, monitoring and weaning of the patient from the mechanical ventilation. The course consists of 45 didactic hours and 60 hours of supervised lab experience.

(*Pre-requisite: RCP-213*)

#### **RCP-208: Advanced Cardiopulmonary Diagnosis: 2 Credits**

This course initiates the students in the different techniques used to diagnose cardiopulmonary conditions. The advanced diagnostic measures are studied so that the students learn to evaluate average and critically ill patients. The course consists of 30 didactic hours.

(Pre-requisite: RCP-202)

## **RCP-209: Advanced Cardiopulmonary Care: 2 Credits**

This course is based on the Advanced Cardiac Life Support Provider Manual of the American Heart Association. It seeks to prepare the students to recognize and manage critically ill patients who require advanced measures for resuscitation in coronary intensive care units, multidisciplinary areas and emergency rooms. The course consists of 15 didactic hours and 30 hours of supervised lab experience.

(Pre-requisite: RCP-205)

## **RCP-210:** Neonatal and Pediatric Respiratory Care: 2 Credits

This course is geared toward the study and application of neonatal and pediatric respiratory care. Emphasis is given to the evaluation and management of the most common cardio respiratory conditions as well as the management of mechanical ventilation for this sector of the population. The course consists of 30 didactic hours.

(Pre-requisite: RCP-200, RCP-202, RCP-204)

## **RCP-211: Seminar: 2 Credits**

This course is designed to study specialized topics concerning the respiratory therapist. The topics discussed include pulmonary rehabilitation, job search procedures and employment retention. It also prepares the student for the Puerto Rico and NBRC board exams. It also includes practice of test questions for the board test and medical lectures. The course consists of 30 didactic hours.

(Pre-requisite: RCP-204)

#### **RCP-212: Clinical Practice: 6 Credits**

This course is geared toward the application and intervention with real patients with regard to the basic and advanced techniques of therapeutical and diagnostic procedures. It includes basic and advanced evaluation of patients with oxygen, humidity and aerosol therapy, hyperinflation and physical chest therapy, ABG's, PFT's and mechanical ventilation. All of these techniques are studied from the view point of the adult, pediatric, and neonatal patient. This course consists of 270 hours of clinical practice.

(*Pre-requisite: RCP-200, RCP-201, RCP-202, RCP-203, RCP-208, RCP-209, RCP-210, RCP-211, RCP-213*)

## **RCP-213: Pulmonary Function Tests and Arterial Gases: 5 Credits**

This course is designed to prepare students in the advanced aspects of respiratory care, specifically in performing and interpreting pulmonary function and arterial gases. The course consists of 45 didactic hours, 30 hours of supervised lab experience and 45 hours of clinical externship.

(Pre-requisite: RCP-204)

## SEMI 1001: University Environment Seminar: 1 credit

In this course, students will contrast the various services, facilities, and programs offered by National University College. The students will develop the necessary skills to achieve success in college and work. The students will also examine the concept he/she has of him/herself to be successful in their personal, academic, and professional life.

#### SEMI 2009: Seminar of Present Issues: 3 credits

The Seminar will consist of the review and integration of the learning experiences across the curriculum, taking into account pedagogical situations and study of cases. The emphasis will be given to study issues of relevance in education. The student will analyze critically present issues in the educational field to establish awareness of the importance of his professional development using a multidisciplinary approach.

(Pre-requisites: EDUC 2020, 2030, 3120, 3140, 3150,3170, 4130)

#### SEMI 4001: Integrating Seminar: 1 credit

In this course the student will have the opportunity to integrate the theoretical and practical knowledge acquired during the courses in the Bachelor's degree, through individual and group workshops and reviews among other strategies.

(Co-requisite: EDUC 4551P)

(Pre-requisites: *EDUC 2020, 2030, 2040, 2050, 3030, 3050, 3120, 3140, 3150, 3160, 3175, 3180, 3190, 3230, 3250, 3290, 4130, 4161L, 4170*)

## SONO 101: Ultrasound: 4 Credits

This course is geared to the study of the fundamental principles of sound, ultrasound and the physical properties of ultrasound. Students learn the definition of sound, ultrasound and how these elements travel through the tissues. Students also learn how to measure frequency and speed of sound through different means and how ultrasound is reflected and absorbed in the tissues.

The course also includes use of the Doppler ultrasound and color flow. Students learn how the Doppler is acquired, generated and measured. Emphasis is given to the Doppler Effect and to the equation so that students can apply within the laboratory the principles they have learned. Special attention is given to spectrometric analysis and color Doppler. The course consists of 60 didactic hours.

#### SONO 102: Medical and Physical Instrumentation Ultrasound: 3 Credits

This course provides students with knowledge of the principles of medical instrumentation and ultrasound. The physics principles include: energy of sound and its characteristics, the piezoelectric effect, properties of ultrasound waves, speed of sound, and its propagation, Doppler and Color-Flow physics. During the course, students also discuss the construction and operation of different types of ultrasound equipment and transducers. Students learn about sonography units of measurement, equations and display modes. The course also focuses on the instrumentation content and ultrasound and vascular physics which are emphasized on the national register tests. This course is complemented with a laboratory in which students apply knowledge. The course consists of 30 didactic hours and 30 hours of supervised lab experience.

(Pre-Requisites: MATH 1010, FIS 101)

## SONO 103: Introduction to Medical Sonography: 2 Credits

This course introduces the students in the Clinical Sonography program to the duties and roles of sonographers. The course introduces topics such as historical development of the profession, ethics code, sonography terminology, desired abilities and skills of future sonographers and safety techniques. The course also helps students learn about different specializations in the field and the basic instruments of the equipment that will be used. The course consists of 30 didactic hours.

## SONO 104: Sonography of Superficial Structures: 3 Credits

This course provides students with detailed study of the normal and pathological superficial structures in relation to exploration techniques, patient history, and laboratory data, in addition to selection of transducers and exploration protocols. This course includes concepts related to ultrasound studies of breasts, thyroid, testicles, and scrotum, prostate, prostate, penis, and neonatal neurosonography. The course consists of 45 didactic hours.

#### SONO 105: Sonography Laboratory of Superficial Structures: 3 Credits

This laboratory must be taken with the course Sonography of Superficial Structures (SONO 104). Student practice the protocols to be followed for complete tests in the laboratory while they revise the physics principles related to diseases of the superficial structures. The course consists of 90 hours of supervised lab experience.

(Co-requisite: SONO 104)

#### SONO 106: Abdominal Sonography: 3 Credits

This course emphasizes clinical procedures and interpretation of abdominal sonography examinations. The course includes evaluation of the liver, kidneys, pancreas, gallbladder and spleen among other organs. Topics regarding normal anatomy and physiology, and pathological conditions of the abdomen are discussed while sonograms are performed in the laboratory. The course consists of 45 didactic hours.

## SONO 107: Laboratory of Abdominal Sonography: 3 Credits

This laboratory must be taken concurrently with the course Abdominal Sonography (SONO 106). Student practice protocols for complete examinations in the laboratory, in addition to tracking techniques and procedures while reviewing the physics principles related to diseases of the abdomen. Students also learn how to interpret medical orders. This course consists of 90 hours of supervised lab experience.

(Co-requisite: SONO 106)

## SONO 108: Gynecological and Obstetrical Sonography: 3 Credits

This course prepares students to perform sonograms of the pelvic area in female bodies. Emphasis is given to gynecological anatomy and pathology and to endovaginal anatomy. Students will practice different diagnostic techniques to recognize normal and abnormal conditions and to evaluate fetal development. The course consists of 45 didactic hours.

#### SONO 109: Laboratory of Gynecological and Obstetrical Sonography: 3 Credits

This laboratory must be taken concurrently with the course Gynecological/Obstetric Sonography. Students practice complete examination protocols in the laboratory while they revise the physics principles related to gynecological/obstetrics diseases. This course consists of 90 hours of supervised lab experience.

(Co-requisite: SONO 108)

## SONO 110: Vascular Sonography: 3 Credits

This course focuses on the study of basic anatomy, physiology and pathology of the vascular system, as well as the basic protocols for exploration. The course consists of 45 didactic hours.

## SONO 111: Laboratory of Vascular Sonography: 2 Credits

This laboratory must be taken concurrently with the course Vascular Sonography. Students practice complete examination protocols in the laboratory while they revise the physics principles related to gynecological/obstetrics diseases. The course consists of 60 hours of supervised lab experience.

(Co-requisite: SONO 110)

#### SONO 112: Patient Care and Management: 3 Credits

This course is designed to develop the tools and basic knowledge in patient care required in the practice of this profession according to accepted professional standards. The course includes an introduction to health systems and their agencies, legal, ethical, and personal responsibilities, room preparation, safety at work, infection control and vital signs, among others. The course consists of 45 didactic hours.

#### SONO 113: Medical Terminology: 2 Credits

This course provides instruction on understanding the structure of words used in the medical field. Students will analyze and learn how are terminology is spelled, combined, plural forms, prefixes, suffixes, pronunciation, spelling, medical abbreviations, symbols and definitions. Anatomical systems will be discussed to connect the use and context of the terms. The course consists of 30 didactic hours.

#### **SONO 114: Laboratory Practice: 4 Credits**

This course is a laboratory where the student will practice in a simulated environment under the supervision of a professor. In the course, the student will practice the most commonly used tracking techniques and procedures in clinical sonography. The student will interpret medical orders, analyze patient's medical history, and provide patient management and orientation. In addition, the course includes development of skills in identifying incises and organs seen in the various sonography studies. This course consists of 120 hours of supervised lab practice.

(Pre-Requisites: SONO 103, SONO-104, SONO-108, SONO-110)

#### **SONO 115: Clinical Seminar**

During the course, the student discusses cases worked during Clinical Practice IV and the student will share with classmates and professor any difficulties encountered. In addition, students learn about specialized topics in the sonography field through research in the EBSCO database, articles in professional journals or the internet.

The course also includes preparing for the job search and job retention, ARDMS (American Registry for Diagnostic Medical Sonography), board test review questions and other activities. The course consists of 30 didactic hours. (*Co-requisite:SONO 203*)

#### SONO 200: Clinical Practice of Sonography I: 1 Credit

This is the first course in a number of courses in which students apply knowledge and skills learned in the classrooms to real scenarios in a private medical office or hospital. This practical experience is performed under the direct supervision of a clinical professor. The aim of this educational experience is to provide the students with an exploratory and observation phase in a real scenario where they can put into practice what they have learned in class. The students will learn about the interdisciplinary team and the work area. In addition, students will perform abdominal sonography studies in which they have the opportunity to interpret medical orders, analyze the patient's medical history, and protocol and tracking techniques. The course consists of 45 hours of practice. (*Pre-Requisites: SONO 103*)

## SONO 201: Clinical Practice of Sonography II: 2 Credits

Students will continue to develop their clinical experiences while taking on greater technical responsibilities in the work area. Students will obtain intensive clinical experiences using the skills acquired and developed for the profession.

This practical experience is performed under the direct supervision of a clinical professor. The objective of this educational experience is to provide students with the opportunity to practice common procedures used in sonography. In addition, on, students will have the opportunity to interpret medical orders, analyze a patient's medical history, provide patient orientation, and perform abdominal sonography studies with emphasis on obstetric and gynecological studies. This course consists of 90 hours of practice.

(Co-requisite: SONO 108, SONO 109)

#### SONO 202: Clinical Practice of Sonography III: 2 Credits

Students will continue to develop their clinical experiences while taking on greater technical responsibilities in the work area. This practical experience is performed under the direct supervision of a clinical professor. The objective of this learning experience is to provide students with the opportunity to practice common sonography procedures according to Practice I and II. In this practice, emphasis will be given to sonography studies of superficial structures. This includes interpretation of medical orders, analysis of medical history, tracking techniques, protocols; students practice identifying cuts, organs, anatomical structures, normal variants and normal and pathological appearance. In addition, attitudes, professional development and students' professional ethics are assessed. This course consists of 90 hours of practice.

(Pre-Requisites: SONO 201) (Co-requisite: SONO 104, SONO 105)

#### SONO 203: Clinical Practice of Sonography IV: 5 Credits

Students will continue to develop their clinical experiences while taking on greater technical responsibilities in the work area. Students will obtain intensive clinical experiences using the skills acquired and developed for the profession. In this last practice, students must be prepared to become competent clinical Sonographers. This course consists of 225 hours of practice.

(Pre-Requisites: SONO 101, SONO 102, SONO 103, SONO 104, SONO 105, SONO 106, SONO 107, SONO 108, SONO 109, SONO 110, SONO 111, SONO 112, SONO 113, SONO 114, SONO 200, SONO 201, SONO 202)

## SOSC 1010: Social Sciences I: 3 credits

Upon completion of this course, the student will analyze fundamental concepts of social sciences, starting from the history, evolution, and development of society. Argue issues across disciplines that make up social sciences such as history, anthropology, sociology, and psychology. In addition, students will develop and explain various social content researches based on current problems of the society to which they belong to.

Requires 14 hours of participation in community learning activities through service.

#### SOSC 1020: Social Sciences II: 3 credits

In this course the student will analyze key concepts of topics such as: the economy, politics, geography and environment, with emphasis on the history and its impact on modern society. In addition, it will compare various researches, content-based on current social problems of the society it belongs to.

(Pre-requisites: SOSC 1010)

#### SOSC 1030: Social Sciences: Tendencies and Perspectives: 4 credits

This course introduces the student to the discipline of the Social Sciences. The student will know the concepts, principles and theories of each discipline and the impact in the educational development. The goal is to get the human being integration to be pertinent in his life.

## SOSC 3610: Current Society: 3 credits

In this course, students will analyze the current society of Puerto Rico from a critical perspective. They will study political and economical structures and how these generate transformations in our social reality. The family, churches and schools will be considered in their role in our society.

(Pre-requisites: SOSC 1010, 1020, POLS 3110)

## SPAN 1010: Basic Spanish I: 3 credits

In this course, the student will apply the basic rules of spelling, grammar and syntax to express himself orally or in writing. He will analyze literary texts to communicate his critical response to the readings, acquire new vocabulary and improve writing skills. He will assess the importance of language to correctly apply the linguistic knowledge and the rules governing oral and written communication.

#### SPAN 1020: Basic Spanish II: 3 credits

In this course, the student will critically analyze different literary genres such as poetry, drama, theater, and novels. The student will describe and illustrate its evolution, development, and characteristics. Furthermore, the student will analyze the elements that distinguish the investigative reporting of chronicles. The student will also use oratory and speech as a resource for effective communication. Lastly, write and present a speech on one of the literary genres discussed in the course.

(Pre-requisite: SPAN 1010)

#### SPAN 2000: Business Spanish: 3 credits

This course has been designed to relate the students with logical and psychological examples necessary to achieve effective business writing. Critical thinking, analysis and synthesis will be emphasized. (*Pre-requisite: SPAN 1010,1020*)

#### SPAN 2020: Writing and Composition: 2 credits

In this course the student will strengthen writing skills learned in SPAN1010, SPAN1020; through reading and text comprehension, the study of vocabulary, and the grammar structures necessary to express himself correctly. Emphasis is made on the expositive and argumentative writing using the computer and the multimedia resources. (*Pre-requisites: SPAN 1010,1020*)

## SPAN 2040: Writing and Composition: 3 credits

In this course, students will examine the fundamentals of communication and writing. Establish the writing process. Integrate spelling and grammar in writing sentences, paragraphs, essays, and monographs (research papers). Also, explain the elements of each kind of narration and the use of technology in the writing process.

(Pre-requisites: SPAN 1010,1020)

## STAT 2000: Introduction to Statistics: 3 credits

In this course, students will examine and apply descriptive statistics in different professional settings. Analyze data by applying statistical methods to collect, summarize, present, and interpret quantitative and categorical data. Analyze situations in which to use general ideas about the concepts of linear correlation and linear regression. In addition, students will use computerized statistical applications that allow data processing as part of the process of data analysis.

(Pre-requisite MATH 1010)

#### STAT 3300: Inferential Statistics: 3 credits

This course is the study of the probability distribution and its use in the determination of population parameters, proper sampling, significant levels estimates, chi square, variance, regression, and correlation analysis in decision making.

(Pre-requisites: MATH 1010, STAT 2000)

#### **TEEN 2150: Technical English for Electronics: 3 credits**

This course covers basic technical English vocabulary with the purpose of providing students with a working knowledge with basic tools of oral and written expression. Special emphasis is given to technical vocabulary use in documents such as letters, memos, reports, as well as reading and writing skills.

(Pre-requisites: ENGL 1010, 1020)

#### THER 1011L: Introduction to Physical Therapist Assistant and Laboratory: 3 credits

In this course the student will be introduced to the fundamental concepts of physical therapy practice. The student will study the history of the profession and acquire basic patient care skills and knowledge within their scope of practice. The student will develop appropriate communication skills and critical thinking to facilitate the delivery of safe and effective interventions under the direction of a physical therapist.

(Co-requisites: None) (Pre-requisites: None)

#### THER 1040L: Functional Movement I and Laboratory: 4 credits

In this course the student will apply knowledge of human anatomy and physiology to the performance of functional movement including analysis of the biomechanical function of the upper extremity and spine. In addition, the student will examine normal thoracoabdominal movements and breathing patterns. The student will demonstrate mastery of oral and written expression using kinesiological terms to communicate and document therapeutic interventions.

The student will develop practical knowledge and skill in data collection procedures including goniometric measurements, manual muscle testing, palpation of bony landmarks and muscles, chest excursion measurements, measures of spinal kyphosis and lordosis, and accessory joint motions in upper extremities, neck and trunk. The student will also describe and demonstrate positions used for scoliosis screening and postural drainage of the lungs.

Co-requisites: BIOL 2020) (Pre-requisites: BIOL 2010, THER 1011L)

# THER 1041L: Modalities of Intervention of Electrotherapy, Physical Agents and Laboratory: 3 credits

In this course, the student will analyze the indications, contraindications, precautions and expected physiological responses associated with the application of selected physical agents, electrotherapy and biofeedback. They will develop the clinical judgement needed to establish or modify safe and effective treatment under the direction of a physical therapist.

(Co-requisites: BIOL 2020, THER 1040L, THER 2040) (Pre-requisites: BIOL 2010, THER 1011L)

## THER 1050L: Functional Movement II and Laboratory: 4 credits

In this course the student will apply knowledge of human anatomy and physiology to the performance of functional movement including analysis of the biomechanical function of the lower extremity. In addition, the student will analyze the components of normal posture, gait and motor development across the lifespan.

The student will develop practical knowledge and skills in data collection procedures including goniometric measurements, manual muscle testing, palpation of bony landmarks and muscles and accessory joint motion in lower extremities. The student will analyze the phases of walking and deviations in human ambulation. In addition, the student will recognize basic milestones of movement development across the life span.

(Co-requisites: THER 2011L) (Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1040L, THER 2040)

#### THER 1060L: Therapeutic Exercises and Laboratory: 4 credits

In this theoretical and practical course, students will analyze the implementation of exercise as a therapeutic means to restore function. They will focus on the fundamental principles of exercise as a therapeutic modality and proper implementation of conventional rehabilitation program, including directions, precautions and contraindications. The student will use this knowledge to develop the skills necessary to prepare and modify programs of therapeutic exercise under the direction the physical therapist.

(Co-requisites: THER 2050L, THER 1070L) (Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1041L, THER 1040L, THER 1050L, THER 2040, PSYC 2510)

#### THER 1070L: Soft Tissue Mobilization and Laboratory: 3 credits

In this theoretical and practical course, the student will develop skills for applying techniques of soft tissue mobilization including Swedish massage, sports massage, massage for pregnant women, massage for babies and toddler, massage for lymphedema, myofascial release, and massage in palliative care. The student will develop clinical judgment needed to establish or modify safe and effective treatment under the direction of a physical therapist.

(Co-requisites: THER 2050L, THER 1060L) (Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1041L, THER 1040L, THER 1050L, THER 2040, PSYC 2510)

### THER 2011L: Daily Living Activities and Laboratory: 3 credits

In this theoretical and practical course, the student will develop skills related to training in functional activities of daily living for patients with conditions or care needs in physical therapy. Students will apply skills to assist clients with positioning, ambulation, use of assistive devices and equipment, prosthetics, orthotics, transfer techniques, bed mobility, identification of environmental barriers, self-care strategies and functional training.

(Co-requisites: THER 1050L, THER 2161P)

(Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1040L, THER 2040, PSYC 2510)

#### THER 2040: Physical Dysfunctions: 3 credits

In this course, the student will analyze the etiology and pathological concepts associated with human disease involving the following systems: musculoskeletal, neuromuscular, integumentary, cardiovascular, pulmonary, endocrine, metabolic/gastrointestinal and genitourinary. The student will also recognize the clinical manifestations, general principles of treatment, complications and problems associated with dysfunction involving these systems. Pertinent medical terminology will be reviewed.

(Co-requisites: BIOL 2020, THER 1040L) (Pre-requisites: BIOL 2010, THER 1011L, PSYC 2510)

# **THER 2050L:** Advanced Rehabilitation Techniques for Complex Patient Conditions and Laboratory: 4 credits

This course is designed to integrate and apply the student's previously learned theories and skills to the treatment of acute and complex patients with conditions such as brain injury, stroke, amputation, burn trauma, cardiovascular disease, rheumatic disease, cancer, etc. In addition, students will learn to apply specialized treatment procedures such as prosthetics and orthotic management, wound and scar management, neurodevelopmental techniques, cardiac rehabilitation and palliative care. Students will also learn to adapt patient education techniques to meet the needs of the patients with cognitive impairment and other psychosocial complications. (*Co-requisites: THER 1060L, THER 1070L*) (*Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1041L, THER 1040L, THER 1050L, THER 2040, PSYC 2510*)

#### THER 2161P: Physical Therapist Assistant Practice I: 3 credits

This is the first comprehensive clinical experience of 190 hours in which the student will, at beginning level performance, apply, integrate and perform clinical skills obtained in class and labs on patients while supervised by a licensed physical therapist. The student will apply clinical skills such as positioning, transfers, gait training, basic passive, assisted and active ROM, and application of physical and electrotherapy agents. The student will also monitor and identify vital signs, pain, skin integrity/sensations, edema, joint range of motion, muscle strength, muscle tone, balance, posture and functional activities. The student will demonstrate skills in communication, documentation and patient education. In addition, the student will recognize the organizational planning and operation of the physical therapy services.

(Co-requisites: THER 1050L, THER 2011L) (Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1041L, THER 1040L, THER 2040, PSYC 2510)

## THER 2171P: Physical therapist assistant practice II: 6 credits

In this course the student will participate in two clinical practices experiences under the supervision of a physical therapist providing services for 190 hours each section for a total of 380 hours of practice at the end of the course. During the first section of the clinical practice the student will continue integrate and apply classroom knowledge and learned clinical skills at an intermediate to advanced intermediate-level performance. During the second section of the course the student will integrate and perform classroom knowledge and learned clinical skills at an entry-level performance.

(Co-requisites: THER 2181) (Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1041L, THER 1040L, THER 1050L, THER 1070L, THER 1060L, THER 2011L, THER 2040, THER 2050L, THER 2161P, PSYC 2510)

## THER 2181: Integrating Seminar on Physical Therapist Assistant: 3 credits

In this course the student will develop skills that facilitate the transition to the role of physical therapist assistant. The student will distinguish trends in the discipline, research skills and analysis of valid and reliable professional literature, which will develop critical thinking to solve problems. Also the student will recognize the importance of reporting fraud or abuse situations. The student will distinguish the importance of continuing professional development and will demonstrate speaking and writing skills necessary for the job search process.

(Co-requisites: None) (Pre-requisites: BIOL 2010, BIOL 2020, THER 1011L, THER 1041L, THER 1040L, THER 1050L, THER 1070L, THER 1060L, THER 2011L, THER 2040, THER 2050L, THER 2161P, PSYC 2510)

## ACADEMIC CALENDARS

For the NUC's Academic Calendars please refer to our online Web Page at: <u>http://www.nuc.edu/calendario/</u>

For the Academic Calendars of the Distance Education Division please refer to our online Web Page at: <u>http://online.nuc.edu/en/about-us/academic-calendar/</u>

## CERTIFICATION

We hereby certify that this catalog is, to the best of our knowledge, a truthful representation of our offerings, curricula, and facilities.

To this effect, we hereby submit the same on August 1<sup>st</sup>, 2018.

Gloria E. Baquero, Ed.D President

# NATIONAL UNIVERSITY COLLEGE

PO Box 2036 Bayamón, PR 00960 Telephone: (787)780-5134 Fax: (787)786-9093

National University College doesn't exclude from participation, nor deny benefits to, nor discriminate against any person for reason of age, race, sex, color, place of birth, social origin or condition, physical or mental handicap, or political or religious beliefs.



## GENERAL CATALOG 2018-2019 MASTER'S, BACHELOR'S AND ASSOCIATE'S DEGREE PROGRAMS

## <u>BAYAMÓN</u>

State Road #2, Km. 11.2 National University College Plaza Building #1660 Bayamón PR 00961

> PO Box 2036 Bayamón, Puerto Rico 00960

> > Tel. (787)780-5134 Fax (787)786-9093

## <u>RÍO GRANDE</u>

State Road # 3, Km. 22.1 Bo. Ciénaga Baja

PO Box 3064 Río Grande, Puerto Rico 00745

> Tel. (787)809-5100 Fax (787)888-8280

## CAGUAS

190 Ave. Gautier Benítez Esquina Ave. Federico Degetau Caguas, PR 00725

PO Box 8337 Caguas, Puerto Rico 00726

> Tel. (787)653-4733 Fax (787)653-4732

## **ARECIBO**

Manuel Pérez Avilés Street Víctor Rojas Avenue Arecibo, Puerto Rico 00612

PMB 452 PO Box 144035 Arecibo, PR 00614-4035

> Tel. (787)879-5044 Fax (787)879-5047

## PONCE

State Road # 506, Km. 1.0 Bo. Coto Laurel Ponce, Puerto Rico 00716

PO Box 801243 Coto Laurel, Ponce PR 00780-1243

> Tel. 1(787)840-4474 Fax 1(787)841-1360

## <u>MAYAGÜEZ</u>

Carr. # 2 KM. 156.5 Bo. Sábalos, Mayagüez, PR 00680

> 345 Ave. Hostos Mayagüez, P.R. 00680

Tels.: (787)652-0373