





# INSTITUTIONAL CATALOG

2021-2022

Reviewed December 2020



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## GREETINGS FROM THE PRESIDENT

Dear Columbia Central University Student:

The decision of which institution to choose to study a profession is a very serious one, since it not only affects the possibility of obtaining a job, but also your future. Today, more than ever, the economy in which we live imposes great professional demands on us. Change and adaptation to change are the key to success.

Aware of this reality and the seriousness of the decision, Columbia Central University (CCU) has a very clear mission: to prepare you for a profession with future potential. This is what we have done for nearly five decades for thousands of students who entrusted us with their professional preparation. CCU study programs have been developed based on the industry needs, considering employer's input, being these who, upon completing your professional career, will be able to offer you employment opportunities. In the following pages, you will find a detail of those study programs. In turn, the academic, student, and administrative services offered by our university are presented.

The CCU staff's primary function is to help you achieve your professional career. We are at your service to answer your questions and provide you with a high-quality service. We look forward to having the opportunity to serve you.

Respectfully,



Daritza Mulero Méndez  
President

# GENERAL INFORMATION

## INSTITUTIONAL BOARD OF DIRECTORS

Columbia Central University is a corporative higher education institution, private, with ownership, which responds to an institutional Board of Directors.

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1. Atif Gilani – Owner Director
2. Bradley Whitman – Owner Director
3. José A. Córdova – Management Director
4. Daritza Mulero – Management Director
5. Zack Shah ([zshah@lincolninternational.com](mailto:zshah@lincolninternational.com)) – Independent Director

### *Columbia College Corporation:*

1. Atif Gilani
2. Bradley Whitman

### *Columbia Central University Institutional Board:*

1. Atif Gilani
2. Bradley Whitman
3. Grayson Harcourt
4. Guillermo Nigaglioni – Independent Director
5. Sara Salva – Independent Director
6. Vacant – Independent Director
7. Vacant – Independent Director
8. José A. Córdova (ex officio, non-voting member)
9. Daritza Mulero (ex officio, non-voting member)

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Obed J. Guzmán Fernández BS, Full Sail University Cert., Columbia Central University	School of Applied Arts
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María Gómez MSN, Columbia Central University BSN, Columbia Central University ADN, Columbia Central University	Health Science School

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EdD, Inter American University MEd,  
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Master's in Public Health  
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Master's in Education  
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University of Massachusetts BS, University of  
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Chancellor

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BS, Metropolitan University

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Officer, Admissions

José Otero Class  
HS, Escuela Canas-El Tuque

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### ***ACADEMIC PERSONNEL – YAUCO CAMPUS***

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Vacant

Academic Coordinator  
BD & AD in Nursing Sciences

Vacant

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MA, Atlantic College  
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BS, Tomography, Ana G. Méndez  
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BD in Health Sciences  
AD in Radiologic Technology  
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Professional Pet Groomer Program

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 PhD, Administration and Supervision  
 Inter American University  
 MS Education, Administration and Supervision  
 University of Phoenix  
 BA Ingles, Universidad Católica  
 ABD Curriculum Instruction Reading Supervision,  
 Penn State University

General Education Component

Maribel Méndez Rosa Post Grade in Medical Technology BS Biology Inter American University	Health Science School
Méndez Vélez, Daphne MEd. Instructional Design and Technology Integration w/E Learning BS Medical Sonography Universidad del Este	Health Science School
Esteban Moscoso Salazar MA English as Second Language University of Phoenix BA Modern Language University Technology of Santiago	General Education Component
Marilyn Ortiz Ortiz MSN, National University BSN, AD Nursing Sciences Colegio Universitario de San Juan	Health Science School
Estefany Peña Hilario, MD Universidad Autónoma de Santo Domingo AD Medical Sonography EDIC College	Health Science School
Fabiola Ramírez Collazo, MD Universidad Iberoamericana Santo Domingo BS Biology University of Puerto Rico	Health Science School
Miguel Resto Mejías AD Optical Sciences Puerto Rico Tech Junior College	Health Science School
Irma C. Rivera Esquerdo MA, School Administration and Supervision BA Health Sciences GA Respiratory Therapy Metropolitan University Veterinary Assistant with Pet Groomer EDIC College	Health Science School
Zorimar Rivera Ojeda MA, Spanish Caribbean University BA, Spanish University of Puerto Rico	General Education Component
Irma Rivera López BS, Inter American University-	Health Science School

Marianita Robert Carrasquillo MSN, BSN National University	Health Science School
Caroline Rodríguez Martínez BS Computer Sciences Universidad Central de Bayamón	General Education Component
Andrés Rodríguez Torres BS Veterinary Technology University of Puerto Rico	Health Science School
Amnerie Santiago Navedo MA Education Caribbean University BA Education University of Puerto Rico	General Education Component
Elsie Santiago Durán MAE Teaching English Second Language Inter American University BA Humanities Southern Connecticut State University	General Education Component
José L. Santos García MSN, Medical Surgery and Education Role National University BSN, ADN, Inter American University	Health Science School
Jenlis Serrano Caraballo, MD Iberoamerican Medical School BS Biology University of Puerto Rico	Health Science School
Patricia Sosa Ortega BA High School Biology Universidad Ana G. Méndez Veterinary Medicine and Zootechnic Universidad Autónoma Metropolitana, México	Health Science School
David Torres Cruz MA Forensic Sciences Universidad del Turabo BS Natural Sciences University of Puerto Rico	General Education Component

Luz Valentín Colón  
MA Administration of  
Non-Profit Organizations  
Sacred Heart University  
BA Accounting  
Inter American University  
AD Optical Sciences  
Puerto Rico Optician College

Health Science School

Milagros Viruet Negrón  
MA Human Resources and Management  
Metropolitan University BS Electric  
Engineering Universidad Politécnica

General Education Component

### ***ADMINISTRATIVE PERSONNEL – CAROLINA CAMPUS***

Bethzaida Piñero  
MS Educational Administration  
Post-Secondary Level Universidad del Este  
BBA-UPR

Chancellor

Vacant

Registrar

David Báez Mojica  
Master's in Counseling  
University of Phoenix

Counselor

Leslie Ann Alvira  
MBA, Marketing  
Inter American University

Director, Admissions

Zoralis Rivera  
BA in Social Work  
University of Puerto Rico

Officer, Placement

Jeannette López  
BBA, Accounting  
Pontificia Universidad Católica

Director de Financial Aid

Karelíe Suazo Burgos  
Master's in Education  
Universidad Central de Bayamón

Officer, Collections

Vacant

Nocturnal Coordinator

Isabel Rivera  
MA Science and Information Technology  
University of Puerto Rico

Administrative Librarian

Maricarmen Pérez BA Biology Sacred Heart University GA Radiologic Technology Universidad Central del Caribe	Coordinator, Student Practice Radiologic Technology Program
Gladimir Rodríguez AS en Radiologic Technology Universidad del Este	Coordinator, Student Practice
Víctor Rodríguez Padilla BS Radiology, CT Scan y MRI Inter American University	Coordinator, Student Practice
Enid López Lugo MEd-School Administration Universidad del Turabo	Officer, Retention
Boamari Méndez BA Business Administration Interamerican University	Officer, Financial Aid
Kamayra Vargas Sánchez High School Diploma Escuela Luis Hernaiz Veronne	Officer, Admissions
Yoiris Rodríguez Llanos AD Business Administration, Accounting National University College	Officer, Admissions
Enid Y. Merced Nieves Airline Services Technician Certificate Inter American University	Receptionist, Admissions
Marilyn Nieves AD in Business Administration International Junior College	Administrative Assistant

### ***ACADEMIC PERSONNEL – CAROLINA CAMPUS***

Lilliam Martínez, PhD. Educational Leadership Universidad Ana G. Méndez	Academic Dean
Edwin Bonilla, MDV Universidad Nacional Pedro Henríquez Ureña BBA, Sacred Heart University	Academic Coordinator Veterinary Assistant Program
Adamaris Morales de MSN, Education Role, BSN National University College	Academic Coordinator, Nursing Program



Dianitza Padilla  
Master's in Health Service Management  
Universidad del Este  
BS Computerized Tomography MRI and  
Digital Angiography Universidad del Este

Academic Coordinator  
Medical Sonography Program

Ilia Parilla  
BS, Biology  
Medical Technologist  
Inter American University

Academic Coordinator, Laboratory  
Assistant with Electronic Processing  
Program

Maricarmen Pérez  
BA Biology  
Sacred Heart University GA Radiologic  
Technology Universidad Central del Caribe

Academic Coordinator,  
Radiologic Technology Program

Joselie Rivera  
de MA Educational Computing  
Inter American University  
BA Office Systems  
University of Puerto Rico

Academic Coordinator, Medical  
Secretary Insurance Billing Program

### ***FACULTY – CAROLINA CAMPUS***

Zulmelanie Barbosa Cátala  
BD in Science and Technology, Biology, Metropolitan  
University  
Fortunato Benítez  
MEd. Mathematics Cambridge  
College BA Mathematics  
University of Puerto Rico

Health Science School

General Education Component

Carmen Caraballo Márquez  
PsyD, Clinical Psychology  
University of Puerto Rico  
BA Psychology, University of Puerto Rico

General Education Component

Sonia Cedeño Aponte  
MSN, Obstetrics  
Pontificia Universidad Católica  
BSN, Pontificia Universidad Católica

Health Science School

Idalys Cepeda Rivera  
BSN, Dewey University  
AD in Nursing Sciences  
Dewey University

Health Science School

Jasbelene Colón Cruz  
BD in Health Sciences Education  
AD in Medical Sonography EDIC College

Health Science School

Marta García López  
MSN, Children's Critical Care  
Metropolitan University  
BSN, University of Puerto Rico

Health Science School

Mayra E. González Lind  
Ph.D. Historia de PR y el Caribe  
Centro de Estudios Avanzados de PR y el Caribe  
MAED Administration and Supervision  
University of Phoenix  
BA High School Social Studies  
University of Puerto Rico

General Education Component

Francisco Guzmán Santiago  
MA, Mathematics  
Inter American University  
BS, Chemical Engineering  
University of Puerto Rico

General Education Component

Angie Heredia Méndez, MD  
Universidad Central del Este  
AD in Cardiovascular and  
Peripheral Vascular Technology  
EDIC College

Health Science School

Alirio Lanchero Cárdenas  
BS Medical Sonography  
AD Medical Sonography Universidad  
Ana G. Méndez

Health Science School

Edwin López Rivera, MD  
Universidad Iberoamericana BS  
Microbiology  
Inter American University

Health Science School

Aida L. Monserrate Feliciano  
MSN, Gerontology  
Caribbean University  
BSN, University of Puerto Rico

Health Science School

Inocencia Nieves Muñoz  
Master Curriculum and Instruction in English  
University of Phoenix  
BA English  
University of Puerto Rico

General Education Component

Keren M. Ocasio López MA in Educational Leadership National University College BD in Industrial Chemistry University of Puerto Rico AD in Pharmacy Technician National University College	Health Science School
Santos O'Farrill López MSN, Family Nurse Practitioner Universidad de Turabo BSN, Universidad del Este	Health Science School
Ángel Ortiz BA Management Pennsylvania State University	Health Science School
Jessica Ortiz Acevedo, MDV Universidad Nacional Ureña BD in Veterinary Technology University of Puerto Rico	Health Science School
Lourmarith Ortiz Carrasquillo, MD Universidad Iberoamericana BS Industrial Microbiology University of Puerto Rico	Health Science School
Jeannine Ortiz Morales MA, ESL Inter American University BD in Hotel and Restaurant Management University of Puerto Rico	General Education Component
Hilda Otero Ramos Master's in Strategic Management and Leadership Universidad de Turabo BS, Medical Sonography Universidad del Este AD in Medical Sonography Universidad de Este	Health Science School
Danyelis Pedroza Rivera BA in Medical Sonography Universidad del Este	Health Science School
Carlos Pérez Paz, MDV Universidad Nacional Pedro Henríquez Ureña	Health Science School

José Pizarro Colón BD in Political Sciences Inter American University	General Education Component
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Justina Quiñones Feliciano Medical Emergency Technician Diploma National University College-IBC	Health Science School
Rene Quiñones Matos Master's in Quantitative Methods BD in Statistics University of Puerto Rico	General Education Component
Ricardo Quiñones Muñiz MSN, Mental Health and Psychiatry Dewey University BSN, EDP University	Health Science School
Quidinashka Ramos Laguna MSN, Case Management Metropolitan University BSN, RN to BSN National University College	Health Science School
Debbie Rivera Morales Master's in Health Organization Management Columbia Central University BA in Management Columbia Central University	Health Science School
Orlando Rivera Suazo BD in Public Health AD in Business Administration Universidad Ana G. Méndez Medical Emergency Technician Diploma CEM College	Health Science School
Dalimar Rodríguez Hernández BA in Medical Sonography Universidad del Este	Health Science School
Vanessa Rawlins Castro Master Curriculum & Teaching BD in High School Spanish Metropolitan University	General Education Component

Víctor Rodríguez Padilla  
Bachelor Radiological SC CT Scan MRI Inter  
American University

Health Science School

Debora Román Sosa, MD  
University of Health Science  
Antigua School of Medicine

Health Science School

Nelly Sanjurjo Figueroa  
MSN, CNS-Case Management  
Metropolitan University BSN,  
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Gricel M. Surillo Luna  
PhD History  
Master's in de Philosophy, History  
University of New York  
BA, History  
University of Puerto Rico

General Education Component

Juan de Jesús Valerio Toribio  
Master's in Scince of Education  
BD in Information  
Universidad Tecnológica de Santiago

General Education Component

Eloinai Vargas  
BS, in Medical Sonography  
Cardiovascular  
AS Radiologic Technology  
Inter American University

Health Science School

Jackeline Velázquez Laboy  
Master's in Human Resources  
BD in Computerized Management  
of Information Systems  
AD in Accounting  
Inter American University

General Education Component

Enilda Velázquez Ventura  
Post Grade in Medical Technology  
University of Puerto Rico  
BS, University of Puerto Rico

Health Science School

## THE UNIVERSITY

Columbia Central University (CCU) is an educational, private, and secular institution, founded in 1966, which currently serves Puerto Rico through its Campuses in Caguas, Carolina, Bayamón, Yauco, and in its additional Campus at Caguas Norte. It is dedicated to teaching professions, especially the administration and commerce disciplines, also including academic offerings in health sciences, technology, and applied arts areas. Its offerings may vary per unit. Its academic levels include programs leading to Master's \*, Baccalaureate, Associate's Degree, and Certificate. Each of these levels are intended to educate and train the student in a profession. The basic requirement for admission is a high school diploma or its equivalent.

CCU was developed to offer, as far as possible, an educational alternative comprised of the following: 1) academic opportunities in the business and administration areas, health sciences, technology, and applied arts, leading to Master's \*, Baccalaureate, Associate's Degree, or Diploma (certificate), depending on the academic area; 2) the advantage of accelerated progression of studies due to a continuous academic calendar; 3) benefiting of work experience, as far as possible, and 4) a variety of teaching and learning methods.

Its corporate offices are in Angora Industrial Park, Angora Ave., Building G Caguas, Puerto Rico, and its institutional headquarters are at the Caguas Campus, which is located on Highway 183, kilometer 1.7 exit to San Lorenzo, Caguas, Puerto Rico. CCU is a proprietary and independent Institution and its operational funds come, almost entirely, from the educational services it offers.

\* Only available in Caguas

## MISSION

Columbia Central University (CCU) is a higher education institution, non-sectarian, proprietary, committed to the integral development of the human being based on creativity, research, and free thinking in an environment of academic excellence and quality of services. The university pursues the transformation of individuals, developing values, leadership, and competencies, through programs and study modalities that respond to the professional needs of the community served.

## VISION

Leading institution in transformation and educational accessibility.

## GOALS

### 1. Student-Centered Learning Culture

Columbia promotes student leadership in the teaching and learning processes by integrating a competency-based curriculum and an active, participatory, and collaborative teaching model; facilitated by a professor who develops initiative and creativity responding to the knowledge of the learner complemented by curricular activities that promote their integral development.

### 2. Social University Responsibility

Columbia values and promotes a proactive attitude by adopting habits, strategies, and processes (curricular and extracurricular) that contribute to the welfare and social interest of the educational environment, promoting the integral development of the human being.

### 3. Growth and Scope

Columbia is focused on a limitless continuous and sustained institutional growth, which allows for strengthen of its resources and expand its reach.

### 4. Effectiveness and Institutional Development

Columbia promotes a culture of continuous growth in its administrative and academic management while achieving quality and excellence.



## 5. University Experience

Contribute to the intellectual, cultural, and social enrichment of students by strengthening their university experience to facilitate their integration to the working world.

## VALUES

Columbia Central University values:

- Ethics - Responsible, moral, and legal behavior.
- Innovation - Create and reinvent yourself.
- Perseverance - Constant and consistent effort until the purpose is achieved.
- Communication - Convey a message or idea effectively and assertively.
- Excellence - Exceed the superior quality standard.
- Commitment - Compliance with the obligation contracted.
- Respect for diversity - We respect and do not discriminate based on race, nation, color, religion, gender, sexual orientation, beliefs, people with special needs, social, cultural, political, and economic status.

## HISTORICAL SYNOPSIS

Columbia Central University (CCU) was founded in Caguas in 1966, as Caguas City College, by a group of prominent businessmen faced with their perceived need for an institution that specialized in preparing office staff to fill emerging positions in the Caguas community, which was beginning to rise economically and stand out as an important city. This was in the Lorenzo Isern Building at the end of El Troche street, in front of the Municipal Hospital of Caguas.

In 1974, the former commercial institute changed ownership and the new administration, whose experience was in the university field, began to give it a turn that was more attuned with the times. Later, in 1976 it was moved into a nearby, but larger building located on Dr. Rufo Street. Thus, in 1976, Caguas City College began offering two-year programs; that is, associate degrees, attuned with the new community needs by better prepared professionals. In 1979, it achieved its accreditation as a “Junior College” from the “Accrediting Council for Independent Colleges and Schools”, a national accrediting entity recognized by the Federal Department of Education. The first to achieve this type of accreditation in Caguas City. Also, during this year, it moved to its new and remodeled facilities on Road 183 in Caguas. These facilities of approximately 40,000p2 were not fully used initially since only 15,000p2 were enough by then.

In 1980, it began to offer a bachelor’s degree in Administration, becoming the first institution in the Autonomous Municipality of Caguas to offer a baccalaureate program. The new program was non-traditional, broadly oriented, aimed at training personnel capable of identifying and solving management problems in the various fields of human activity. This innovation started an academic offering of non-traditional programs that made the then Caguas City College a true university alternative. During the 1980s, to maintain its leading position in the educational community of the region, it expanded its academic offerings to include high-demand employment programs in vocational and technical areas, such as electronics and nursing, but without abandoning its emphasis in administration and commerce.

In 1986, after being consolidated in the Caguas region, the Institution opened the Yauco Campus, at that time the only educational institution in that municipality. To begin operations, some offices were leased on the second floor of the Galería Yaucana building and later, the entire third floor of the same building was leased with 5,000p2 approximately. Its first-degree graduation took place in June 1987. In 1990, the Yauco Campus received authorization to offer university programs in associate degrees. During the 80s, in addition, the Institution strengthened its position

as a leader in university education in the country by taking the initiative to offer educational opportunities and quality services to adult students. To this end, it created the Educational Alternative for Adults (AEPA), today called Pro-follow, as an alternative for adults with work experience.

Also, new study programs began to be offered: Bachelor's in Nursing Science for the Caguas Campus and two Associate Degrees for the Yauco Campus: Associate Degree in Nursing Science and an Associate Degree in Business Administration in Information Systems. In 1990, to sustain its new reality of its geographic presence beyond Caguas, it assumed the name of Columbia College. Considering the profession demands, it developed the Division of Advanced Continuing Education (DECA), which is responsible for maintaining a continuing education program available to the community in general on current issues and requirements to comply with different professional licenses.

True to its origins as a commercial institution, in 2002 it began to offer in the Caguas Campus the Master of Business Administration program with two specialties: one in General Administration and another in Administration of Health Organizations. This new level gave way to a new modification in its name: Columbia University Center.

As a result of its performance and participation in various sectors of the community, in recent years CCU has achieved recognition from the industrial and business community of the region. It has given, and continues to support, activities such as: Business Fairs, Educational Forums, Puerto Rican Industry Month, and Total Quality Symposia. It has also been involved in alliance projects and collaborative activities with other educational institutions, with the Technical Vocational Network, with the Municipal Government of Caguas, with the Technical Vocational Council, and with federal initiatives such as "School to Work". Attentive to the emerging needs of the community, in 2005, CCU incorporated into its educational offerings the Certificate in Professional Therapeutic Massage and the Certificate in Communications Media in both the Caguas and the Yauco Campus.

In its continuous search for excellence, in 2007 it achieved accreditation from the Middle States Commission on Higher Education. This achievement was also based on the need for an accreditation adjusted to the institutional development achieved in recent years. During this year academic offerings in the health areas (Technician in Respiratory Care) and in Applied Arts (Technician in Audio, Graphic Design and Cinematography) were inaugurated.

Close to concluding a decade of achievements, approval was received to begin offering the Bachelor's in Nursing Science through non-face-to-face educational means (on-line) at the Caguas Campus. It also began offering the Master's in Nursing Sciences specialized in adults and the elderly.

The second decade of the new century was received with authorizations to offer Master's in Business Administration with a specialty in Management by non-face-to-face educational means and Associate Degrees in Audio and Film for the Caguas Campus in addition to the authorizations for the Associate Degrees in Health Services Administration, Therapeutic Massage, Communications, and Graphic Design for the Caguas and Yauco Campuses. In 2015, authorization was received to offer a Bachelor's Degree in Information Systems, Security and Networks (BATEC). In May 2016 authorization was received to offer Bachelor's in Nursing Sciences program, and in October 2017, the Cyber Security program.

On May 2020, CCU changed ownership and was acquired by the investment firm Renovus Partners, which owned EDIC College. During the acquisition process, Renovus Partners evaluated the different options and decided to integrate two institutions into one, where the name of Columbia Central University was received, and the EDIC College locations located in Carolina and Bayamón became CCU Campus, as well as the Caguas Norte location, which became an additional campus in Caguas for CCU: becoming an institution with 4 campuses and an additional location.

As a result of this merge, the EDIC College programs became part of the academic offering at CCU. Among the added programs are certificate level programs, which include the following: Medical Secretary with Insurance Billing Program, Practical Nursing, Emergency Medical Technician, Preschool Teacher Assistant, Veterinary Assistant, Laboratory Assistant with Electronic Processing, Professional Pet Groomer, and Veterinary Assistant with Pet Grooming. At Associate Degree level: Radiological Technology, Medical Sonography, Optical Sciences, Cardiac and Vascular Technology, Nursing Sciences, Physical Therapy and Pharmacy Technician. In addition, at the baccalaureate level, the following programs: Bachelor's in Nursing Science, Bachelor in Diagnostic Imaging Science with a concentration in CT and MRI, Bachelor's in Nutrition and Dietetics, and an online Bachelor's in Nursing from RN to BSN.

If history is premonitory of the future, Columbia Central University will achieve in the near future as many or more goals as it has had in its history for the past 54 years and more.

## ACCREDITATIONS, LICENSES, AND ALLIANCES

Columbia Central University is accredited as a university institution by the Middle States Commission on Higher Education. This accrediting body is located at 3624 Market Street, Philadelphia, PA 19104; with phone number (267) 284-5000. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the United States Secretary of Education and the Council for Higher Education Accreditation. All campuses offer programs at the certificate, associate's, and baccalaureate levels. The Caguas Campus also offers master's level programs.

The University is licensed to operate by the Puerto Rico Board of Postsecondary Institutions. This Board oversees the administration of public policy on educational standards in Puerto Rico. Columbia Central University is also approved or recognized by the following government agencies: the Veterans' Approving Agency and the Office of Vocational Rehabilitation. Approvals or acknowledgments may vary by Campus.

## PHYSICAL FACILITIES

### *CAGUAS CAMPUS*

The Caguas Campus is located on Highway 183, km. 1.7, at the exit to San Lorenzo. The physical facilities consist of approximately 55,000 square feet in different buildings nestled in 12 acres of land. These house nineteen academic classrooms with an average capacity of twenty-five students, three computer laboratories, two computer repair laboratories, a technology laboratory, an area dedicated to technology research, a nursing laboratory, two multidisciplinary laboratories, a pharmacy laboratory, two massage laboratories, a graphic design laboratory, an audio laboratory, and a recording studio.

In addition, it has a modern two-story library, faculty room, cafeteria, and administration offices. In one of the buildings are the graduate school facilities, which has five modern classrooms, study area, and service offices for students. The campus has 425 parking lots, an activity room, and green areas for the enjoyment of the university community, demonstrating in this campus our respect for the conservation of the environment, while promoting a pleasant study environment.

## ***YAUCO CAMPUS***

The Yauco Campus consists of three buildings at the town center. The main building is located on 3 Betances Street, better known as Galerías Yaucanas Building. The second building is located on 6 Betances street, also known as Calvo Irizarry Building, and the third building is on Betances with Vivaldi known as the Beltrán & Bermejo Building.

At the Galerías Yaucana building, the physical facility is distributed as follows; on the second floor are the service offices, the faculty office, the admissions and marketing office, the student center (Cyber), and the library. The library physical facilities include a main study room, an administration and management of collections area, a work area for the librarian, and a magazines collection warehouse, and faculty books. It has an Integrated Services Room (SSI) for student group work, presentation practices, and library instruction. The third floor is comprised of an academic lounge, a computer lab, a multidisciplinary lab, a graphic design lab, a computer repair lab, and a pharmacy lab.

The Calvo Irizarry building has two floors where on the first floor there is a laboratory technician site and another for veterinary with pet grooming. On the second floor, there are 4 academic classrooms with different capacities. On both floors are bathrooms for men and women.

At the Beltrán and Bermejo building, there is the nursing laboratory, which meets our student needs. In addition, at the Beltrán y Bermejo building there is an interior courtyard for our students to rest and mingle. Although the Yauco Campus is in the town center, it is in the middle of the two public squares of the municipality, which allow our students to enjoy the greenery and forestation that these squares offer. We also have a student parking lot with a capacity for 65 vehicles.

## ***CAROLINA CAMPUS***

The Carolina campus is located at 1 Victoria Industrial Park, Road # 877, Km 0.08, in Carolina, Puerto Rico.

This facility has 14 classrooms, 2 computer labs, and 12 laboratories for health programs. It also has an Educational Resource Center (Library), administrative offices, student services offices, a student's resting room and parking lots for students, administration, and faculty.

The building houses two computer laboratories, two nursing laboratories, the pharmacy laboratory, the anatomy laboratory, the sonography laboratory, the radiology laboratory, the

cardiovascular laboratory with peripheral vascular, the emergency medical laboratory, the laboratory of laboratory assistant, laboratories of pet grooming, veterinarian assistant laboratory, library, restrooms, admissions office, financial aid office, placement office, collections, registrar, rectory and assistant office, recreation room for employees and students, academic director's office and its assistant, registrar, counseling, retention, practice coordinators, academic coordinators, faculty, and classrooms. In these facilities, the Institution offers the following academic programs:

1. Veterinarian Assistant
2. Laboratory Assistant with Electronic Processing
3. Practical Nursing
4. Medical Secretary with Insurance Billing Program
5. Professional Pet Groomer
6. Emergency Medical Technician
7. Associate Degree in Radiological Technology
8. Associate Degree in Medical Sonography
9. Associate Degree in Cardiac and Vascular Technology
10. Associate Degree in Nursing Science
11. Associate Degree in Pharmacy Technician
12. Bachelor's Degree in Nursing Science

### ***BAYAMÓN CAMPUS***

The Bayamón campus is located at the Corujo Industrial Park, Lot # 1, on Highway # 2 Km. 15, Hato Tejas in Bayamón.

This facility has 7 classrooms, a computer lab, and 9 labs for health programs. It also has an Educational Resource Center (Library), administrative offices and student services, recreation room for students and parking lots for students, administration, and faculty.

In the building a computer laboratory, nursing laboratory, anatomy laboratory, sonography laboratory, radiology laboratory, cardiovascular laboratory with peripheral vascular, laboratory assistant laboratory, pet grooming laboratory, veterinary assistant laboratory, optics laboratory, library, restrooms, admissions office, financial aid office, placement office, collections, registrar, rectory and assistant office, recreation room for employees and students, an academic director office and the assistant, registrar, counseling, retention , practice coordinators, academic coordinators, faculty, and academic classrooms. The following programs are offered in this facility:

1. Laboratory Assistant with Electronic Processing
2. Veterinarian Assistant
3. Practical Nursing
4. Professional Pet Groomer
5. Medical Secretary with Insurance Billing Program
6. Associate Degree in Radiological Technology
7. Associate Degree in Medical Sonography
8. Associate Degree in Optical Sciences
9. Associate Degree in Cardiac and Vascular Technology
10. Associate Degree in Nursing Sciences
11. Bachelor's in Nursing Sciences

### ***ADDITIONAL CAMPUS - CAGUAS NORTE***

The additional campus in Caguas Norte is located on Rafael Cordero Avenue, Génova Street, Urb. Caguas Norte, and it occupies 3 horseshoe-shaped buildings. This campus has 12 classrooms, 2 computer labs, and 16 labs dedicated to health programs. It also has an educational resource center (library), student services offices, cafeteria and, parking spaces for students, administration, and faculty for an average of 100 vehicles.

Building A houses a computer lab, nursing lab, pharmacy lab, anatomy lab, sonography lab, radiology lab, two cardiovascular-vascular labs, ladies' restrooms, admissions office, and financial aid, placement office, collections, registrar, rectory and assistant office, recreation room for employees, the academic director office and the assistant, registrar, counseling, retention, practice coordinators, academic coordinators, faculty, and 5 academic classrooms.

In Building B is a computer lab, preschool lab, emergency medical lab, lab assistant lab, and 6 academic classrooms.

Building C houses the pet grooming labs, vet assistant lab, optics lab, library, restrooms, and academic lounge. In another neighboring building is the cafeteria. At these facilities, the Institution offers the following academic programs:

1. Preschool Teacher Assistant
2. Veterinarian Assistant
3. Laboratory Assistant with Electronic Processing



4. Medical Secretary with Insurance Billing Program
5. Professional Pet Groomer
6. Emergency Medical Technician
7. Associate Degree in Radiological Technology
8. Associate Degree in Medical Sonography
9. Associate Degree in Optical Sciences
10. Associate Degree in Cardiac and Vascular Technology
11. Bachelor's in science in Diagnostic Imaging with a concentration in CT and MRI

## COLUMBIA CENTRAL UNIVERSITY LIBRARY SYSTEM

The libraries at Columbia Central University (CCU) are made up of the Caguas, Caguas Norte, Yauco, Bayamón, Carolina, and its virtual component libraries. These are organized in such a way that they constitute the essential academic support to the teaching-learning process. They provide all the necessary services to meet the educational-teaching, research, professional and technical training, and cultural growth needs. Although the services are mainly aimed at the university academic community, graduates, and the community in general are also served.

### *CAGUAS CAMPUS*

#### **Physical Facilities**

The Efraín Solá Bezares Library is the first building to be found at the campus main entrance in a two-story structure. The first of these is equipped with tables for collaborative study and it is there where the printed collection is located as well as the Public Services area. It has an area of preferential use for people with disabilities with four computers, one equipped with specialized equipment. The second floor has collaborative study tables, cubicles for individual study, and 16 computers and 2 group study rooms equipped with audiovisual equipment to be used by both students and the faculty and administrative staff in group work and presentation practices.

### **Technological Resources**

Computers are up to date with Microsoft Office and have Internet access. They provide access to the different databases existing in the Virtual Component, to the online catalog and to emails. They are used by students to carry out their research work, as well as to prepare their projects and presentations.

The **MANDARIN Automated Public Catalog (WebOPAC)** provides quick and efficient access to all library resources. It can be accessed through the CCU website and from any computer or mobile device in or outside the Institution. The library also has the multifunctional equipment service (printers and photocopiers), available to its users.

### **Printed Collection**

The collection of printed resources consists of over 7,000 volumes and 10 journal titles updated and intricately linked to the curriculum in academic areas and offerings.

## ***YAUCO CAMPUS***

### **Physical Facilities**

The physical facilities include a main study room, an administration and collection management area, a librarian work area and a warehouse for the magazine collections and faculty textbooks. It has a study room for student group work, presentation practices, and library instruction. It is located on the second floor of the Galerías Yaucanas Building.

### **Technological Resources**

The library has 14 computers with Microsoft Office applications and Internet access. The workstations are used for research work, access to the virtual library, databases, online catalog, and tutorials. In addition, the library offers print and photocopy service.

### **Printed Collections**

The printed collection consists of over 2,800 volumes in English and Spanish in the administration and commerce areas, office administration, technology, allied health sciences, and applied arts. The collection is closely related to the curriculum in the areas of academic offerings.

The MANDARIN Automated Public Catalog (WebOPAC) provides quick and efficient access to all library resources. It can be accessed through the CCU website and from any computer or mobile device in or outside the Institution.

**The CCU Libraries also offer the following services:**

### **Digital Collections through the Virtual Library 24/7**

Access to CCU collections and digital resources is provided through the 24/7 Virtual Component. Access and use are subjected to policies, established rules, and provider licenses. They are administered by the librarian in charge of virtual services.

The digital collections comprise the update to thousands of magazines, books, documents, brochures, and audiovisual resources. The university community can use these resources through the Virtual Component from any computer or mobile device through institutional email authentication.

The content in the electronic databases of the resource providers: Digital Ocean in the Spanish language and EBSCO in English and Spanish, responds to the areas of administration and commerce, office administration, technology, science allied to health and applied arts, available through the Internet. The sources are dictionaries, reference works, multimedia, atlases, literature works, almanacs, illustrations, company profiles, and documents in different areas and academic/professional journals.

It also has access to the Access Pharmacy database with 180 electronic textbooks and quick reference sources, case studies, and medication guides, among others, from McGraw Hill in basic biomedical sciences and clinical sciences areas.

The **Anatomy.tv** platform contains high-quality 3D images of detailed, accurate, evidence-based human anatomy, and thoroughly reviewed by professionals in the related disciplines.

**Films on Demand - Master Academic Videos** consists of over 78,000 video segments and over 260,000 full videos. Of these, 21,525 related to nursing, health, and patient education, and the rest in the liberal arts, social sciences, humanities, natural sciences, administration, and economics, among others.

The **Micro Juris** database contains jurisprudence, legislation, regulations, and administrative resolutions of the Puerto Rico governmental agencies, among others. Access to this database is limited to the Master of Business Administration program students and faculty, as well as the library staff.

The virtual component also has open access resources, booklets, and workshops to support the research process with direct attention from a librarian. You can access the virtual component through <http://www.biblioteca.columbiacentral.edu>.

### **Audiovisual Resources**

The audiovisual equipment and resources available in the library are used as educational supplements. They are offered to train students in the application of technology in their academic work, to use them in their classroom presentations, and in the library. Laptops, projectors, and external computer equipment are available for digital video formats, compact discs (CDs), and DVDs, among others, according to the Study Program.

The circulation and loan of the equipment is generated from the library, according to the established rules and procedures. They can be used by professors, students, administrative, and institutional staff.

### **Information Competencies Program**

The Information Competencies Program is designed and responds to the needs of the development of abilities and skills in the use of equipment, technology, access, use and management of electronic resources, process techniques, and research methodology.

The main goal is to equip our students for academic success. The library staff offers individual and group orientations, conferences, and workshops throughout the academic term, in coordination with the faculty with their respective class schedules. They can be requested at the service desk, by email, and through the Virtual Library by filling out the corresponding form. Students can request individual guidance and assistance from the library staff.

## ***CAROLINA CAMPUS***

### **Physical Facilities**

The Carolina Campus has physical facilities that consist of a Study Room with 7 tables, 2 rooms for group study and Information Competency Development, 10 independent study stations with computers for access to information, an area for magazines and collections, 2 cubicles for independent study, a service area for students and professors, a photocopier area, 2 cubicles for independent study, a service area for the student and academic community, a work area for the librarian, the collections area, and magazines that support the academic offering.

## **Technological Resources**

Among the technological resources are:

- In independent stations, 10 computers with internet access, Microsoft Office, resource catalog, virtual library, among others.
- In group room 2, 4 computers with internet access, Microsoft Office, resource catalog, and virtual library.
- In the service area: a computer with internet access, Microsoft Office, resource catalog, and a virtual library, among others.
- In the Librarian's office, a computer with internet access, Microsoft Office, resource catalog, and a virtual library, among others.

## **Printed Collection**

The collection consists of 991 volumes, bibliographic resources, and magazines in Spanish and English related to the academic offer of the campus. These resources can be accessed through the Mandarin automated public catalog.

## **Digital Collections**

The digital collections can be accessed through the Virtual Library, whose databases are EBSCO, Mandarin (OPAC), and access to databases of the World Library.

## **Audiovisual Resources**

The audiovisual resources available to support academic management are:

- 5 laptops
- A laptop with an iPad specifically for the Emergency Medical Program
- 2 projectors
- 1 DVD with TV
- 2 smart boards

The loan for these resources is made in the Library service area according to the established rules and procedures.

## **Information Competencies**

The information competence offered by the Librarian responds to both students and faculty need, reason for which it has a variety of topics for the development and successful achievement of those objectives. Some topics are use of technological platforms, information access and search, APA style, and report preparation, among others.

## ***BAYAMÓN CAMPUS***

### **Physical Facilities**

The Bayamón Campus physical facilities consist of a Study Room with 9 tables, 2 rooms for group study and Development of Information Competencies, a technology area, an area for audiovisual resources, 2 cubicles for independent study, a service area for student and the academic community, work area for the librarian, and a collections and magazines area which supports the academic offering.

### **Technological Resources**

In the access to information area, it consists of aiding and the availability of technological resources to all the student community for their support and performance of academic work. There are 10 computers with internet access and with Microsoft Office program. Each computer terminal has access to the virtual Library, the physically available Resources catalog, the Professors' Digital Reserve, and the guidelines for the Information Competency Development Program.

### **Printed Collection**

Our collection consists of 867 volumes, bibliographic resources, and magazines in Spanish and English which supports the different academic offerings in our campus such as Radiology, Sonography, Pet Grooming, Veterinary Assistant, Laboratory Assistant, Cardiovascular, Optical Assistant, and Nursing. These resources can be accessed through the Mandarin automated public catalog from any computer or mobile device.

## **Digital Collections**

The Virtual Library contains databases and provides access to virtual collections which supports our academic offering. The databases consist of EBSCO responding to all disciplines offered, Mandarin (OPAC) databases on physically available resources, access to the World Library database, magazines, and newspapers.

## **Audiovisual Resources**

Audiovisual resources are used in the educational institution as a mean that allows the development of different learning strategies. In addition, they constitute a useful and effective resource, both for pedagogical activities and for greater library dynamics and training of users. Our audiovisual resources consist of 5 projectors, 4 laptops, 4 electric extensions, 1 DVD, 3 speakers, and 4 pointers.

These resources loan is made in the Library service area according to the established rules and procedures.

## **Information Competencies**

Information competencies equip your learners with the critical thinking skills necessary to become independent lifelong learners. The American Library Association (ALA) defines information skills as a set of skills necessary to find, retrieve, analyze, and use information (1989). The information competence offered by the Librarian responds to the needs of the student and academic community, for this reason it is on varied topics, for the development and successful achievement of those objectives. Achievement and process evaluation is done with the purpose of improvement. The user is trained to handle, solve their information problems, plan, develop and improve their intellectual work. The development of critical, creative and ethical thinking is encouraged.

## ***ADDITIONAL CAMPUS – CAGUAS NORTE***

## **Physical Facilities**

The Lydia E. Cardín Lerma library has a group study room with capacity for 6 persons, a general study room with twelve tables, a technology area, a cubicle for people with special needs, a service desk, the collections area, a technical services area, and an office for the librarian.

## **Technological Resources**

We have a technology area that consists of 13 computers in total to meet the needs of access to information in an environment conducive to our students. One of these computers is to be used by students with special needs. Each computer has access to the OPAC Catalog, Internet access to perform educational searches, access to our subscribed databases provided by the Institution, as well as Microsoft Office utilities to prepare papers or presentations, and all of them are connected to a photocopier. Also, there is available Wireless internet service (WiFi), sockets to connect laptops, and a copier for copying and printing services.

## **Printed Collections**

Our collections include a total of 2,558 titles and 4,159 issues, as well as professional journals that meet all academic offerings. Students have access through the Mandarin public catalog on the institutional website from any computer or mobile device.

## **STUDENT SERVICES**

Among the student services offered by the university, the following ones stand out: admissions, orientation and counseling, financial aid, collection, retention, registration, placements, academic tutoring, and all those aimed at ensuring that the student, regardless of their study modality, achieves the reason for which they selected this university. All services are aimed at serving regular, veteran, and international students.

### ***Admissions Office***

The Admissions Office is responsible of offering clear and complete information about the study program they wish to complete to any person interested in becoming part of the university. Among the main information that is given to the prospect is: the application, admission requirements, curriculum for the program of interest, and a suggested study program, among other documents. In addition, the interested party is directed to visit the Financial Aid Office and Collections to receive all the information available about the financial aid that is available if the student qualifies, as well as alternative payment methods.



### ***Guidance and Counseling Office***

Guidance and counseling services facilitate student adjustment to university life and student development. These services include academic counseling, vocational, personal or group counseling, individual or group counseling, and referral to other supporting professionals or public or private agencies.

Assistance is offered to the student to achieve their educational, vocational, and personal goals. The Guidance and Counseling Office is responsible for monitoring students through guidance and students under the different classifications of academic progress, as well as those of reasonable accommodation.

### ***Registrar's Office***

The Registrar's Office is responsible of the enrollment processes, the filing and custody of student records and the expedition of documents, and certifications to the students that they have met the graduation requirements and required certifications. In addition, it is responsible for certifying those students who have met all established graduation requirements.

### ***Retention Office***

The main function of the Retention Office is to look for alternatives to avoid student dropouts, promoting the involvement and persistence of students with the university. This office helps the student get to the office concerned according to their needs and which has inheritance in said need. As one of its retention strategies, it offers and coordinates a program of cultural, social, and educational activities for the enjoyment of the student body. It also monitors student attendance, follow up, and refer them to tutoring. It also encourages the constitution of student organizations and the Student Council.

### ***Placement Office***

The Placement Office's primary responsibility is to provide employment services to its graduate students. To comply with this, it carries out different activities, such as: orientation to the graduate candidate on how to prepare a resume, techniques for an employment interview, and

letters of recommendation, among others. Guidance is offered to students who will take board exams, on the documents required by the Examining Board, the deadlines for document submissions, and the examination dates.

Placement Office staff visits public and private sector employers to promote Columbia alumni. University facilities are offered for the recruitment processes of those companies that request it.

Note: The University does not guarantee employment to graduate students.

### ***Collections Office***

The Collections Office is responsible for collecting the money billed to the student for tuition, fees, and other related services. It guides and offers the student a payment plan, where he/she agrees with the university to pay off his/her balance before their next enrollment.

In addition, work-study program checks are delivered, and loan checks are endorsed. It is also oriented to students who participate in study benefits. Students in need of official documents, such as diploma, and official credit transcript, among others, must have their accounts settled. University payments may be made in cash, check, or money order payable to Columbia Central University; also credit cards such as Visa and Master Card, ATH, and Telepago from Banco Popular de Puerto Rico are accepted.

### ***Financial Aid Office***

The Financial Aid Office provides guidance on financial aid sponsored by federal, state, and institutional funds. The purpose of this grants is to help the student obtain a certificate or an academic degree, for those students who thus qualify. The offer of these aids is conditioned on the eligibility and availability of the funds, and that the student meets the requirements established by government agencies, including those for satisfactory academic progress. This Office reserves the right to make the necessary changes to financial aid if there are changes in the student's economic status, academic load, or any change in the funds available at the university. For additional information on grants, refer to the Student Consumer Manual published on the website [www.columbiacentral.edu/asistenciaeconómica](http://www.columbiacentral.edu/asistenciaeconómica)

### ***Tutoring***

To respond to the student's academic needs regarding their academic achievement, Columbia has an Academic Tutoring Program. The Program is aimed at providing the student with individual or group academic assistance to reinforce knowledge and skills in those courses or interdisciplinary subjects where the student needs to improve their academic performance. Students can be referred by their professors or they can voluntarily request the service. The tutoring is offered by tutor student participating in the Work-Study Program. The tutor students are supervised by professors from different academic areas.

### ***Online Services***

Columbia, in its desire to provide a better service to its students and tempered with the different modalities, has an electronic page to provide some of the online services, depending on the venue, accessing [www.columbiacentral.edu](http://www.columbiacentral.edu)

# INSTITUTIONAL POLICIES AND PROCESSES

# ADMISSIONS POLICY

## Introduction

Columbia Central University (CCU) has an open-door admissions policy, which gives people the opportunity to continue undergraduate and graduate studies through our certificate, associate, baccalaureate, and master's degree programs. Anyone interested and who can benefit from continuing their studies at our university must meet the established admission requirements. Once people complete and comply with the admission process, they will be able to begin their studies in the selected program that will lead them to become professionals in the chosen discipline.

Our admission policy applies to anyone who has a high school diploma or its equivalent, as well as transfer students or those who have studies at the post-secondary level and students from undergraduate programs. This policy provides individuals the opportunity to continue postsecondary studies through our various academic programs. The university does not exclude participation, nor does it deny benefits, nor does it discriminate against any person based on race, sex, color, birth, sexual orientation, origin or social condition, physical or mental handicap, or because of political, religious, social, or union ideals.

## Admissions Office

The Admissions Office is responsible of offering clear and complete information about the study program any person interested in being part of the University wishes to complete. Among the main information that is given to the prospect is the curriculum for the program of interest, the admission requirements to be completed, practice requirements and board review, among other documents. In addition, the interested party is directed to go through the Financial Aid Office and Collections to receive all the information about the available economic aid, if he/she qualifies, and about the alternative payment methods.

## **General Admission Requirements**

### ***Certificate and undergraduate level admission***

To be admitted as a regular student at CCU, each applicant must meet the following requirements and documents:

1. Complete the admission application and sign it.

It can also be submitted online at our website, [www.columbiacentral.edu](http://www.columbiacentral.edu). (The student's account will be charged a Non-refundable admission request fee according to the Cost Table current at the campus requesting admission).

2. Be a high school graduate or have equivalent preparation. This must be verified by submitting the original credit transcript or a copy of the diploma or transcript in case of transfer.

1. The credit transcript from the fourth year and/or from a postsecondary institution, the exams of the Extension Division of the Department of Education known as the GED (General Education Development Test) will be accepted as equivalent. The student must have obtained a minimum general average of 2.00 (GPA) or more in high school or from the postsecondary institution they are transferring.

3. Those students who do not meet the required GPA of 2.00, may be eligible for admission under the "Academic Opportunity Program" (POA) (see Enrollment under the POA).
4. If the student cannot present a credit transcript or the results of the equivalency exam, the fourth-year diploma will be accepted (diploma of which a true and exact copy will be taken as evidence of the high school degree), or Graduation Certification (original document, not copy). These students are admitted as a student under the POA, since we will not have a way to show the accumulated average in high school.
5. Students who have graduated from a high school outside of Puerto Rico and the United States must submit evidence of their academic credentials validated by the Puerto Rico Department of Education.
6. Children under 18 years of age must be accompanied by their parents or their sponsors.
7. For programs in which there is an internship component or in which there is a requirement to request the revalidation exam of the Examining Boards, the prospect must have met, or meet before their external internship, which is be 18 years of age.

8. Submit the Certificate of Vaccines by the Department of Health (students under 21 years of age), in compliance with Law 25 on School Immunization of PR. See Immunization Policy published in the Institutional Catalog.

### ***Academic Opportunity Program (POA)***

Applies to those students who do not meet the accumulated general average, required in their program, either undergraduate or graduate. Please refer to the POA published in the Institutional Catalog. In case of applicants who cannot present an official high school transcript or institution of origin by the following reasons: confiscated records, school closings, destruction of property, fire, or any other event that makes it impossible to obtain them, may also be admitted under this alternative.

POA applicants must be seen at the Counseling Office to be recommended to enter the University. For more information, please refer to Enrollment under the Academic Opportunity Program in the Institutional Catalog.

### **International Students**

- In addition to the general requirements (undergraduate and/or graduate level), the official transcript of the highest degree at the graduate level or courses completed so far and at the undergraduate level the official transcript, diploma or degree received with their grades and average must be submitted. Said transcript must be approved by an agency accredited by NACES (National Association of Credential Evaluation Services) and must include course by course, average and grade awarded, if any.

### **Admission to the Graduate Level for New Students and CCU Graduates**

To be admitted as a regular student to a graduate program at CCU, each applicant must meet the following requirements and documents:

1. File an application for admission, which can be obtained at the Admissions Office, Graduate Program Office, or online through our website [www.columbiacentral.edu](http://www.columbiacentral.edu). (A non-refundable admission or readmission application fee will be charged to the student's account according to the current Cost Table at the campus requesting admission). Students who have graduated from CCU will also have to file an application for readmission.

2. Submit 1 official copy of the valid credit transcript(s) of the institution where the baccalaureate degree or higher was completed. The corresponding university where the baccalaureate was obtained must have proper authorization and/or accreditation.
3. Submit 3 letters of recommendation from 3 people who can offer an opinion about the candidate's chances of success for graduate studies. See forms included in the application.

**Specific admission requirements for Master's Degrees for new students and graduates of undergraduate programs at CCU:**

- Master's in Business Administration
- Have a 2.50 cumulative general average. Students interested in being admitted and have a lower average, refer to the POA.
- Master's in Nursing Science
- Have a 2.75 cumulative general average. Students interested in being admitted and have a lower average, refer to the POA
- Have a Bachelor's Degree in Nursing
- Present evidence of a current license as a general nurse

**Admission requirements at the graduate level under the Non-Presential (distance) modality, in addition to the aforementioned requirements, the applicant must:**

- Present the university with a copy of an identity document from the state which proves their nationality. At the time of the interview, this document can be sent by email.
- Later, to validate the registration, the same document in a copy legalized by a notary of the city in which you reside must be sent. This document must be the National Identity Document (DNI), identification issued by the state or country of origin or a valid passport for the expiration date. If an applicant can visit the CCU offices personally, they have the option of presenting their identification and validating it at our offices without notarization.



## ***Verification of High-School Documents in the Admission Process for Puerto Rico students***

CCU, as part of its admission policy, verifies the origin of the document evidencing that a student has completed the fourth year of high school.

When presenting the evidence on how they obtained the high school diploma, the admissions officer will use the document provided by the Board of Postsecondary Institutions (formerly CEPR), which indicates the school or college current license date to determine if the date compares with the terms of years the license is or was in force. If the information is correct, the evidence from the fourth year of high school is accepted. If the document is not according to with the document of the Board of Postsecondary Institutions (formerly CEPR), the student is directed to consult with the school.

Certifications from high school will be accepted, only via exception, when a particular case warrants it.

In those cases that the documents presented by the student for validation reflect diversity in identity or difference in name as provided in the admission application, the corresponding verification will be carried out, guaranteeing that no discrimination against any person based on race, sex, color, birth, sexual orientation, origin, or social condition, physical or mental handicap, or because of political, religious, social, or union ideas is met. Given this, they must submit:

- Affidavit certifying the information in case of diversity or difference in name.

## **Verification of High School Documents in the Admission Process for students from Accelerated Schools**

CCU, as part of its admission policy, verifies fourth-year documents in the admission process for students from accelerated schools in Puerto Rico. This policy applies to all incoming students who come straight from high school and whose high school diploma is from an accelerated school. In those cases that the student comes from a transfer and does not present the transcript of the transferring institution, the fourth-year verification will proceed as established in this procedure.

Through the established procedure, the following will be verified:

1. The validity of the license of the accelerated school from which the student comes.
2. The year the accelerated school diploma was awarded.
3. That the students from said schools completed their studies according to the applicable requirements according to the Board of Postsecondary Institutions (formerly CEPR).

Documents to be delivered by the student from an accelerated school:

1. Accelerated school credit transcript.

Once the documents delivered by the student have been verified and validated, their admission to the institution will be determined.

### ***Admission of Homeschooling Students***

Students from homeschooling may apply to CCU in two ways:

1. Present evidence of having completed a study program equivalent to high school graduation in Puerto Rico. The equivalency must be certified by the Puerto Rico Department of Education. The equivalence of the academic index obtained must meet the minimum requirement of 2.00.
2. If there is no certification from the Puerto Rico Department of Education, the student's parent or guardian will present:
  - a. Credit transcript: the person or entity that certifies the home studies will prepare a transcript of the courses approved by the student. It should include name of the course, period in which the course was taken, and grade obtained. Must complete all courses required by the Department of Education to complete High School.
  - b. Affidavit that highlights that the student completed their studies through the home learning modality (homeschooling).

### ***Requirements for Admission for Professional Improvement***

A Professional Improvement (PI) student is one who is interested in taking certain courses, without being enrolled in an academic program at the University. The most frequent reasons for this type of request are for continuing professional education purposes or to request

transfer credits to another university. PI students are not eligible for financial aid. The requirements for admission as a PI student are:

- Submit a duly completed application for admission.
- Full payment of the admission application fee.

### **Transfer Student Admission**

In addition to the general admission requirements, CCU welcomes applications for admission from students who are studying or have studied in other post-secondary educational institutions, which are duly authorized and/or accredited to operate in Puerto Rico and the United States, as well as those of recognized foreign institutions. Transfer applicants are subjected to regular admission requirements, except:

- Undergraduate transfer applicants with an academic average of less than 2.00 are eligible to enter through the POA.
- Undergraduate students who possess post-secondary transfer credits for Spanish, English, computer, and mathematics courses may be exempt from the diagnostic test for the approved course.
- For students at the graduate level, transfers will be accepted up to a maximum of 18 credits. Ordinarily, approved courses with a grade of less than B will not be accepted in transfer. Courses accepted in transfer will not be considered to compute the general graduation average.
- For students with professional experience of the Master of Business Administration Program, CCU offers the opportunity to consider and accredit the knowledge and skills acquired through their professional work experience, as established by the PROSIGUE alternative. Through this alternative, a maximum of 18 credits can be credited. At the undergraduate level, they can also be considered and accredited, always complying with the residency requirements.

CCU will accept transfer credits from postsecondary institutions authorized and/or accredited by an agency recognized by the United States Department of Education and legitimate foreign institutions, as determined by CCU. The courses approved in the institution of origin will be considered individually for validation; CCU reserves the right to accept courses approved in other institutions. For more details, refer to the Course Validation Policy.

In case of institutions that have ceased functions and therefore it is impossible to obtain an official credit transcript, the student may submit a student credit transcript or any other document that attests to their approved courses for consideration by CCU, provided they are

supported by an "affidavit." However, CCU reserves the right to validate said knowledge through its evaluation instruments, if understood, as a previous step to their transfer acceptance. Applies only to undergraduate programs.

The student with veterans benefits and/or their beneficiaries, having studied at any post-secondary or university institution, will be required to present the official credit transcript of the institution of origin, in order to qualify for the educational benefits of the Veterans Administration (GOES). If the official credit transcript is not presented, CCU will not be able to certify it to the Veterans Administration.

### *Special cases - "Experiential Learning"*

- People who have acquired knowledge through other means, other than traditional academics, and wish to have it considered for academic credit, should request guidance regard this at the Admissions Office, so that it can be channeled to the Dean of Academic Affairs.
- In those cases that present evidence of having approved the parts of the Mathematics, English and/or Spanish with 560 points or more on the College Board, the course will be validated according to their study program, regardless of whether they come from high school or transfer.

## ***Residency Requirements***

**Graduate programs:** Regardless of how many credits a student can obtain through transfer, professional experience, or other methods accepted by the academic community, each student must obtain at least 21 approved credit hours in their study program in residence within CCU.

**Undergraduate programs:** Regardless of how many credits a student may obtain through transfer, professional experience, or other methods accepted by the academic community, each student must obtain at least 24 credit hours credited towards their program of study in residence within CCU. For certificate or associate degree programs, these credits in residence must include at least 12 credit hours in the student's area of specialization. Students enrolled in a baccalaureate program must complete at least 24 credit hours in residency in their area of specialization or related courses, except in the Bachelor of Science program in Nursing RN to BSN, which of the 24 credits must be completed at minus 18 in your area of expertise or related courses.

## ***Notification of Admission***

All applicants will be informed in a timely manner about the institution's decision regarding their admission to the university, through a letter from the Admissions Office.

Acceptance to the university and an educational program does not authorize the applicant to begin classes unless all required documentation has been submitted or an extension has been granted to submit the documents.

## ***Other Conditions for Admission***

A student who does not have an application accompanied by all the required documents will have a period of 30 days after classes begin to submit them. The Recruitment and Admissions Officer will notify the student of the documentation that is needed to complete their file and the deadline for its delivery.

If the student does not deliver the required documentation in the specified period, the enrollment will be canceled, and the student will be dropped from the University.

# POLICY OF VALIDATION AND TRANSFER OF CREDITS

## Introduction

The fulfillment of the mission of Columbia Central University (CCU) depends on several factors, including the validation of courses or their transfer. It is important to establish mechanisms for those students who request the evaluation of courses approved in other institutions at the postsecondary or university level. Consequently, the Office of the Vice President for Academic Affairs has established the Policy for the Validation and Transfer of Credits.

## Policy layout

Students who are or have studied at other post-secondary and higher education institutions and who wish to continue studies at CCU, must satisfy the admission requirements and, if they wish for their approved courses to be considered from the institutions of origin, they must obtain from said institutions, an official credit transcript, which must be sent by mail from institution to institution. The courses approved in the institution of origin will be considered individually for validation and/or transfer, except in case of articulation agreements with partner institutions. CCU reserves the right to accept courses approved at other institutions, for valid reasons.

Acceptance of approved courses at the institution(s) of origin will be subject to the following considerations:

1. Have filed a request for course evaluation to be validated or transferred in the Registrar's Office.
2. The courses submitted for evaluation must be equivalent or acceptable to those offered in the study program requested by the student.
3. The courses must have the same or greater value in credits, or the equivalent in contact hours.
4. In cases of graded courses, the approved course at the institution of origin must have a grade of C or above. In courses with a minimum qualification per study program policy, the same will be considered when evaluating. Ordinarily, courses with a "D" grade will not be accepted for validation. For those programs that require credit transfer, all courses approved in the institution of origin, especially in cases in which the degree has been conferred, will be accepted; this includes those rated "D".

5. In cases of courses without qualification, approved courses will be evaluated for validation through the modalities of military credits, work experience, university experience, CLEP, PNA, and DANTES exams, among others.
6. The student must submit the official certification issued by the entity offering the exam. Please refer to the minimum accepted scoring table for details.
7. In case of passing the diagnostic tests about Spanish, English, and mathematics with 70% or more, the course will be validated according to their study program.
8. Those candidates who prove that they have passed the mathematics, English and/or Spanish parts with 560 points or more in the College Board, may request validation of the applicable courses according with their study program.
9. To transfer courses from authorized international institutions in their country, the student must present the official transcript and official certification issued by an evaluation agency that is affiliated with the National Association of Credential Evaluation (NACES).
10. Remedial or continuing education courses, as well as challenge exams taken at other institutions will not be considered for validation.

The validation of the courses will be made only of the credits, but not of the qualification. That is, these courses grades will not be considered for the average computation. The credits of the validated courses will be considered as part of the credits attempted and approved to determine the Satisfactory Academic Progress (SAP) of the student. However, the average determination will be based on the courses approved at CCU.

CCU does not want to establish a specific term for the expiration of previously completed studies because we understand that not all knowledge has the same ability to expire and because the person may have been strengthening that knowledge at their work in another way. For this reason, the university will evaluate each case individually.

### **Procedure**

1. The candidate will file an application for their credit evaluation to be validated or transferred at the Registrar's office.
2. The candidate will specify all the institutions of origin from which they will present the transcript to be evaluated, when applying.
3. The designated official will make the corresponding evaluation, taking into consideration the information described above. The original validation document is for the student and the copy

will be filed in the student's academic record along with the credit transcripts that validate the validation.

4. The application for validation establishes that all validation will be considered tentative until the official transcript of each evaluated course is presented. The student has 45 days from the request day to provide the official transcript of the institution of origin. In the case of institutions that have ceased functions and therefore it is impossible to obtain an official credit transcript, the student may submit a student credit transcript, or any other document that attests to their approved courses, for consideration by CCU, if they are supported by an "affidavit". However, CCU reserves the right to validate said knowledge through its evaluation instruments, if understood, as a previous step to their transfer acceptance. If the student does not present an official credit transcript, they may request other possible validation alternatives; like, for example, challenge exams.
5. Once the accepted courses and/or exam results have been validated, they will be recorded in the student's academic record.

## **Residency Requirements**

### **Graduate Level Programs**

Regardless of how many credits a student can obtain through validation, transfer, professional experience, or other methods accepted by the academic community, each student must obtain at least 21 approved credit hours in their study program in residence within CCU.

### **Undergraduate Level Programs**

The credits that a student can obtain through validation, transfer, professional experience, or other methods accepted by the academic community will not exceed 49% of the total credits required to complete the study program. In certificate programs, a maximum of 12 credits will be accepted in validation. For certificate or associate degree programs, residency credits must include at least 12 credit hours in the student's area of specialization. Students enrolled in a Baccalaureate program must complete at least 24 credits in residency in their area of specialization or related courses, except in the Bachelor of Science program in Nursing RN to BSN, which of the 24 credits must complete at least 18 in your area of expertise or related courses.



The credits approved by challenge exams or by work experience will be considered as part of the credits approved in residence and will not be considered as part of the policy of maximum 49% credits to be validated.

## **POLICY ON COURSE VALIDATION BETWEEN THE NON-UNIVERSITY POSTSECONDARY LEVEL AND THE UNIVERSITY**

### **Introduction**

The fulfillment of Columbia Central University's mission depends on several factors; among them, the need to provide mechanisms for students to continue their studies until they reach their academic goals. CCU offers students enrolled in non-university postsecondary programs the opportunity to transfer courses to other non-university programs or to a college-level program. To achieve its mission, the Office of the Vice President for Academic Affairs has established the Policy for Course Validation between the Non-University Postsecondary Level and the University Level.

Courses approved at the certificate level may be considered individually for transfer to other non-university or higher-level study programs. They will be considered if the non-university post-secondary level technical courses transferred are part of the student's non-university program of interest or at least one of the higher-level programs offered at the university.

### **Applicability**

This policy applies to all students enrolled in a program that belongs to the certificate level that is part of at least one of the higher-level programs offered at the university.

### **Dispositions**

Acceptance of approved courses will be subject to the following considerations:

1. Courses to be considered for transfer must have a "C" grade or higher. Courses with a minimum qualification per study program policy will be considered during evaluation. Ordinarily, courses with a "D" grade will not be accepted.
2. The courses to be considered must have the same or greater credit, or the equivalent in contact hours.

3. The courses submitted for evaluation must be equivalent in content, quality, and rigor to the courses offered in the study program requested by the student.

The determination of averages will be made based on the courses approved at CCU.

The validation of any course duly approved in CCU will be accepted when it is offered in programs of different levels, but the course must be comparable in content, hours, and credits. Students graduated from a program or students who have processed withdrawal and are determined to enroll in a certificate program must pass a minimum of 12 credits of residence after validating all the applicable courses: this for average purposes. For the Associate Degree, Baccalaureate and Master's degree programs, it is required to pass a minimum of 24 credits of residency once all the courses that apply for validation have been accepted.

Students who have processed withdrawal who request readmission to finish the program from which they withdrew will have to take the necessary courses to complete it. All courses that are comparable to the current program will be validated for these students.

CCU does not want to establish a specific term for the expiration of previously completed studies, as it understands that not all knowledge has the same capacity to expire and because the person may have been strengthening that knowledge in their work in another way. For this reason, the university will evaluate each case individually.

## **POLICY FOR THE CHALLENGING EXAM**

### **Introduction**

The fulfillment of Columbia Central University's mission (CCU) depends on several factors. Among them, the course validation through other alternatives. To achieve its mission, CCU offers students the opportunity to validate courses, demonstrating the knowledge and skills acquired through passing challenge exams. For this reason, the Office of the Vice President for Academic Affairs has established the Policy for Challenging Exams.

Any student interested in challenging a course for it to be validated must request and take the challenge exam before registering for the course, according to the established dates. Only one opportunity to take the exam is allowed. The student must obtain a minimum of 70% to consider the exam passed.

### **Applicability**

This policy applies to all students enrolled in CCU programs, regardless of level of study program.

### **Dispositions**

#### **1. Students:**

1. Not having previously enrolled in the course.
2. Have approved all requirements established for the course to be challenged.
3. The student will have the right to try the challenging exam for a course only once. If the exam is failed, the student will have to enroll in the course.
4. Once enrolled in the courses, the student will not have the right to request a challenge exam for said courses.
5. The challenge exam is not a substitute or alternative for completing courses or making up courses previously attempted and not approved.
6. The student may only challenge up to a maximum of 3 courses per semester.
7. Make the payment at the Collections Office.
8. File the challenge exam application at the Registrar's Office.

#### **2. Registrar Officer:**

- a. Process the application for the challenging exam.
- b. Give the student the study guide.
- c. Notify the Academic Directors/Coordinators of the student's request to take a challenging exam.
- d. Coordinate with the Director/Academic Coordinator the date and time to offer the challenging exam.
- e. Notify the student, in writing, of the test results.

## **POLICY FOR THE ACCREDITATION OF COURSES BY EDUCATIONAL EXPERIENCE IN CONTINUOUS PROFESSIONAL GROWTH AND PROSIGUE ALTERNATIVE**

As part of the alternatives that CCU grants the student to complete their study program, the university recognizes professional experience, non-academic professional training, and performance by execution of tasks as sources of knowledge. For those students who have acquired

knowledge and skills through this mean and wish to have them evaluated to accredit them as part of their study program, there is the **Policy for the Accreditation of Courses by Educational Experience in Continuous Professional Growth**.

The evaluation of the experience for continuous professional growth consists of establishing judgment and academic assessment on the student's narratives on the cognitive, personal, and professional aspects, focused on their work experience, as long as it is consistent with the learning that is supposed to be acquired in private courses. The narratives must be documented with evidence, which will be requested according to the course for which accreditation is needed. The student will request the courses they wish to accredit by experience and will undergo the evaluation process correspondent. This process is carried out by evaluating professors of each discipline and according to the academic level of the study program.

The courses evaluated by this modality are not covered by the financial aid programs available at the Institution. The student must cover the cost of the courses accredited by experience at the time of the evaluation request.

#### **Requirements:**

1. Go through an interview process with the Program Coordinator.
2. Present evidence of a minimum of 3 years of experience in the specialty area or related area.
3. Go through an orientation process.
4. Approved courses will not be taken into consideration for average purposes but will be taken into consideration for attempted credits according with the Satisfactory Academic Progress Policy. Courses approved under this alternative will count as approved, but not graded.
5. The student will comply with the specific evaluation requirements of the course during the academic term in which it is requested. If the course is not completed, the student will receive notification of non-compliance and will have to enroll in the course.
6. The student will be obliged to satisfy the criteria applicable to the accreditation of all the course credit hours through the evaluation. Under this alternative, no credits representing a portion of the course will be awarded; This means that all experience evaluated must be equivalent to the total amount of credits, knowledge, skills, and competences required for this course approval.

#### **Continuing Alternative**

PROSIGUE is an educational alternative designed to respond to the needs of the adult student with significant professional experience. The modality allows serving those students who

have little time to study, are trained, and wish to complete their progress in their studies. Applicants must possess the required competencies to validate the courses of interest.

In this alternative, the undergraduate student enrolls in the SEMI 3008 course: *Life Reflection Seminar*. Through this course and with the advice of a college facilitator, the student prepares a professional portfolio. It consists of a series of narratives on personal, academic, and professional aspects focused on the work experience that is relevant to the instruction of the selected courses. These narratives must be supported by evidence that justifies the writing. During the period established in the term, the student will request the courses wished to be validated by experience and will undergo the evaluation process.

The cost of the SEMI 3008 course can be covered by federal funds, in those cases that the students qualify. However, the costs of the courses that will be evaluated by this modality will not be covered by federal funds. Before the final evaluation process, the student must have covered the current costs. The final evaluation process will be carried out by evaluating professors in the different disciplines according to the courses of their study program.

Regardless of how many credits a student can obtain through transfer, challenge exams, validation of professional experience, or other methods accepted by the academic community, each student must approve at least 24 credit hours towards their study program in residence as established in the Undergraduate Level Admissions Policy and the Course Validation Policy.

At the graduate level, the student develops the portfolio with the advice of a mentor. Before the final evaluation process, the student must have covered the current costs. The final evaluation process will be carried out by evaluating professors in the different disciplines according to the courses of their study program.

Regardless of how many credits can be obtained through transfer, challenge exams, validation of professional experience, or other methods accepted by the academic community, the student must pass at least 21 credit hours towards their study program in residence established in the Admissions Policy (Graduate Level) and the Course Accreditation Policy.

**CCU reserves the right to accept or reject the candidate's application for any of these alternatives for validation and/or transfer of credits if, at the time of the initial evaluation, it is identified that it does not meet the requirements to proceed.**

# READMISSION POLICY

## Introduction

CCU reserves the right to readmit students in each session and/or academic term. CCU's obligation is exclusively during the term in which the student has enrolled and paid all fees. All students who request readmission must abide by the university's existing academic policies, as well as those of the academic program requesting re-admission.

If there is a curricular review of the program that the latter wishes to readmit, the Registrar's Office will determine the student's placement according to the applicant's academic evaluation. The readmission of each applicant will be subjected to the evaluation of their academic record, their status with the university, and that there is a group available to continue their studies.

## Applicability

The Columbia Central University (CCU) Readmission Policy applies to all students who have stopped studying at the university for one or more academic terms or have graduated. They must apply for re-admission to the university when they decide to continue their studies in the program from which they dropped out.

## Classifications:

- *Reentry*- Student who was one or more terms out of college and did not complete any academic program and returns to continue the same academic program. This readmission is carried out by the Retention Office together with the Registrar's Office.
  - Withdrawn student who has not passed any course and returns to the same program.
  - Withdrawn student, applies for readmission to the same program, and has approved credits.
  - Withdrawn student who only needs his/her practice to graduate.
- *Grad Reentry Future Start*- CCU graduate students who re-enroll in another academic program at the university. This type of readmission is processed by the Admissions Office.

- *Reentry Future Start*- Student who dropped out of an academic program at the university and enrolled in a new program. This type of readmission is handled by the Admissions Office.

### **Readmission Requirements**

If the student wishes to resume their studies in the same unit where they previously studied, or in another of the CCU campuses, to request readmission they must meet the following requirements:

Graduate level programs:

- a. File the readmission application, which can be obtained at the Admissions Office.
- b. If the applicant has withdrawn from an academic program at CCU and completed the study program at another institution, they must provide the following documentation: Submit 1 official copy of the valid credit transcript(s) from the institution where the baccalaureate degree or higher was completed. The university where the baccalaureate was obtained must have proper authorization and/or accreditation.
- c. An applicant who has graduated from a CCU undergraduate program and wishes to readmit to a graduate program, must provide the following documentation:
  - Present 3 letters of recommendation from 3 persons who can offer an opinion on the chances of success of the candidate for graduate studies.

Certificate and Undergraduate level programs:

- a. File a request for readmission, which can be obtained at the Retention Office.
- b. If the student has any debt with the University, the financial situation must be resolved before readmission.
- c. Comply with the policies and/or requirements of the program to be readmitted.
- d. If the student withdraws again and wishes to apply for readmission a second time, it will be strictly evaluated and must be approved by the Retention Officer, the Counselor, and the Registrar Officer. If necessary, input may be requested from the Director/Academic Coordinator of the program.

# IMMUNIZATION POLICY

Columbia Central University (CCU) recognizes the importance of a good quality of life. For this purpose and in compliance with Law 25 on School Immunization of 1983, the Immunization Policy was created. The Law establishes that no person under the age of 21 may attend a college or university unless they present a Certificate of Immunization with all the doses of vaccines required by the Department of Health.

## **To whom this Policy applies**

This Policy applies to all those students who enroll in a program and are under 21 years of age.

## **Definition**

Immunization Certificate - Form provided by the Department of Health, signed by the doctor or professional administering the vaccine and certifying that a particular person has been immunized against a certain disease.

## **Policy Disposition**

All students under the age of 21 who are enrolled must present the current Immunization Certificate. If they do not comply with this requirement, their enrollment will be canceled. Those students who request exemption to vaccinate for medical or religious reasons, as provided by Law, will have to submit the Medical Certification or Affidavit provided by the Department of Health of the Commonwealth of Puerto Rico. In these cases, the following applies:

1. Every parent or guardian must deliver to the university staff, the aforementioned Medical Certificate or Affidavit.

It should be noted that, although the Law stipulates such exemptions, the student must orient themselves in the Admissions Office, since there are academic programs that require internships in hospitals, and these require that they be duly vaccinated to participate in said practice.



# POLICY OF ADMISSION CONDITIONED TO A HIGHER-LEVEL PROGRAM

## Introduction

The fulfillment of Columbia Central University's mission (CCU) depends on a number of factors. Among them, the need to provide mechanisms for students to continue their studies until they reach their academic goals.

Changes in society and advances in science, health, technology, and various professions have promoted the need for professionals trained to meet job demands. This causes many students to wish to continue studies at a higher level. CCU encourages students to develop their knowledge and skills to their maximum and face challenges as well as to expand their opportunities to climb new positions and achieve personal, professional and, work success. Consequently, the Vice Presidency for Academic Affairs has established a Policy for conditional admission to higher level programs.

## Applicability

This policy applies to all students enrolled in a CCU academic program.

## Dispositions

1. Students:
  - a. Be enrolled in their penultimate term of studies and lack 11 credits or less to complete the program if a certificate or associate degree student.
  - b. Be enrolled in their penultimate term of studies and lack 9 credits or less to finish the program if a high school student.
  - c. Duly complete the Conditional Admission Application to a Higher-Level Program of their interest and any other document related to the validation process, if applicable.
  - d. The student will not be officially enrolled in an associate, baccalaureate, or master's program, as applicable until the previous academic level is completed.
  - e. Receive guidance from the Financial Aid and Collections Officer on their new financial obligation and be aware that Title IV Funds for conditionally admitted courses will not be received.
  - f. If the application is accepted, continue to approve the courses enrolled in their original program to maintain their status of conditional admission.

- g. Could enroll up to a maximum of 3 credits per academic term of the higher-level program of their interest. Once conditionally admitted, if the student completes the degree and continues studies in the program that was conditionally admitted, he/she will be considered an admitted student in the higher-level program without needing to go through any additional application process, except when it is at the graduate level. At the graduate level, the student must refer to the graduate admission requirements.

2. Personnel of the Registrar's Office:

- a. In case of those students who have registered as transfer students, the application and transcript will be sent to the designated official, for the validation process of transferred courses, if applicable.

Notify the applicant on the decision made, emphasizing the importance of receiving guidance from the Financial Aid and Collections Offices regarding their new financial obligation and emphasizing that conditionally admitted courses are not eligible to receive Title IV Funds.

## **POLICY FOR THE CONTINUITY OF THE ACADEMIC OFFER, ACCORDING TO THE SUGGESTED PROGRAM OF STUDY**

### **Introduction**

The fulfillment of the Columbia Central University's mission (CCU) depends on a myriad of factors, including demand for the programs offered to meet community's needs. To achieve this, it is important that the academic curriculum includes the mechanisms that allow students to progress in their study program until they complete their academic degree, according to their needs. CCU is committed to complying with the regulations established by the licensing and accrediting agency and the federal government.

For this reason, the Office of the Vice President for Academic Affairs has established the Policy for the continuity of the academic offer, according to the suggested study (PES) and the time established to complete an academic program, based on its development of rules, procedures, and regulations established by the Board of Postsecondary Institutions of Puerto Rico, the Middle States Commission on Higher Education, and the United States Department of Education.

## **Applicability**

This policy applies to all Academic Directors/Coordinators and students of all academic programs offered at the university, regardless of the type of study.

## **General Dispositions**

1. The Director/Academic Coordinator will keep the PES updated, for each program under his/her charge, using the format established by the Office of the Vice President for Academic Affairs.
2. The Director/Academic Coordinator of each program will guide all students
3. Students, regardless of their classification, on the courses that correspond to enroll, for each term according to the PES and the time established to complete their academic program, aligned to the curricular sequence.
4. The Director/Academic Coordinator of each program will guide those transfer students who come from another university, on the courses that correspond to enroll for each academic term, according to the PES and the validation of transfer courses. With this information, the Director/Academic Coordinator will determine the time it will take for the student to complete their program if it continues without interruption.
5. Orientation offered by the Director/Academic Coordinator will include, but will not be limited to, the following:

### **a. Suggested Study Program (PES)**

- i. The academic load that the student must enroll, for each academic term until completing their degree, according to their PES.
- ii. The benefit of complying with the academic load to finish the degree in the established time, of following the PES without interruption.
- iii. The consequence of not complying with the academic load to finish the degree in the established time, of following the PES without interruption.
- iv. The importance of visiting the Financial Aid and Collections Offices to discuss the PES, after knowing the recommendation of the Director/Academic Coordinator.

### **b. Selection of Courses**

- i. The frequency of the courses offered is subjected to the number of students and the demand.
- ii. The importance of enrolling in the recommended courses for each academic term for the student to complete their degree in the time established in the PES. 97

- iii. The need to comply with the program and course requirements on time, to avoid delay in the enrollment of each academic term.

**c. Study Alternatives**

- 1. The study alternatives that exist to complete the academic degree in the established time, according to the PES include challenge exams, portfolio, and work experience, among others.

**d. Course Guarantee**

- i. CCU guarantees continuity in offering courses to students who follow the suggested study program without interruption (without failing or leaving a term in between), until they complete their academic degree.
- ii. CCU guarantees continuity in offering courses to students who request the graduation evaluation with, at least, two terms prior to their graduation date.

## **POLICY FOR THE CONTINUATION IN THE COURSE OFFERINGS TO STUDENTS ENROLLED IN ACADEMIC PROGRAMS THAT THE INSTITUTION PROPOSES TO PLACE IN MORATORIUM, CLOSE, OR CEASE OPERATIONS**

### **Introduction**

The fulfillment of the Columbia Central University's mission (CCU) depends on a myriad of factors, including demand for the programs offered to meet the communities' needs. CCU periodically evaluates the enrollment movement and the labor demand market to determine the continuation of the academic programs. When the demand for the programs drops significantly, in a period of 3 years or more, the situation is analyzed to determine if there is a need to place it in moratorium or close the program. When demand drops dramatically in all programs offered, the situation is analyzed to determine whether it is necessary to cease operations.

CCU is committed to complying with the regulations established by the licensing agency, accrediting agency, and the federal government. For this reason, the Office of the Vice President for Academic Affairs has established a Policy for the continuation of courses offered to students enrolled in academic programs that the institution intends to place in moratorium or close, as well as the possible cessation of operations, taking as a basis for its development; the rules, procedures, and regulations established by the Board of Postsecondary Institutions of Puerto Rico, the Middle States Commission on Higher Education, and the United States Department of Education.

## **Applicability**

This policy applies to all Academic Directors/Coordinators and students of all academic programs offered at the university, regardless of the type of study.

## **General Dispositions**

When the university determines to place a program on moratorium, close it, or cease operations, it must:

1. Notify the licensing agency, accrediting agency, and the federal government of the decision.
2. Comply with the requirements established by the licensing agency, the accrediting agency, and the federal government for such purposes.
3. Ensure active students the continuation in the courses offerings that follow in the Suggested Studies Program, uninterruptedly (without failing or leaving a term in between) until they complete their academic degree.
4. Assure the graduation candidate students the continuity in the courses offering to which they request the graduation evaluation with at least 2 terms prior to their graduation date.
5. Ensure that students and graduates continue to receive transcription services for official credits and other documents related to the registry.
6. Notify the licensing and accrediting agency and the federal government about changes in the address, telephone number, person to contact, and any other information necessary for the student to request and receive services.

Other considerations when the university determines to cease operations:

1. Dialogue with affected students to identify the educational institutions that they are interested in transferring and help them to carry out the procedures.
2. Establish a verifiable and reliable system to continue providing students with information relevant to their academic work (transcription of credits and other documents).
3. Post an announcement notifying the closing of the university.
4. Establish a Teach out plan for all students affected by the moratorium or operational closure of the university.

# INSTITUTIONAL POLICY ON ACADEMIC RESEARCH

## Introduction

The fulfillment of Columbia Central University's mission (CCU) depends on a myriad of factors, including promoting the development of knowledge through teaching and research in the various areas of study. Currently, the program curriculums offered at the master's and baccalaureate levels include projects that engage students in the research process. The results of these projects demonstrate the integration of the knowledge acquired by students in their study disciplines.

Similarly, CCU promotes the value and interest in the research processes in the program curriculums offered at the associate and certificate level. CCU's commitment continues to expand by including teaching research to develop projects according to the area of specialty of the faculty. For this purpose, the Office of the Vice President for Academic Affairs has established the Institutional Policy for academic research.

## Applicability

This policy applies to the entire university community and the academic programs of CCU and its enclosures.

## Dispositions

1. Develop research projects in the classroom that contribute to the generation of knowledge in the study programs offered and in the community in general.
2. Develop projects in teaching that promote the value and interest of research and professional development of the faculty in their area of specialty.
3. Encourage the collaboration and participation of administrative, academic, and student units to facilitate the research projects or activities carried out at the university.
4. Facilitate the dissemination of the results of research projects or activities to the university community and in general.
5. Promote the students and professors' quality and integrity of the projects or activities throughout the research process.
6. Ensure that research projects or activities are carried out according to with the Institutional Manual for Academic Research (MIIA).

7. Ensure that research projects that involve human beings do not begin without the proper authorization of the relevant Institutions and that they follow the procedures established by the Federal Regulations Code of the Department of Health and Human Services for the Protection of Human Subjects in Applicable Research, <http://www.hhs.gov/ohrp/>.

Collaborate or participate with other universities, institutions, or public or private organizations that works or promote research projects for the benefit of society.

## **SELECTION AND PROGRAMS CHANGES**

One of the advantages offered by the curricular structure of Columbia Central University is that the study programs integrate the Professional Education courses. It is therefore necessary for the student to make their selection of academic program before beginning to study.

This does not prevent the student, after having started their studies, from changing the program. For this, it will be necessary to discuss the matter with the Counselor.

## **DEFINITION OF THE STUDENT'S ACADEMIC LOAD**

### **Graduated Level**

A graduate-level student is considered full-time when having 6 credits or more in the term. If a student has 5 credits or less is considered part time.

### **Undergraduate and Certified Level**

A full-time student is one who has 12 credits or more in the academic term or its equivalent. A student who takes 9-11 credits (3/4 time) and 6-8 credits (1/2 time).

In case of those students who wish to enroll in 18 credits or more, they must be referred to the Counselor. This, in conjunction with the Director or Academic Coordinator of their program, will evaluate the academic performance to determine if it is recommended to enroll said number of credits.

## STUDENT ENROLLED ONLINE

A student will be considered under the online modality, if they have one hundred percent (100%) of their courses enrolled under said modality. The student classification remains the same as described under full-time student.

## DEFINITION OF ACADEMIC YEAR

An academic year is equivalent to a period of 2 terms of a minimum of 12 credits per term or 24 credits per academic year of a minimum duration of 15 weeks per term or 30 weeks per term. anus.

## POLICY ON THE DEFINITION OF CREDIT HOURS

### Introduction

Credit hours are the basic unit the federal government uses to determine the amount of funds a student is eligible for under Title IV financial aid programs. To prevent fraud and abuse when using financial aid, the United States Department of Education establishes, effective July 1, 2011, determined that there must be a federal definition of credit hours, which serves as a standard for all educational institutions to develop their own definition to be used in all the courses they offer. For such purposes, and in compliance with the regulation 34CFR 600.2 of October 29, 2010, the Office of the Vice President for Public Affairs Academics have established the Policy on the definition of credit hours.

### Applicability

This policy applies to all programs offered by CCU in its campuses, regardless of their level or type of studies.

### Definition of Credit Hours

CCU defines credit hours as the amount of work represented in expected learning outcomes, which are evidenced by student achievement. For the associate, baccalaureate, and master's degree levels, the unit of measurement used to calculate credit hours is the Carnegie Unit, which states that 1 credit is equal to 15 hours of theoretical instruction or 30 hours of laboratory or 45 hours of practice. To calculate the approximate time of the amount of work that will be done



outside the classroom, the Carnegie Unit establishes that each hour of theoretical class is equivalent to a minimum of 2 hours of homework outside the classroom.

For the certificate level, the unit of measurement used to calculate credit hours is that of the United States Federal Government, which states that 1 credit is equal to 37.5 hours.

### **General Dispositions**

1. The definition of credit hours will be used to develop new programs and develop the course schedule.
2. Evidence of compliance with the amount of work represented by the expected learning outcomes for all programs and levels, regardless of the study modality, will be evidenced by the faculty in the student's grade register as the Supplementary Independent Component (CIS).
3. Every professor who has an assigned course will ensure compliance with the credit hours and will use the instruments established by the program or identified in the syllabus for such compliance.
4. The syllabi of all courses in the programs will specify the number of contact hours for the CIS in the General Information (under Contact Hours) and Methodology sections, as established in the Guide to the Syllabus. Each student's CIS will be evaluated in each academic term and a grade will be assigned. At the end of each academic term, the faculty will include the CIS grade in the grade register, as one of the evaluation criteria for the course.
5. The syllabi of all courses of all certificate level programs will reflect the number of contact hours of the CIS in the General Information (under Contact Hours) and Methodology sections, as established in the Syllabus Guide. At the end of each academic term, the faculty will include the CIS grade in the grade register, as one of the evaluation criteria for the course.

## ENROLLMENT

A student is officially enrolled at Columbia Central University (CCU) only when the entire admission and enrollment process is completed, and has satisfied all study fees, including, but not limited to any other special fees. It is also necessary to have a registration agreement and class program duly endorsed by the university.

The enrolling act of the student at CCU, means total approval, acceptance, and endorsement to all the rules and academic, administrative, and student policies contained in this catalog and any other publications.

## ELIMINATION OF SCHEDULED COURSES

Every course that the university offers has been duly considered and its inclusion in the program of course offerings is due to the best goodwill to be fulfilled. However, due to imponderables that may arise, Columbia Central University notifies that reserves, at all times, the faculty and prerogative to open or close courses and/or study programs and/or alter the student's program after the end of the enrollment period, if the circumstances so require, depending on the circumstances to be interpreted by the university itself.

## CANCELLATION OF ENROLLMENT

The cancellation of enrollment is to discard (render without effect) a duly made official registration, prior to the beginning of classes for each term during the normal registration process. The student who enrolls and notifies the institution on or before the beginning of the semester classes that they will no longer attend will have their enrollment canceled. A cancellation implies that the student will not be penalized for the tuition costs. This does not refer to admission fees.

# ACADEMIC OPPORTUNITY PROGRAM POLICY

## Policy Statement

Columbia Central University (CCU) offers its services to those who want to improve academically and professionally. In keeping with this philosophy, the university has an open-door policy for all those who show a genuine interest in pursuing studies and who, in the opinion of the university, possess the necessary skills to pursue higher education.

In keeping with this open-door policy, the university may admit students who do not meet the prior achievement requirements. These students will be enrolled under the Academic Opportunity Program.

## To whom it applies

The Academic Opportunity Program (POA) applies to all those students who graduate from: high school, equivalency exams (Law 188 or GED), home schooling, or transfers to the undergraduate level whose average is less than 2.00 points and students at the graduate level who do not meet the minimum average income required for the program of interest.

## Program Layout

All students who apply for admission to an undergraduate academic program and their average is less than 2.00 points may be admitted to the university under the POA. The POA will also apply to students who apply for admission to graduate programs and do not meet the minimum GPA required for the program they are applying for.

## During the Pre-admission stage, the student:

1. The Recruitment and Admissions Officer, once all those students below the required minimum average are identified, will proceed to refer them to the Guidance and Counseling Office (using the Guidance and Counseling Referral form for students with an average lower than 2.00 GPA for undergraduate programs and below the minimum average applicable to graduate programs).
2. The Counselor will proceed to interview the student, to determine the student's interest in continuing studies and identify the reasons why they did not obtain a satisfactory average and will complete the corresponding part in the Referral to the Guidance Office and Counseling form.

3. Will be oriented on the university Satisfactory Academic Progress Policy.

**After being admitted and enrolled:**

1. The student will be monitored to determine the level of integration and adjustment to university life around the following activities:
  - a. Attendance at classes at the undergraduate level. The Counselor will verify the attendance referrals made by the school.
  - b. At the graduate level, the student will verify the faculty census during the first 2 weeks of classes.
  - c. The follow-up to the students will be done through: regular mail, email, calls, or summoning those students who are not actively participating to the office.
  - d. Academic progress
    - i. The student's academic progress will be measured according to with the parameters established in the Satisfactory Academic Progress Policy. If failure to achieve the minimum academic progress required, the student will be suspended from the University. The suspension will be valid for 1 year. After the year of suspension, the student may request readmission to the university, and will be evaluated according to the Satisfactory Academic Progress Policy existing at the time of application. The University reserves the right to readmit it.
    - ii. In case the student presents mitigating circumstances that have affected the academic progress, he/she may appeal to the Board of the Academic Opportunity Program; constituted by the Director/ Academic Coordinator of the program, the Counselor and the Retention Officer, to evaluate the case. The Board will determine if the student will be authorized to continue studies for a second term maintaining their POA classification. Students who receive a favorable appeal and do not make academic progress in the second term granted will be suspended from the University. This decision will be final.
  - e. Tutorships
    - i. The student who holds a POA classification may be referred to benefit from scheduled tutoring services, according to their need. Tutorials are not compulsory, but it is recommended to participate in them so that the student achieves his/her academic objective.
  - f. Tracing

- i. The Guidance and Counseling Office will meet with the students monthly to evaluate how they are doing in their courses and, if necessary, examine other alternatives that contribute to the academic success of the same in conjunction with the Academic Dean.
- g. Workshops
  - i. The Guidance and Counseling Office will hold at least two workshops during the academic term related to adjusting to university life for the benefit of students classified under the POA and any other student who may benefit from them.

## **ATTENDANC POLICY**

### **Introduction**

Columbia Central University is a university that is not required to take attendance; however, for the best student academic achievement, recommends attendance as required for all students in its courses, except in the practice courses. However, the student will be responsible for fulfilling the objectives and requirements of the course, as established in the syllabus.

### **To whom this policy applies**

This policy applies to all those students who are enrolled in a university program, regardless of the type of study, at the undergraduate level.

### **Policy layout**

1. It is the responsibility of the faculty together with its Directors or Academic Coordinators to comply with this attendance policy.
2. Unexcused attendance, tardiness, or leaving the classroom
  - a. If a student is absent, it will be their responsibility to obtain the material covered in class.
  - b. Any student who is absent for 3 consecutive days, is frequently late, or leaves the classroom unjustifiably, will be referred to the Director or Academic Coordinator.
  - c. Those students who are absent for a period of 14 consecutive days without excusing themselves with their professors, will be processed a retroactive withdrawal to the last day of attendance at the Registrar's Office.
3. Attendance of students enrolled in a program under the modality of distance education

- a. Attendance will be defined by the participation of that qualifying academic task leading to evaluation as established or programmed by the professor in charge of the course.
- b. During the school period, the student must access the course at least once a week, as established by the teacher to carry out the tasks and assignments that are assigned.
- c. The student must participate in 100% of the activities programmed in the online education platform for the course they are taking.
- d. Failure to submit more than 2 tasks without justification endorsed by the professor, will be grounds for immediate referral to the Director or Academic Coordinator and will require an evaluation of the case. This will imply an immediate evaluation of the possibility of replacing the material in the cases where it is feasible. If the material replacement is not feasible, it would imply failing the course.
- e. Attendance at online education courses will be related to task deliveries and participation in the activities required by the professor. The student's attendance will be registered and updated according to their fulfillment of tasks delivery and participation in activities. The last day of attendance to the course will be determined based on the update of the student's attendance.
- f. Any qualifying activity worked by the student and completed in its entirety within the virtual classroom will be considered participation in the course. This includes but is not limited to participation in discussion forums, development and submission of papers, responding to tests in their entirety within the established time, and responding to verification of readings assigned by the teacher, among others. The work done by the students, as part of their participation in the virtual classroom, will be completed on the platform established for this.
- g. The student will spend time checking the platform frequently to identify pending work, communicated by the teacher, homework, or other academic assets which are under their responsibility. The classroom assignments must always be completed in the time established by the professor.

# WITHDRAWAL POLICY

## Introduction

Columbia Central University (Columbia) is a university which is not required to take attendance. However, for the best academic achievement Columbia has made it a policy to take attendance. Starting from this premise, the Dismissal Policy is based, whether official or unofficial.

## Applicability

This policy applies to all students enrolled in any academic program at the university, except those at the graduate level.

## Definitions

Official Withdrawal - Withdrawal that is requested by the student from one or all courses.

Unofficial withdrawal - Withdrawal processed by the University since the student is absent from all classes for 14 consecutive calendar days without being excused.

## Disposition

## Official Discharges

They are those withdrawals that are processed through the student's request. Official withdrawals are classified as total withdrawals (includes all enrolled courses) and partial withdrawals (does not include all enrolled courses).

1. The student will notify his intention to withdraw in the Counseling Office or Retention.
  - a. Intention to unsubscribe means that the student indicates their interest in not attending their classes or understands that, at the time of notification, they will stop attending classes.

All possible help will be offered to the student; so that they can achieve their academic goal. From the student making the final decision to process the withdrawal, he/she will complete the Withdrawal Form, to determine the last day attended the University.

2. Once the withdrawal form is completed, the student will be referred to the Treasury Office for signature and guidance on the debt acquired, if applicable.

3. Then the student will be referred to the Financial Aid Office where the status of his file, financial aid and the official's signature will be verified.
4. Finally, the student will be referred to the Registrar's Office where the withdrawal will be processed, and the copy will be delivered to the student and to each corresponding office.

### **Unofficial Discharges**

These are those that are processed when the student stops attending the University. Students who are absent for a period of 14 consecutive days (including counting Saturdays, Sundays, and holidays) from all their classes without excusing themselves to their professors will be processed a withdrawal, retroactive to their last day of attendance at the Registrar's Office:

1. The Retention Officer will daily check the students who have 14 consecutive days absent, to determine those that correspond to an Administrative Withdrawal.
2. The Retention Officer will follow up on absent students and will document the information obtained in the weekly report.
3. The Retention Officer will evaluate each situation and file a withdrawal in those cases in which the student has not returned to the University. The last day attended will be determined and the Withdrawal Form will be sent to the Registrar's Office to complete the process.
4. The Registrar's Office will evaluate the withdrawal form and process it.
5. The Withdrawal Form will be sent to the corresponding offices for the Signatures of the Officers and for the processing thereof (Retention, Registrar, Collection, and Financial Aid).
6. Once the Withdrawal Form has arrived, completed by all the Officers; the Registrar's Office will proceed to send by mail a copy of the withdrawal made and a letter to the student notifying him that he was withdrawn from the University. A copy of the withdrawal and the letter will be sent to the student's file.

### **Cancellation of cancellation**

1. Any student interested in continuing their studies after having processed any type of withdrawal may request that it be canceled within a term of 7 school days at the Registrar's Office.
2. To cancel any withdrawal processed, the student must visit the Registration Office or Retention Office where he will request the Cancellation Form. Said document must be delivered complete and authorized in all its parties at the Registrar's Office. Cancellation must indicate that the



student will continue to attend classes and their intention is to complete the academic term. In turn, he will sign the Orientation Sheet for Cancellation of Cancellation.

3. If after canceling the same, the student requests a new withdrawal, the effective date of the same will be the date on which the student for the first time notified the university of their intention to withdraw.

## **INSTITUTIONAL POLICY FOR THE RETURN OF TITLE IV FUNDS (R2T4)**

### **Introduction**

Columbia Central University (CCU), will use the same percentage determined under the Title IV Federal Aid Refund Worksheet, established by the United States Department of Education (R2T4, Step 5), to determine the amount of institutional fees that are earned by the university. Institutional charges for the semester will be multiplied by the percentage of the semester the student attends, based on the date of withdrawal, to determine the amount of institutional charges earned by the university. If the percentage obtained by the university is higher than 60%, 100% of the tuition is earned and 0% is unearned. If the amount earned by the college is greater than the amount of Title IV funds earned by the student, the student may owe the institution a balance.

### **Applicability**

Columbia Central University (CCU) applies the following Dispositions to all students who enroll in the university and cancel their enrollment, do not participate, or attend classes, or withdraw.

### **Return of Tuition Assistance (TA) for Military Students**

Military Tuition Assistance (TA) is awarded to a student on the assumption that the student will attend the enrolled courses for the entire period for which the tuition is awarded. When a student withdraws, the student may no longer be eligible for the full amount of TA funds originally awarded.

To comply with the new Department of Defense policy, CCU will return unearned TA funds, on a prorated basis of at least 60% of the period for which the funds were provided. TA funds are earned on a pro rata basis over an enrollment period, with unearned funds returned based on when a student stops attending. These funds are returned to the Military Service branch.

In cases where a Service Member stops attending due to military service obligation, the university will work with the affected Service Member to identify solutions that do not result in student debt for the portion returned.

**Return of Unearned Tuition Assistance (TA) to the government:**

1. Students enrolled in graduate level programs (Withdrawal processed in 8 weeks)
  - The university will refund 100% of unearned TA if the student processes a withdrawal before or during week 1.
  - The university will refund 75% of TA not earned if the student processes a withdrawal during week 2.
  - The university will refund 50% of unearned TA if the student processes a withdrawal during weeks 3-4.
  - The university will refund 40% (60% of the course has been completed) of TA not earned if the student processes a withdrawal during week 5.
  - Students who process a withdrawal during weeks 6-8 will not be entitled to a refund.
- B. Students enrolled in Undergraduate Programs (Withdrawal processed in 15 weeks)
  - The university will refund 100% of unearned TA if the student processes a withdrawal before or during week 1-2.
  - The university will refund 90% of TA not earned if the student processes a withdrawal during weeks 3-4.
  - The university will refund 75% of unearned TA if the student processes a withdrawal during weeks 5-6.
  - The university will refund 50% of TA not earned if the student processes a withdrawal during weeks 7-8.
  - The university will refund 40% (60% of the course has been completed) of TA not earned if the student processes a withdrawal during week 9.
  - Students who process a withdrawal during weeks 10-15 will not be entitled to refund.

## LEAVE OF ABSENCE

Any student who needs to be absent from the university for an extended period must apply for a leave of absence (LOA). If the student requests a leave of absence, he/she will keep the academic progress classification that he/she held at the time of receiving approval to be absent. Once the semester is over, they will be evaluated according to what is established in the Academic Progress Policy. The leave of absence does not affect academic progress.

The granting of the license will be governed by the following parameters:

1. The student must request and complete the LOA at the Registrar Office.
2. The request will be filed prior to beginning the requested period. Said request must state in writing the reasons why the student is forced to be absent and evidence must be provided. The following situations can be considered to grant a Leave of Absence:
  - a. Health problems (personal or that of a family member) and a medical certification must be submitted
  - b. Military commitments (present the training order)
  - c. Loss of a relative (submit death certificate)
  - d. Conflict with your work schedule (Ex. Business travel related to employment and a letter from the employer must be submitted)
  - e. Maternity and must submit medical certification
  - f. Personal situations. These cases will be evaluated by the Guidance and Counseling Office.
3. The Registrar and the Guidance and Counseling Office will evaluate the application and determine if it is approved.
4. The student may request a license in a period of 12 months. The period starts counting from the first day of the authorized license.
5. The requested license may not exceed 180 days in a 12-month period.
6. Previous agreement with the professor. The student will be able to complete the pending work upon receiving authorization for the license.
7. **COVID-19- We are not able to place students in a Practice Center due to COVID-19, since establishments are closed for the duration of the pandemic. If the Leave of Absence is granted for the exception of COVID-19, the leave may not be extended more than 180 days. The days granted in the license are counted within a 12-month period.**

The license is granted for a pre-determined period with the real expectation that the student will return to the university. If, after the end of the authorized time in the license, the student does not return to the university, the date to proceed with any withdrawal will be the day the license began.

In case of students with veterans benefits and/or beneficiaries who request a leave of absence, the payment will automatically be suspended by the Veterans Administration for the duration of the leave. Once the student or beneficiary returns to the university again, the Agency will proceed to continue with their benefits.

## **POLICY OF ACCEPTABLE USE OF TECHNOLOGY**

### **Background**

Columbia Central University (CCU) recognizes that the use of technology and its resources in the work and student environment is highly susceptible to inappropriate use, ethical, and legal violations. To this end, it has adopted the following policy to clarify the appropriate use of technology and the responsibility of users.

### **Introduction**

CCU is committed to promoting the ethical and responsible use of technological means and their resources. The use of technology resources is a privilege, not a right, and should be treated as such. Access to the Internet and technology is provided for professional, administrative, and educational purposes. Anyone who uses university technology is responsible for its appropriate use. By accessing and using technology, users acknowledge that inappropriate use is prohibited and may result in disciplinary action.

CCU reserves the right and has the means to monitor and control all network activities with or without prior notice, including emails and communications to all Internet sites, so users should not expect privacy when using these resources. The technology is provided to assist employees to carry out their tasks, educational purposes in the classroom, and for external and internal communication, among others.

## **Applicability**

This institutional policy applies to CCU's teaching and non-teaching staff, both full-time and part-time, professionals, contractors, and all university students. The policy is a condition of employment and hiring with CCU.

## **Aim**

This policy offers the necessary support and guidance to clarify the staff and student's responsibility related to the appropriate use of the technology provided and the sanctions to be implemented for not complying with it.

## **Code of Conduct**

The technological infrastructure that CCU has is designed to ensure and satisfy the needs of the university community and its resources. It is necessary that everyone who uses our facilities observe good judgment and apply what is described in this policy. It is important to be careful in activities performed and not try to alter or bypass the security measures that the Institution provides. When necessary, technical support should be requested.

## **Collaborative Content**

CCU provides the university community with access to those sites and online services that allow it to communicate and exchange messages or content in a secure way. It is recommended that the user always communicate in a friendly and professional manner. All electronic messaging activity could be monitored.

## **Security**

In compliance with Law 267 of 2000, our university has acquired several security systems. These systems provide security to all our computer networks at the institutional level. These systems provide us with a virtual surveillance mechanism in real time of all the computing activities carried out in our student network and administrative services.

Additionally, it is recommended for the user to take security measures when using the university's computer resources. This includes not opening and/or distributing unknown or questionable files, leaving personal or sensitive information on the screen when leaving the computer. The equipment should not be used to print personal and/or sensitive information that may be exposed to others. It is not recommended to disclose sensitive or personal information on

those pages that are not secure. If a message, comment, picture, or anything else online that is thought to endanger personal safety or the university is seen, this should be brought up immediately to an immediate teacher or supervisor. The personnel who, as part of their duties, handle sensitive information, must take the necessary precautions to protect said information. Credentials to access the information systems should not be shared with another user.

To keep our equipment and systems at an optimal level, we recommend that our users report any malfunction to the Information Systems Department as soon as possible. Users are not allowed to fix computers or try to remove viruses by downloading programs.

### **Rules of Conduct on the Web**

Users must use reliable sources when conducting their research through the resources offered by the university. Users in the academic area should not store personal information on university computers. This information could be shared and disseminated in a totally unforeseen way.

CCU will not be responsible, financially or in any other way, for unauthorized transactions carried out on the technology network or for damage, theft, or destruction of personal property devices.

### **Copyright Policy**

The university has a Copyright Policy (Employee and Faculty Manuals, Consumer Student Manual) to which users must refer to manage information in such a way that it is not violated. When using online information for work and research, the user will be responsible of properly citing the sources from which they obtained them, giving credit to the original author.

### **Cyber Bullying**

Cyberbullying will not be tolerated as established in our Institutional Bullying or Harassment and Cyberbullying Policy (Employee and Faculty Manuals, Student Consumer Manual). Harassing, disrespecting, sending attacking or threatening messages, denigrating, impersonating, divulging confidential information about a person, deceiving, excluding, and cybernetic harassment are examples of cyberbullying. You should not send electronic messages or post comments with the intention of scaring, hurting, harming, or intimidating someone.

Engaging in these behaviors or engaging in any online activity for the purpose of harming (physically or emotionally) another person, will result in disciplinary action as specified stated in our Policy. In some cases, cyberbullying can constitute a crime. All user activity is monitored.

### **Acceptable Uses of Technology**

The technology provided to our users can be used to:

1. Access infrastructure and resources for university-related activities.
2. Encourage the use of university resources responsibly.
3. Treat college property carefully and alert technical support staff if a problem occurs with its operation.
4. Notify a professor or immediate supervisor if threatening, questionable, or inappropriate content online is seen.

### **Unacceptable Use of the Internet/Email**

1. Exposing unauthorized information/graphics belonging to the university, its employees, or its students
2. Visiting inappropriate or inappropriate sites
3. Design, create, or expose pages that do not follow the university standards.
4. Using logos without authorization from the university
5. Use chat rooms
6. Violate the copyright of information obtained through the network
7. Access electronic games for recreational use
8. Access social pages such as Facebook, Twitter, and Instagram, among others during working hours; except for personnel assigned to use said means for promoting the university or its educational programs
9. Access pages to watch or download movies or TV series during work hours
10. Sending inappropriate emails such as: non-essential messages including jokes, thoughts of the day, chain email, political advertisements, personal commercial use, and making comments that affect the institutional image.

CCU will not be responsible, financially or in any other way, for unauthorized transactions carried out on the technology network or for damage, theft, or destruction of personal property devices.

## **Confidentiality**

No email is confidential, personal, or private. Emails may be subjected to revision without prior notice.

## **Disciplinary Actions for Employees**

All violations will be handled like any other violation of university policies and penalties will be applied as set forth in the Employee Handbook and the Faculty Handbook. These sanctions can range from a written warning to dismissal, depending on the seriousness of the violation.

## **Disciplinary Actions for Students**

All violations will be handled like any other infraction of university policies and sanctions will be applied as established in the Student Regulations. These sanctions can include anything from a written warning, suspension, or expulsion depending on the seriousness of the violation.

# **INSTITUTIONAL POLICY FOR PROGRAMS UNDER THE MODALITY OF ONLINE AND HYBRID STUDIES**

## **Introduction**

The fulfillment of Columbia Central University's mission (CCU) depends on a myriad of factors, including being in tune with technological and educational changes to offer diverse study modalities to help students achieve their academic goals. CCU offers the local and international community access to programs under the modality of non-contact and hybrid studies and a learning management system to manage distance courses.

Consequently, the Vice Presidency for Academic Affairs has established the Institutional Policy for programs under the modality of non-face-to-face and hybrid studies, taking as a basis for their development the norms, procedures and regulations established by the Puerto Rico Board of Education, the Middle States Commission on Higher Education and the United States Department of Education.



## **Applicability**

This policy applies to all Academic Directors / Coordinators, faculty and students of all campuses and programs that are offered through the modality of non-contact and hybrid studies.

## **Dispositions**

### **University Responsibility**

1. Ensure access to courses and programs under the modality of non-contact and hybrid studies for enrolled students.
2. Provide a calendar of activities at the beginning of each course.
3. Provide guidance on the use and management of the course teaching platform at the beginning of each academic term.
4. Offer technical service 24 hours a day, seven days a week.
5. Provide students with the mechanisms to communicate with academic and administrative authorities.
6. Permanent access to a digital copy of this policy.

### **Student Responsibility**

1. Complete the affidavit for each course, at the beginning of each academic term, to corroborate identity.
2. Frequently access the teaching platform or the indicated electronic links, as part of the study activities of the course or courses in which they are enrolled.
3. Actively participate in the virtual room of the enrolled courses.
4. Study the content offered, investigate the topics indicated, and meet the requirements according to the itinerary of the enrolled course or courses.
5. Respect the correct use of information sources and copyright of all content susceptible to intellectual property with which you work.
6. Comply with the administrative considerations of the university.

### **Administrative Considerations**

1. The student enrollment under the modality of non-contact and hybrid studies will be defined by:

- a. The student's will who formally expresses interest, according to his/her convenience to withdraw from the course within the established periods.
- b. The university determination to modify that type of studies due to any incidence specified in the regulations and that indicates it.
- c. Compliance with the criteria established by the university regarding the maintenance of the enrollment of online students, set out below:
  - i. Entering the specific course within the learning platform with a frequency of no more than 14 calendar days.
  - ii. Participation in the virtual room of the specific course with a frequency no greater than 14 calendar days.
  - iii. Timely delivery of the activities scheduled in the calendar established at the beginning of the specific course. If the period between one scheduled activity and another is greater than 14 calendar days, the student must comply with another factor in this list in the corresponding period.
  - iv. Sending any communication to the teacher through the platform's internal communication tools with a frequency of no more than 14 calendar days. This communication can be a question about the subject or related to the administration of the specific course.
  - v. Sending a communication to another classmate of each specific course related to a group activity of the course with a frequency no greater than 14 calendar days.
  - vi. Sending any communication to the Technical-Pedagogical Assistant of the specific course, related to the course, with a frequency of no more than 14 calendar days.
  - vii. Justification agreed in writing and in advance for any absence greater than 14 calendar days in each specific course when entering the course within the platform. The agreements with the professor of each course will be sent to the Academic Coordinator of their program and the Dean/Coordinator of Academic Affairs of their campus.
- d. To keep enrollment active within each course, the student must correct any justified exception to the previous rule within the term established in writing with the university.

# ONLINE SERVICES USE AND SECURITY POLICY

## Introduction

The university community agrees to accept the conditions stipulated in this policy, which indicates the use of services for exclusively academic and administrative purposes, which prohibits any commercial use of the network, as well as inappropriate practices or any other activity that tends to affect other users in the privacy of their information Columbia Central University (CCU), offers online services to its entire university community. Its use is limited to academic and administrative purposes.

## Objective

This document establishes the rules and procedures on the use and management of the university's online services.

## User Codes, Password, Data, and Their Protection

1. All registered users will be responsible for protecting their username and data from any unauthorized access.
2. Any unauthorized access to a username will be immediately communicated by the affected user.
3. Access to user accounts other than your own is prohibited.
4. The accounts are not shareable. The user must preserve their password and change it regularly as required by the system.
5. CCU reserves the right to cancel at any time any access account used for purposes other than those authorized.

## Technical Support

1. If the student or user has problems with their account, there are several alternatives to solve their problem:
  - a. Call the Information Systems department and request technical support
  - b. Send an email

2. CCU technicians do not provide technical support nor are responsible for the hardware or software installed on personal equipment, including laptop or desktop computers, mobile devices that are not owned by CCU.

### **Student Information System (SIS)**

1. These systems are used to store, manage, and exchange information between offices to streamline services to students.
2. These systems are used by CCU employees to manage student information.
3. All employees are responsible for protecting their username and password.
4. The employee cannot leave his System account open once he is not at his desk.
5. The employee is responsible for ensuring the access granted to all CCU systems to which the student is authorized to work.

### **University website**

1. The website, [www.columbiacentral.edu](http://www.columbiacentral.edu), allows the student to acquire useful information and tools from CCU.
2. The page provides access to publications and services for the student.

### **Information Systems Safeguarding or "Backup"**

The systems content is protected by the university Information Systems department to guarantee the availability of information and protect the information of CCU students.

## **INSTITUTIONAL POLICY ON AUTHOR RIGHTS AND ACADEMIC INTEGRITY**

### **Introduction**

Columbia Central University recognizes integrity as a fundamental principle that must be present in all the resources that make up the academic community, as it will promote an academic culture based on integrity and honesty. Conducts that violate healthy academic activity including plagiarism, are strictly prohibited and in case they occur, will be investigated, and sanctioned according to the severity of the incident. CCU adopts the policy to protect, recognize and disclose the legal protection of copyright and make known the scope of Federal Law and the legal responsibility of the parties.

## **Legal Base**

CCU's Institutional Copyright Policy recognizes as pertinent and applicable to the protection of Copyright, the statutes that are included below as part of the Federal Copyright Act of 1976, as amended (Copyright Act of 1976. 17 USC, 101, and Law number 96 of the Commonwealth of Puerto Rico of July 15, 1988, as amended.

These laws establish legal protection for authors of original literary, dramatic, musical, artistic, and other intellectual works in partial or total reproduction without the prior authorization of their creators. It is illegal to violate these rights for the person's own benefit or that of third parties and such violation carries penalties under the law.

## **Intellectual Property and Copyright Protection**

Copyright protection arises from the moment a work or work is created and transmitted in a tangible form of expression. In case of works carried out under contract, the employer is considered the owner of the exclusive right of use.

To use a partial or total work of information protected by copyright, authorization, or permission of the author is required for its use. (Copyright Clearing Center).

The following creations are protected by copyright:

- literary works (poems, essays, novels, among others)
- musical works, including vocal accompaniment
- dramatic works
- speeches
- pantomimes and choreography
- Photographs
- graphic arts
- sculptures
- films and other audiovisuals, recordings, computer programs
- architectural works
- digital programs (software)

## **Copyright in the Academic Environment**

Copyright applies to all literary creation, so it is the responsibility of every academic institution to guide the faculty and students to ensure compliance with this federal law. In terms of

course materials (textbooks), CCU does not encourage any copyrighted material to be reproduced by faculty, students, employees, and other contractors.

The faculty may occasionally use images, music, and movies that are related to the curriculum to be taught in the classroom. The reproduction of the content of databases authorized by license is allowed. Example of this are magazine articles, whose full content and multiple copies can be used to support the courses.

### **Fair use**

“Fair use” is a concept that recognizes that certain uses of copyrighted works do not require authorization from the author. It is established that the use must be minimal, must not interfere with the exclusive rights of the author, and must recognize the author of the work. Regarding the physical and digital reserves in the CCU Library System, these subscribe to copyright (Section 107 of the 'Copyright Act') and the doctrine of fair use that provides the principle behind the collections of the reserve.

Article 107 presents a four-factor approach to measuring fair and reasonable use, different and simply directing libraries in general to assess whether a use is fair, considering: the nature of the use, the nature of the work to be used, the amount used in proportion to the total and the impact on the labor market.

### **Factors to Help Determine Fair Use**

- The purpose of the use, including whether the use is for commercial purposes, if there is an academic benefit, it is not considered fair use.
- The purpose, educational if performed by a non-profit entity.
- The nature of the work is also considered.
- The amount of the portion used in relation to the total work.
- The effect of the use on the market of a work or protected work.

### **Examples of Fair Use**

- Quotes from extracts for illustrative use, comments, or criticism.
- Quotes from short passages of a school or technical work, for illustrative purposes.
- Limited use of poems, essays, and stories. No more than 3 of the same authors must be reproduced in collective work during the same academic period.

- Newspaper articles that illustrate the topic of the class to be discussed, for non-repetitive use.
- News
- For parody or small portion use.
- Summary of an article that includes quotes or short portions.

The use of materials under fair use should not substitute or replace compilations, collective works, manuals, or text.

### **Plagiarism in the University Environment**

CCU offers comprehensive and exhaustive information on compliance with the Copyright Law. Supporting this document, additional information is offered in the Rules and Policies Manual, in which the acceptable parameters of reasonable use of the protected material in the exercise of academia, teaching, and learning are offered.

Technological changes, access to information on the network and the ease with which information resources can be used in the academic field at CCU will observe the corrective measures regarding the detection of use and abuse of protected material, and the action of plagiarism at the institutional level.

CCU recognizes integrity as a fundamental principle inherent to the entire academic community. This principle prevails in all academic assets and all the modalities that CCU offers as part of its teaching-learning process. Academic integrity is the basic guide to conduct for professors, students, and administrative staff.

Academic integrity includes ethics in research and the promotion and prevalence of academic honesty, and integrates the universal principles of:

- honesty
- trust
- Justice
- respect
- responsibility

How plagiarism is defined and how it is constituted:

- The Royal Spanish Academy (RAE) defines it as "the action and affection of substantially copying other people's works and being awarded ownership" (original creation as own).
- Use a large portion or copy a work in any format (written, representations and documents, others) and adjudicate themselves as own and original work without the citations and references corresponding to its original author.

How to avoid plagiarism:

- Verify and note the source of origin of the information presented.
- Cite the phrase or paragraph directly from the original and prove the authority and source by means of a citation or bibliographic reference.
- Paraphrase the original words of the author and prove the authority and source by means of a citation or bibliographic reference.
- Educate the faculty and students in workshops on the use of the Style Manual of publications of the American Library Association (ALA, 2010).
- Take internal measures to identify plagiarism.

The use of “disclaimer” phrases, stamps, or writings does not constitute good faith use of materials beyond fair use, in the teaching and learning process to present them as authentic. This action does not excuse the user from the authenticity and authorship of the document(s) of others, when you present your name and that of the institution on the title page, in research papers and class presentations and student work in groups.

### **Use of Materials in the Library and Reserve**

Section 108 of the Copyright Act establishes that reproduction (photocopying) by libraries and preservation archives does not constitute a violation of law, if it is to provide access to resources for the purpose of study and research.

This is established for educators, librarians, and archivists by the following clarification of the article, "it should not, in some cases, influence in the possibility to use photocopies for reserve books". The library can reproduce resource materials related to archives and replace lost or damaged copies. In the reserve area, members of the faculty may locate personal books that are not available in the collections and items, if fair and reasonable use is observed.



## **Internet Materials**

The works published on the Internet do not lose their copyright and are subject of intellectual protection for which; before using them, must ensure that this protection is not violated. There are sites on the Internet that allow the material reproduction and have permitted uses, as stated on their pages (community commons and open source).

## **Distribution of Copyrighted Material**

It is prohibited to illegally download and share information from files using the computerized systems provided by the university. Unauthorized person-to-person distribution of material protected under the law is prohibited. Such material includes, but is not limited to: sharing music files, video games, movies, computer software, and photos. Such action is subjected to civil and criminal charges.

## **Mechanisms Available to Detect Plagiarism**

The university will have tools for academic and administrative personnel's use to identify plagiarism in documents generated in the academy and the administration. The tool can be used through the online platform, among others. All work to be evaluated will be submitted through the tool and an analysis will be received indicating the percentage of authenticity for the detection and control of plagiarism.

## **Copyright Protection and Online Education**

In terms of distance education, only excerpts or limited portions of dramatic works, music, and audiovisual works can be shown. The law does not allow the reproduction or duplication of content of:

- Electronic reservations (electronic or printed "course packs") or Interlibrary Loans (ILL).
- Access and reproduction of electronic books in collections of other institutions.
- Partial or total electronic transfer of commercial documents.
- Textbooks or other digital content provided under license from the author or publisher, unless there is an institutional license for the content and use, provided by the source suppliers.
- Materials in a printed format analogous to digital format without prior authorization and when there is no digital version of the work.

The Fair Use Dispositions and the 'Teach Act' (2002) indicate that professors may use the following resources to conduct their courses online without the permission of the author:

- Artistic or literary representations (example; poetry, plays, movies or musical works). It is important to assess that an extract is used and that it cannot be copied. It is recommended that live broadcasts be used (streaming or links that can be accessed by the student).

### **Student, Faculty, and Employee Jobs**

CCU recognizes the authorship of works and documents of the teaching staff and students created in the normal course of academic and study activities, unless otherwise agreed. However, CCU will be recognized as the author of those works that are the product of the exercise of administrative or academic functions specifically commissioned and contracted by the university.

CCU establishes that the author's ownership over the work does not exempt anyone from the responsibility of granting the university due explicit recognition, as appropriate, for contributions, support, or collaborations that make its design, development, or dissemination possible. In the same way, it does not exempt students from their responsibility to indicate whether their works were developed as part of the requirements of courses or academic degrees. In any case, CCU retains the right to claim such recognition. It is the employees and students' power and responsibility to register and protect the works under their ownership.

The authors will retain ownership of works developed during sabbaticals, licenses, substitutions of tasks, highlights, and other similar situations, unless previously agreed. The ownership of thesis works, and other similar academic requirements fall on the student(s), even if they receive academic credit for them, unless otherwise agreed.

### **Procedures for Resolving Disputes Regarding Copyright Ownership**

In the event of a controversy over the ownership of works and copyright or related to any other provision of this policy, said dispute will be submitted to the consideration of the Chancellor, who may make a consulted determination for his/her decision, final and firm, on the matter according to with law dispositions and applicable regulations.

### **Tools for Monitoring Compliances with this Policy**

CCU has technological equipment that makes it possible to use, as a preventive measure, to compare and monitor through reports, the bandwidth, and the network traffic to determine if there is any anomaly and, therefore, violations of this policy.

## Legal Alternatives to Using Copyrighted Material

At CCU, it is possible, under certain parameters, to use materials without the need to request authorization or permission from the author, if the Dispositions of this fair and reasonable use policy are complied with.

1. **Materials created by the Professor** - Professors can publish materials of their own, such as course summaries, exercises, tests, investigations, and presentations, among others. If another user uses these materials, they must fill out the authorization sheet.
2. **Materials for which CCU has acquired licenses** - CCU has digital collections in the Virtual Component for which it has obtained licenses and agreements with each provider of these resources. The provider and not the institution assumes the control, limitations of reproduction and use of these materials.
3. **Materials in the public domain** - There are materials not protected by the Copyright Law that can be published in electronic reserves or on websites, without the permission of the copyright owner.
  - Materials that have entered the public domain because protection has expired copyright law (70 years after the death of the authors).
  - Works or documents from the governments of the United States and Puerto Rico.
4. **Links to content from websites** - Links from electronic sites can be included and cited. The document must state that the person who creates the link is not responsible for its content.
5. **Works with Creative Commons licenses** - If the material has a Creative Commons license, it means you have copyright. The user who accesses these materials may reproduce in its entirety the work for study, research, and reference use in academic works.
6. **Open access materials on the web** - Materials that are available with open access are those that the user can use without permission for study, research, and reference use in academic works. The publication license of the materials must be verified before use. Some examples of links that contain open access materials are:
  - Flickr and Flickr Commons: [www.flickr.com](http://www.flickr.com) and <https://www.flickr.com/commons>
  - Wikimedia Commons: [https://commons.wikimedia.org/wiki/Main\\_Page](https://commons.wikimedia.org/wiki/Main_Page)
  - The Internet Archive: <https://www.archive.org/>
  - Digital Public Library of America: <https://dp.la/>

## **Plan to Educate the University Community**

CCU has developed the following plan to educate the university community about the distribution and unauthorized use of copyrighted materials.

1. Send the Copyright Policy to the university community (students, faculty, and administrative employees) through the institutional mail each beginning of the academic term.
2. Offer talks on the Copyright Policy on an annual basis
3. Publish the Policy on the institutional website
4. Offer workshops to the faculty and students on the use of the Style Manual of the APA

## **Penalties for Violating the Copyright Policy**

Violation of copyright is the act of exercising, without the permission or legal authority, one or more of the exclusive rights granted to the owner of the title in Section 106 of the copyright laws.

These rights include the reproduction or distribution of copyrighted material. In the context of file sharing, downloading, or uploading substantial portions of copyrighted material without authority constitutes a violation.

The penalties for copyright infringement include civil and criminal penalties. Anyone found guilty of copyright infringement may be ordered to pay actual or statutory damages in an amount of not less than \$ 750 and not more than \$ 30,000 per violation. For willful violation, a court can award up to \$ 150,000 per violation. A court may, at its discretion, also include attorney's fees and expenses.

Deliberate violations can also result in criminal charges, including imprisonment for up to 5 years or fines of up to \$ 250,000 per offense.

## **Policy Violations /Disciplinary Actions**

If a complaint is received that an employee or student has violated the Dispositions described, the complaint will be investigated through the Board to Ventilate Complaints (JVQ) of students or employees. If cause is found, the corresponding disciplinary procedures described in the Employee or Faculty Handbook (verbal, written warning, and dismissal) and in the Student Regulations (published in the Student Consumer Handbook in the case of students (verbal warning, written, expulsion), depending on the magnitude of the violation.

## Copyright Related Links

1. Federal Copyright Law <https://www.copyright.gov/espanol/circ01-espanol.pdf>
2. Plagiarism: Avoid the Consequences <http://www.onlinecolleges.net/for-students/avoid-plagiarism>
3. Creative Commons Licenses <http://www.creativecommons.org/>
4. Legal Sources of Online Content <https://www.educause.edu/focus-areas-and-initiatives/policy-and-security/educause-policy/issues-and-positions/intellectual-property/legal-sources-online>
5. Copyright Guide of Online Courses, E-Reserves and Course Management Systems <https://library.cn.edu/CopyrightTips.pdf>

Plagiarism is considered a violation of academic integrity. Any student or professor is prohibited from commenting on plagiarism, defined as the act of presenting someone else's ideas or work in whole or in part as their own. This includes, but is not limited to, any text, figures, photographs, images, sounds, or videos.

In case of using material belonging to another author as support material, it is required as part of the writing process to reference the external sources used.

Other actions not allowed, also considered as a variant of plagiarism, lacking in academic integrity are:

- Change key words and phrases, but keeping the essence of the original work
- Integrate a significant portion of a text by another author without giving due credit
- Present as your own creation the identical or partial work of someone else
- Appropriating the work of another author by not citing the text
- Use works from other classes, already previously qualified and present them as new

Major offenses may have therefore the suspension of the student, the suspension of a professor or administrative officer for a defined time, or the permanent expulsion from the institution of the person who commits the offense according to the findings of the investigation carried out by the members of the Discipline Committee.

It is required for the entire academic community to promote and ensure integrity and ethical, truthful, and responsible conduct in all work related to the work in the teaching and learning processes.

Professors will not participate in or tolerate acts of forgery, plagiarism, dishonesty, identity theft, or any other act that violates the fundamental ethical principles of the university community. Dishonesty, dishonesty, fraud, plagiarism, and any other inappropriate behavior in relation to academic work will constitute a referral to the Discipline Committee and sanctions to be awarded according to the severity of the incident.

Fraudulent actions in general, paper delivery, and obtaining grades or academic degrees through fraudulent acts, the usurpation or allowing usurpation of their identity, copying all or part of academic works are classified as incidents related to dishonesty or lack of academic integrity, and copying someone else's answers to test questions, as well as helping someone else to engage in the conduct. These and any other conduct that violates academic integrity will be referred to the Disciplinary Committee for the corresponding action.

## COMMUNICATION POLICY BETWEEN FACULTY AND STUDENTS IN ONLINE COURSES

Columbia Central University (CCU) recognizes that interaction and clear communication observing all ethical standards between the faculty and students, must be frequent, direct, and consistent to provide experiences that tend to maximize the learning process in each course. Unlike presential courses, in the online modality, communication can be asynchronous. This policy will be applicable to all professors and students during the academic term in which they teach or participate in courses offered by CCU in the online mode.

CCU recognizes that, unlike the synchrony in the interaction between professors and students of the courses in the face-to-face mode, in the non-face-to-face study modality the interactions often occur asynchronously between the facilitating resource and the learner. To guarantee that both professors and students have an official, effective, and consistent media with this type of study, CCU has established the Policy for Communication between Faculty and Students in the Online Study Mode.

Through this policy it is established that the university will provide official means of communication between students and professors to promote and ensure effective interactions between them. CCU encourages interactions to be open and frequent and to ensure their integrity, establishes that:

1. The university will provide an email account to all professors and students.
2. Said account will be the official means provided by CCU for exchanging written communications. All exchanges between the faculty and students must comply with the policies established for the use of email, for the acceptable use of technology, and with this policy.
3. The university will use Canvas LMS as a learning management platform for offering online courses and will consider this the only official means for the exchange of content, material, assignments, and grades between the professor and his/her students. The user account for both the faculty and students will be linked to their institutional email account.
4. Through Canvas LMS, both students and professors will have access to functions for exchanging messages, emails, announcements, content, homework, and grading.
5. The professor's response process to any type of communication by his/her students in the online mode must occur within a time frame that does not exceed 24 hours after the message was received. This does not imply that any request or request by a student can or has to be resolved in that time, but that the professor will respond and provide feedback to the student.
6. The university does not sponsor the use of social networks and applications such as WhatsApp and Facebook for the official exchange of messages or communications regarding the courses in the remote mode. CCU will not consider official any communication exchanged through these or other unofficial means.

## **SATISFACTORY ACADEMIC PROGRESS POLICY**

Columbia Central University has established the Satisfactory Academic Progress Policy as the evaluation criteria to determine the academic achievement of students. This rule is part of the eligibility requirements to participate in the Title IV financial aid programs of the Federal Department of Education, as well as to institute the procedures for the monitoring and application of this policy.

### **Explanatory Statement**

The Federal Department of Education requires institutions of higher education to establish, publish, and enforce reasonable standards that measure the student academic progress to determine their eligibility to participate in Title IV aid programs. Under this rule, all students



participating in the federal financial aid programs may receive such assistance as long as it does not exceed 150% of the time required to complete the study program in which they are enrolled.

### **Applicability**

This policy applies to all students enrolled at CCU, regardless of whether they are full-time or part-time students, private, or receive financial aid from the Title IV Program, Veteran recipients, or receive any other type of aid. The policy does not substitute any other institutional norm or policy related to the student academic achievement or the maximum time to complete a degree. The policy does not interfere with the academic requirements of the accrediting programs or agencies.

### **Rules**

To maintain satisfactory academic progress and be eligible to receive federal, state, and institutional financial aid, the student must meet the qualitative and quantitative criteria and the maximum time required to complete their study program.

Satisfactory Academic Progress is a student who meets the three criteria when evaluated. The student who does not comply with the policy may lose their eligibility to receive financial aid or may be suspended from the Institution. This according to the application as to the individual evaluation of each student.

### **Qualitative Criterion**

To achieve academic eligibility from the qualitative point of view, the student must achieve the minimum cumulative academic index (GPA) for their study program, as described in the academic progress tables.

### **Quantitative Criteria**

This criterion determines the gradual progress of the student towards obtaining the certificate or degree by passing a minimum percentage of attempted and approved credits, as indicated in the academic progress tables. Attempted credits are all those in which the student enrolls in a regular program. Approved credits are all attempted credits in which the grades of A, B, C, D, P, T are obtained.

Courses with grades F, W, WT, WF are considered attempted but not passed courses. In addition, the accumulated average and the credits attempted versus approved until the last school



period of studies will be considered. For this quantitative criterion, all validated courses from other institutions will be considered.

### **Maximum Time Criterion**

Students can complete their study program within one and a half times the normal duration of the program. The maximum time is reached when the credits attempted by the student exceed one and a half times the number of credits required to obtain the degree or certificate from the program in which the student is currently enrolled.

A student who has passed 150% of the credits in their program may be allowed to continue for a further term at the discretion of the Counselor and/or Chancellor. This term will not be considered eligible for financial aid. The student enrolls under an Academic Plan.

Students are expected to meet the required minimum credits and average at the end of each testing period or semester. Students must satisfactorily pass at least the established percentage of the credits enrolled and attempted. The Registrar's Office will prepare the list of students who do not comply with the satisfactory academic progress policy and will notify the Financial Aid, Collections, and Counseling offices in writing.

### **Tables to evaluate the Student's Satisfactory Academic Progress by Level:**

<b>Certificate Program</b>	<b>Grade Point Average (GPA)</b>	<b>Minimum% of Credits Accumulated</b>
<b>Total of Credits Attempted</b>		<b>Approved of the Attempted</b>
15 credits or less	1.00	33%
16 to 27 credits	1.25	50%
28 credits or more	2.00	67%

<b>Associate and Bachelor's Degree Programs Total of Credits Attempted</b>	<b>Grade Point Average (GPA)</b>	<b>Minimum % of Credits Accumulated Approved of the Attempted</b>
34 credits or less	1.00	33%
35 to 57 credits	1.60	50%
58 credits or more	2.25	67%

<b>Master's Degree Program Total of Credits Attempted</b>	<b>Grade Point Average (GPA)</b>	<b>Minimum % of Credits Accumulated Approved of the Attempts</b>
15 credits or less	2.50	50%
16 credits or more	3.00	67%

### **Veteran Students and/or Beneficiaries**

Veterans Administration, under Federal Code, Title 38, requires veteran students and/or their beneficiaries to complete their program of study in the regular time allotted to it. If someone extends the time established to complete their 100% study program, they must inform themselves to other available financial aid for which they may be eligible and will not be eligible for Veterans benefits.

### **Withdrawals**

Courses withdrawn within the period stipulated for changes in the academic calendar will not count for the determination of the quantitative criteria. Courses withdrawn after the change period will count as attempted and not approved.

## **Transferred Students**

Credits accepted in transfer are considered approved courses for the purposes of this policy. However, because no grades are assigned to transferred courses, they will have no impact on the student's GPA.

## **Course Repetition**

CCU will allow its students to repeat the courses as many times as they wish, but for average purpose the best grade obtained will be considered (for general average purpose, previous attempts are not considered). All repeated courses will be considered as attempted credits when computation is done to determine satisfactory academic progress. In those cases where there are N/A (never participated) within the attempts of the same class, they will not be taken into consideration, since no payment of federal funds is made for them.

For federal funds eligibility purpose, a student may repeat a course which was previously approved once more to improve its grade when it requires a minimum grade within the study program. The student may repeat courses as many times as wished if the course was failed if the academic progress is not affected.

In case of students with Veterans benefits and/or their beneficiaries, the Veterans Administration will only pay for the repetition of failed courses or courses where a minimum grade is required.

## **Change of Program**

When a student requests a change of program, the institution determines which of the courses taken are equivalent to those required in the new one. These credits will count as attempted credits and will be considered in the calculation of the academic average.

## **Application of the Satisfactory Academic Progress Policy**

The student's academic progress will be evaluated at the end of each academic term. Grades reported as incomplete or requests for grade reviews at the time of evaluation will be considered attempted and not approved but will not affect the student's GPA. After the incompletes are removed and the corresponding grade reviews are carried out, the student's academic progress will be evaluated again. In case of students in readmission, their academic progress will be evaluated at the time of being readmitted to the university.

When the student does not meet any of the criteria in the term to be evaluated, the student will be placed in one of the following classifications, as applicable:

### **Warning Classification**

Students who do not demonstrate satisfactory academic progress as established in the policy, are classified in the Financial Aid with a warning status. These students may continue to receive the financial aid assigned for an additional semester.

The Registrar will refer all students who are classified under Warning to the Counselor to receive academic advice and develop an orientation and intervention plan. The plan is intended to guide and prevent the student to fall under the suspension classification on the next semester for not meeting the satisfactory academic progress standard.

At the next evaluation period, students who correct the deficiency by raising their grade point average and credits above the required parameters will be removed from the Warning classification, returning to satisfactory academic status at the end of the term.

### **Academic Suspension Classification**

Students who are in a warning classification and who do not pass the classification by raising their average and credits above the minimum parameters, will be placed on Academic Suspension; losing your eligibility for financial aid as long as they don't appeal. Students classified in suspension will not be eligible for financial aid, unless they request an appeal, and it is approved by the Committee on Academic Progress. A suspension is appealable under certain mitigating circumstances. See appeal process below.

Suspended students who do not appeal may not enroll in the following academic term after being declared in suspension but are eligible to apply for readmission after recessing an academic term. If readmission is approved, the student will return to CCU on financial aid probation or extended period. The student will remain on financial aid probation or extended period and will remain ineligible for financial aid programs until the deficiencies are overcome and his/her Satisfactory Academic Progress eligibility is restored.

### **Appeal Procedure**

A student placed on Academic Suspension may appeal such classification based on mitigating circumstances, within a period of no more than 5 business days from the date of notification. The appeal must be by letter that includes a complete description of the circumstances

that led to the academic difficulty, how those circumstances have changed, and a plan for academic success. Said appeal must be accompanied by any copy of the supporting documents that supports it.

The Academic Progress Committee will be composed of the Academic Director and/or Program Coordinator, Registrar, Counselor, and the Director of the Financial Aid Office. Based on the documentation presented and the merits of the case, a decision will be made regarding the case. The Committee will notify in writing the action that has been taken in the case within a period not exceeding 5 business days from the date the appeal is received. The Committee's decision will be final and firm, therefore, it cannot be appealed.

### **Mitigating Circumstances**

Mitigating circumstances are defined as those beyond the direct control of the student. These can affect the student and not allow him/her to progress satisfactorily and/or to achieve his/her academic objective. Among these we can mention the following:

1. Change in the educational goal
2. Death of a relative
3. Health problems
4. Changes in the family unit
5. Changes and/or loss of employment
  
6. Other situations beyond the student's control

Students who present any of the above situations may appeal the suspension to the Academic Progress Committee. For the appeal to be considered, it must be accompanied by the documents that support the condition, such as medical certificates, notifications of layoffs, etc.

### **Financial Aid Probation**

Once an appeal is approved, the student is placed on financial aid probation and will be required to meet with the Counselor to develop an academic plan. The plan will be designed to return the student to a good academic achievement within the maximum time (see measurement table). The student remains eligible for Federal financial assistance, if the terms stipulated in the Academic plan are met.

### **Regain Financial Assistance Eligibility by Means Other than Appeal**

The suspended student who does not file an appeal or who is denied the appeal may become eligible for federal student aid by one or more of the following methods: 1) by overcoming deficiencies (regaining satisfactory academic progress) by completing courses in CCU as a student in extended period classification without federal financial aid benefits (requires an absence of at least one full term — see definition of Suspension), and / or 2) completing courses at another accredited university and having them accepted on transfer to CCU, resulting in compliance with academic parameters.

### **Reinstatement as a Regular Student**

All students who, after having been classified in financial aid warning, economic aid probation, and achieve the academic progress required by their study program, will be reinstated as a regular student for Financial Aid eligibility. It is recommended that during the Warning and Probation periods under this subsection, the student does not enroll in more than 12 credits per academic term or as recommended by the Counselor, preferably repeating courses whose grade has been D or F; if necessary.

### **Reinstatement of Students who did not meet Satisfactory Academic Progress**

Students who are readmitted after not complying with the Satisfactory Academic Progress Policy will be evaluated during the current semester and their classification will depend on the progress made.

### **COVID-19 Exception for SAP Quantitative Criteria**

In compliance with article 3509 of the CARES Act, those credits attempted that a student has not been able to complete because of a circumstance related to the COVID-19 pandemic will be excluded from the quantitative component of satisfactory academic progress (SAP). Permitted circumstances include, but are not limited to:

- Illness of the student or a member of his family
- The need to become a caregiver or first responder
- Economic difficulties
- Increase in working hours
- Loss of childcare
- Impossibility of continuing with classes through online education

Regarding the effect of excluding credit attempts in the maximum term, SAP policy requires that the rate at which students' progress in the program guarantees the completion of that program within a maximum term of 150%. A four-year program consisting of 120 credit hours with a maximum term of 180 credit hours (150 percent of the program duration) must have a rate of 66.666 percent (rounded to the 67 percent), measured cumulatively at each interval, to ensure that students complete the program within the maximum time frame.

For example, the pace of a student who has completed 78 of the 120 attempted hours is 65 percent (78/120), below what is necessary to do the SAP. However, if 12 credits that the student attempted but was unable to complete in the spring of 2020 due to a circumstance related to COVID-19, the rate becomes 72 percent (79/108) and follows the SAP. The credits attempted will be effectively excluded from the maximum term, as well as from the rhythm measurement.

## **GRADING SYSTEM POLICY**

### **Introduction**

To ensure that grades are awarded fairly and consistently, all programs have evaluation criteria that professors must apply to their rubrics. These evaluation criteria (rubric) vary depending on the program and the academic activity to be evaluated. Students may be evaluated through exams, final exam, hours of external work, projects, participation in classes, and reports, among others. If there are justified causes for a student to be absent from an exam, he/she will coordinate with the professor to make it up.

### **Applicability**

Our Grading System policy applies to faculty, service office personnel, and all our enrolled and active students in the certificate, undergraduate, and graduate level academic programs. The student receives detailed feedback on their performance in the assessment tests carried out by the faculty for each of their enrolled courses and for the grades of these assessments, the university uses the equivalent system to the GPA method ("Grade Point Average"). According to the grading system, the marks are expressed with the letters A, B, C, D, or F.

### **Dispositions**

All academic activity that is related to the student while studying at the university is constituted in the credit transcript and grade report. In these official records, the student's different courses will appear with the grades obtained. In addition, it will include the academic index of the term.

To determine the index or general average of the student, the equivalent in honor points of each classification is multiplied by the number of credits of each course and its result is divided by the total of credits considered. For purposes of this and other averages to be computed by the university, the grades for courses approved in other institutions and accepted in transfer and any course that is accepted by any alternative and does not have a grade will not be taken into consideration.

Each grade is accompanied by a number, which is its equivalent in honor points. Honor points allow the computation of the arithmetic average of each student. The grades that are awarded at the university and their respective points of honor are the following:

<b>Grade</b>	<b>Equivalency</b>	<b>Honor Points</b>	<b>Intervals</b>	<b>Percentages</b>
<b>A</b>	Excellent	4	4.00 - 3.50	100 - 90
<b>B</b>	Good	3	3.49 - 2.50	89 - 80
<b>C</b>	Satisfactory	2	2.49 - 1.60	79 - 70
<b>D</b>	Deficient	1	1.59 - 0.80	69 - 60
<b>F</b>	Failed	0	0.79 - 0.00	59 - 0

Any student who understands that his/her grade(s) warrants a review will have the right to request a grade review. Any claim to review the grade(s) must be made within the term following the grade's receipt. Claims after this time will not be received.

Additionally, there are letters or codes that the university uses in the report cards, which are detailed below:



Symbol	Equivalency
<b>W</b>	Withdrawal
<b>WF</b>	Administrative Withdrawal
<b>WT</b>	Total Withdrawal
<b>P</b>	Passed
<b>NP</b>	Not Passed
<b>R</b>	Repetition
<b>T</b>	Transfer
<b>L</b>	Laboratory
<b>I</b>	Incomplete
<b>IP</b>	In progress

The symbols presented in the table above are used in certain circumstances but are not included in the determination of the student's cumulative academic average but are considered for the percentage of attempted credits versus approved credits. In addition, it can affect the student's Satisfactory Academic Progress.

Each of the symbols with their respective equivalents are detailed below:

**W-** Means withdrawal or voluntary withdrawal, in writing, from a course, on or before the deadline for withdrawal. Also considered withdrawals (W) are those students who are processed as withdrawal by the Institution through the Registrar's Office for the following reasons:

- In the case of consecutive absences for a period of 14 calendar days.
- Unsatisfactory academic progress
- Improper conduct
- Health problems (after completing the Leave of Absence-LOA)
- Changes in the class schedule without the consent of the Registrar's Office.

**WF-** An administrative withdrawal in all courses is processed because the student did not have active participation in their courses and/or stopped attending classes with or without reasonable causes.

**WT-** When a student decides to officially withdraw from all the courses in which they enrolled.

**P-** This symbol indicates that the student successfully passed a course or was validated (if it was taken at our Institution). It carries academic credits but does not affect the computation of the

general average. It is considered for the computation of attempted credits versus approved credits, for the Satisfactory Academic Progress Policy.

**NP-** It means that the student did not pass the course.

**R-** It means that the student repeated the course. CCU will allow its students to repeat the courses as many times as they wish, but for average purposes, the best grade obtained will be considered (for general average purpose, previous attempts are not considered). All repeated courses will be considered as attempted credits in the computation to determine satisfactory academic progress. In those cases where there are N/A (never participated) within the attempts of the same class, they will not be taken into consideration, since no payment of federal funds is made for them.

Otherwise, if the student voluntarily wishes to repeat a class because is not satisfied with the grade received, he/she may repeat it only once if he/she is a recipient of federal funds. In addition, there are courses that require a minimum grade of B to be considered approved. The student must refer to the breakdown of the requirements of each academic program, in compliance with the Minimum Grading Policy.

**T-** Courses that are validated from another institution. It carries academic credits but does not affect the computation of the general average. They are considered for the computation of attempted credits versus approved credits, for the Satisfactory Academic Progress Policy.

**L-** Laboratory courses

**I-** This symbol indicates that the student has not been able to fulfill the course requirements in the allotted time of the semester in which he/she is enrolled. This symbol is accompanied by the grade now in the course, until the student proceeds to remove the incomplete, in the period established in the Academic Calendar.

**IP-** In Progress. This symbol indicates that the student did not complete their internship hours within the enrolled academic semester. A TW is considered to indicate a special semester in which the student completes the practice hours.

## RATING REVIEW POLICY (GRADES)

### Introduction

Any grade (grade) awarded to the student by the faculty represents the student's level of academic achievement in their courses. Scores are determined using assessment instruments, such as metrics and rubrics, among other academic assessment tools designed to evaluate student learning.

The student has the right to appeal the result of any grade obtained and request its review. This request could be related to the content of the evaluation instrument used, the application of a rubric, or even an involuntary arithmetic error, among other possibilities. Therefore, if the student is not satisfied with the grade acquired, they must file the request for the review of grades at the Registrar's Office.

### Applicability

The policy applies to every student who understands that it warrants a review of the grade received and will have the right to request a grade review. Any claim to review the grade must be made within the term after the student received such grade(s). Claims after this period will not be received.

Process for filing the request for review at the Registrar's Office:

1. To start the process, the student must complete the Request for Grade Review form at the Registrar's Office or through the online services on the university's website [www.columbiacentral.edu](http://www.columbiacentral.edu). The request result must be communicated to the student in 5 working days or before; from the date the application was filed.
2. If the student does not agree with the result of the review or wishes to meet with the professor, he/she must visit the Registrar's Office and complete the Request for Grade Appeal Review form, within a term of no more than 5 working days.

3. Once the form is completed, it will be sent to the Coordinator or Academic Director to coordinate a meeting with the professor. The meeting must be held within a term of 5 business days or before, from the date the request was filed.

### **Professor's Responsibilities**

1. All professors must keep evidence of the evaluation methods used to calculate the student's grade. This evidence must be kept for a period not less than the term following the one in which the course was offered.
2. All professors must answer any Request for Grade Review on or before 3 business days from the date they received it.
3. All professors must be available for a meeting with the student who requests it. The Coordinator, Director, or Academic Dean must establish the date, time, and place with the professor, before 5 working days from the date of filing the request.

## **REQUEST AND REMOVAL OF INCOMPLETE POLICY**

### **Introduction**

Columbia Central University (CCU), in its best intention to contribute to the academic achievement of its students, developed the Incomplete Request and Removal Policy. The purpose of this policy is to establish the conditions under which the university will guarantee the student the opportunity to satisfy the requirements established for their courses when they cannot fulfill them in the assigned time of the semester in which they are enrolled.

### **Applicability**

This policy promotes the best interests of the university to support the student in their academic process and guarantees that the student can be provided an additional opportunity to satisfy the criteria and activities by which they will be evaluated in the course.

### **Policy Layout**

The end-of-course grade called Incomplete (I) may be used when the student fails to meet the final requirement of the course, be it a test, written work, a project, or others. Note that the

incomplete is only given when the requirement that has not been met is the final course work and the student has satisfactorily met the other academic requirements of the course.

The student must request a grade of Incomplete 2 weeks before the end of the term and must be in Good Standing in the course. Understand “Good Standing”, as being successfully passing the course at the time of requesting the Incomplete grade.

When reporting the final grade, the professor must submit the incomplete grade accompanied by the grade that the student would obtain assuming that the grade in the final work had been zero. This will allow the Registrar to grant the student the corresponding grade in case the incomplete is not removed at the close of late enrollment, the date established in the current Academic Calendar, of the following semester.

In case of practices, the professor in charge of the practice will be responsible to identify students who have not completed the requirements and assign them an incomplete. When reporting the final grade, the professor must submit the incomplete grade accompanied by an “F” grade until the student meets all the course requirements, including all the required practice hours, as established in their class program. For the practice courses, the deadline to remove the incomplete will be according to the practice hours that remain to be completed. In case the incomplete F is not removed within the established term, the Registry will proceed to assign an F grade corresponding to the practice course.

If the Incomplete has not been removed within the established term, any course enrolled for the next term that has as a prerequisite the course with a grade of incomplete not removed, will be automatically eliminated once the late registration deadline is met.

All removal of incomplete carries a charge, according to the current Cost Table. The student must manage with the professor the removal of the incomplete. In case the professor is not available, the student should go to the Director or Academic Coordinator of their program to process the removal.

# **POLICY ON STUDENTS ACTIVATED BY THE UNITED STATES ARMED FORCES AND THE PUERTO RICO NATIONAL GUARD**

## **Introduction**

Columbia Central University (CCU) recognizes the commitment of all those students who are part of the Armed Forces of the United States and the National Guard of Puerto Rico. Taking this as a basis and in compliance with Law 109 of 2003, the following policy was developed.

## **To whom this policy applies**

This policy applies to all those students who are enrolled in a program and who show the university that it has indeed been activated by the United States Armed Reserves in Puerto Rico or the National Guard of Puerto Rico.

## **Policy Layout**

All students who are activated must notify the Registrar's Office, at least 15 days before the activation date, presenting the original evidence of the activation order. Each student is responsible to notify the Registrar's Office at the beginning of each term that they are a member of any of the agencies mentioned here. To better serve the student, the Registrar's Office will do the following:

### **a. Cancellation of registration**

Once the activation order has been received, the enrollment will be canceled for the term in which it is enrolled.

### **b. Academic progress**

The student's academic progress will not be affected since the cancellation of enrollment cancels any credit attempt. Likewise, the credit transcript will not be affected since that term will not be reflected in it.

### **c. Tuition costs**

For all students who are activated, once their enrollment is canceled, any charge made to their account will be void.

#### **d. Reasonable accommodation in case of activations**

For all students who are activated, the university will ensure a space in the courses in which they were enrolled or their equivalent for a period of no more than 2 terms after their inactivation. If changes and/or curricular revisions occur, after this date, the student will be evaluated in the new curriculum.

#### **e. Candidates for graduation**

If the student is a candidate for graduation, they are also guaranteed the courses needed to complete their academic objective.

## **COSTS OF TUITION**

For a detail of the tuition costs by program, courses, laboratories, and others, please see the Current Cost Table of the university. Any change in tuition and fees will be notified to students at least 3 months in advance of its effectiveness. Upon approval, and at least three months before, the new charges and fees will be posted on the university's bulletin boards and electronic screens. The cost table is part of the Institutional Catalog. Changes in tuition and fees are prospectively effective.

## **COLLECTION POLICY**

### **To whom this Policy applies**

The following Collection Policy is established for students studying in Columbia Central University (CCU):

### **Policy Dispositions**

#### **Payment Deferrals**

Payment of tuition costs will be made in advance. However, in cases where the student cannot meet this requirement, the university allows payment through a payment plan at the Collection Office. There will be no surcharges or penalty for establishing deferred payment plans.

Students who are not up to date with their financial commitments to college, as set forth above, risk missing the opportunity to:

1. make their class schedule for the next academic term
2. the processing or processing of any request for official or other documents
3. continue to participate in classes
4. The student will be awarded the academic degree; however, no official credit transcripts or diploma will be issued. This also applies to those who did not complete an academic degree.

Given that there are different situations among students who must contribute all or part of the tuition cost from their own funds, each of these categories will have a particular treatment within the limits of the established policy. More specifically, the following categories of cases will be treated as follows:

### **Private students**

Private students are those who do not have the benefit of benefiting from Title IV federal funds programs, such as: Federal Pell Grant, FSEOG, and Direct Loans. The University considers them private students.

1. The student must pay the entire tuition fees at the time of registration.
2. If the student does not have the full tuition payment, they must go through the Collection Office or access the online services on the website [www.columbiacentral.edu](http://www.columbiacentral.edu), to establish payment agreements. These agreements will proceed as follows:
  - a. The student must pay 25% of the tuition costs before the start of classes.
  - b. The difference (75%) will be divided into equal payments for a period equal to or less than the number of months of the semester.

### **Semi-Private Students**

Semi-private students are those who have the benefits of federal Title IV funds, but who do not cover their entire tuition cost. Those students who intend to make use of their scholarships and other financial aid must have completed the corresponding procedures before starting classes.

Once their aid has been awarded, the student is responsible for any difference between the cost of the semester and the possible financial aid for which he/she is eligible and must pay them at the Collection Office. To do this, they will receive a payment plan indicating the amount



and the payment dates (the amount of the payments is estimated and may change once the financial aid to which the student finally qualified is awarded).

Once the aid has been granted and accepted by the student, they will be credited to his/her account. If the student does not have to make any disbursement to the university, any excess paid will be reimbursed after the financial aid has been credited. If during this process the student is not eligible for federal scholarships or if he is only eligible for a part of them, the Collection Policy will be applied as a private or semi-private student, as applicable.

### **Outstanding Balances and Non-Compliance with Payment Plans**

1. If a student has a balance pending payment at the time of finishing or interrupting their studies, either for processing a withdrawal or cancellation of their enrollment, they will be sent a billing notice. If they do not respond to it, the student's debt will be referred to the Collection Agency hired by the Institution. There will be a charge of \$ 20.00, added to the debt already contracted.
2. If a student does not meet their payment plan, they may be referred to the collection agency and they will be charged \$20.00 to cover this expense.

### **Work Experience Evaluations**

The student must pay the full charge for evaluations for work experience requested before being evaluated.

### **Challenge Exams**

The student must pay the full cost when requesting the Challenge exam(s).

### **Payments by Companies, Veterans, Government Agencies or Programs and Vocational Rehabilitation Vocational**

The student who covers the cost of studies through any of the above institutions, must notify it before registering and provide the necessary documentation in which the company or agency commits to the university to make the payment directly. For this, there must be a certification or payment commitment from the company or agency that will assume the study costs.

In case of students participating in the educational aid program under Chapter 31 or 33 of Veterans, at the time of registration, they must provide one of the following documents: Certificate of Eligibility or Declaration of Benefits or VAF form 28-1905. Once this evidence is submitted, the university will not impose any penalty on students covered by these programs, even when payment

has not been received from the agency or it is delayed, which include imposing late fees, denying access to their courses, receive services, process any document, and use of facilities, among others. This exception is extended for up to 90 days after tuition costs are certified or until payment is received from the agency, whichever occurs first.

### **Payment Methods**

CCU accepts payments in cash, check or money order payable to Columbia Central University, as well as credit cards such as Visa, Master Card, ATH, and TelePago from Banco Popular de Puerto Rico. The Institution will charge \$20.00 for each check that is received and returned for insufficient funds. Payments can be made in person at the Collection Office or by mail, except for credit cards whose transaction must be made in person or by accessing the online services on the website [www.columbiacentral.edu](http://www.columbiacentral.edu).

### **Responsibilities and Warning**

The student is responsible for staying informed about CCU's payment rules by reading this policy and any other pertinent information. The university reserves the right to change or modify its payment rules at any time. The university will contact the student at the permanent address, as it appears in the Registrar's Office. It is the student's responsibility to provide the university with the correct address and phone number. Any change must be notified.

Columbia Central University will review tuition fees and annual fees. Changes in tuition costs will be effective as of July 1 of each academic year and will be published on the website and in the Treasury Office.

## **POLICY AND PROCEDURE TO ATTEND COMPLAINTS**

### **Policy Statement**

The complaint must be based on any action or inaction on behalf of the university according to the interpretation of one or more of the dispositions contained in the Institutional Catalog, Student-Consumer Manual, Employee Manual, and the Institutional Title IX Policy. Students and visitors must present their complaint to the Campus Rector's Office and the employee to their immediate supervisor or to the Human Resources Director.

If the complaint is related to gender discrimination, sexual harassment, stalking, or sexual assault, it will be immediately referred to the Title IX Coordinator or Human Resources Director. The complainant will be oriented to his/her right to inform the police. The university official who receives the complaint must initiate the corresponding procedure immediately after the filing is done. The Title IX Coordinator or Human Resources Director will proceed to attend the complaint within the next 3 working days and will inform the parties of the procedure to follow.

**To whom it applies**

Columbia Central University's institutional policy is to provide all its employees, students, and visitors with a study and work environment free from health and safety risks, promoting the respect, protection, and well-being of the entire academic community. Any student, employee, or visitor who understands that there is a situation in which the institutional policies, regulations, and procedures have been violated, including conduct or action of a sexual nature such as sexual harassment, hostile environment and/or sexual assault or discrimination by reason of race, sex, gender, sexual orientation, color, religion, age, disability, veteran status, marital status, or national origin, that interferes with the achievement of their academic or professional goals, may file a written complaint.

**Terms and Conditions**

1. Complainant - Person filing the complaint
2. Respondent - Person against whom a complaint is filed

**Procedure for Filing Complaints****Informal Process**

The parties involved should have the opportunity to resolve the problem informally. Prior to instituting the formal complaint process, the complainant will have the option of meeting with

the person with whom he/she understands he/she has discriminated against, misapplied, or misinterpreted or violated institutional policies or procedures.

If the complainant does not feel able to participate in said meeting; he/she will have the option of meeting with the employee's supervisor, Human Resources Director, Chancellor, and/or Title IX Coordinator to discuss the incident. This meeting must be held within the next 15 working days after the situation that caused the complaint. The staff responsible for receiving the complaint or a representative from their office will be available to guide the parties, both in the informal and formal processes. The informal grievance process will end as the parties reach an agreement. If not, the complainant will be informed about his/her right to file a formal complaint.

### **Formal Process**

If the complainant is not satisfied with the results of the informal process, he/she may initiate the formal process no later than 10 working days after the situation that caused the complaint occurred. The procedure to follow in these cases will be:

- If the complainant is a student or visitor, the case should be referred to the Chancellor Office who will deliver the complaint form and guide you through the process.
- If the complainant is an employee, he/she should go to his/her immediate supervisor. The official should refer the case immediately to the Human Resources Office, who will deliver the complaint form and guide him/her through the process.
- If the accused is the supervisor, the complainant may go directly to the Human Resources office. Both the Campus Chancellor and the Human Resources Director may appoint a Grievance Committee.
  - Complaints of an academic nature - The Complaints Committee will be composed of the Academic Dean, a member of the faculty (the faculty member must be from a different academic program than that of the students involved), 2 administrative members and a student (the student must be from a different program than the case involved). The Chancellor will appoint this committee.
  - Complaints of an administrative nature and/or other types of discrimination that are not based on gender - The Complaints Committee will be made up of the Campus

Chancellor, the Dean, the VP Academic Affairs, a member of the faculty (opposite to the faculty to which it belongs), and an administrative member.

- Complaints of discrimination by gender, sexual harassment, sexual assault, or stalking
  - The Complaints Committee will be composed of the Rector, the Director of Human Resources, the VP Academic Affairs, a member of the faculty, in case the complaint is related with students (the faculty member must be from a different program than the students involved), an administrative member. If there is a conflict of interest between the members of the Committee, they will be replaced. The Human Resources Director will appoint this Committee.

**Note:**

- The Counseling staff should not be part of the committee due to conflict of interests.
- The participation of a student representative will be limited to cases of Academic nature, that they are made to cases of students only.
- An investigation will be initiated guaranteeing the strictest confidentiality. The officials responsible for intervening will evaluate the information provided by the complainant and the accused. The complainant's concerns will be addressed to ensure a suitable environment free of intimidating, hostile or offensive conduct.
- The investigation will be conducted in an impartial manner. Equal opportunity will be offered to parties to present witnesses and evidence. Equal time will be offered, and equal access to the information to be considered in the complaint process. For one of the parties to notify that they will have legal representation, the same opportunity will be offered to the other party.
- During the investigation, all parties involved will be provided with the necessary adjustments
- relevant to the extent practicable. These provisional arrangements should not be understood as a disciplinary sanction for either party, until the investigation process is complete. As part of the investigation, signed statements may be taken from witnesses identified by the parties.
- At the end of the investigation of the complaint, the complainant will be notified in writing as to the defendant the decision of the Committee.

- Complaints of an academic nature. It is up to the VP of Academics Academic to notify the Committee's decision.
- Complaints of an administrative nature and other types of discrimination other than gender. It is up to the Human Resources Director to notify the Committee decision.
- Complaints of discrimination based on gender, sexual harassment, sexual assault, or stalking. It is the responsibility of the Human Resources Director to notify the Committee's decision.

### **Applicable Sanctions**

The sanctions that will be awarded after the investigation of a complaint for the violation of institutional policies, rules, and procedures and/or situations of gender discrimination, stalking, sexual harassment, sexual assault, will be carried out according to with the Dispositions of the Institutional Catalog, Consumer Student Manual and Employee Manual.

### **Right of Appeal:**

If they are not satisfied with the decision of the Complaints Committee, both the complainant and the defendant can appeal in writing within the next five working days:

1. All appeals will be directed to the President of the University

The President will appoint a review committee. The review committee will be integrated by 3 members of the administration and 2 faculty members who have not participated as members of the Grievance Committee. This committee will evaluate the complaint and present a final recommendation to the President within 10 business days of the request for review. The President has 5 working days to validate the decision of the review committee and notify the complainant and the respondent of the final decision in writing. The final decision of the President will be final.

Explanatory Note: In circumstances beyond the control of the University, the time to respond to the complaint may be extended.

### **Withdrawal of Complaints**

The complainant may withdraw the complaint at any time by requesting it in writing.

## **No Retaliation**

Columbia Central University is committed not to retaliate against any student, faculty, employee, or visitor for their involvement in a complaint.

## **Complaint Report**

Reports and documents related to complaints will be kept in the Human Resource Director's office or the Chancellor for 6 years.

## **Unresolved Complaints**

If they are not satisfied with the process for resolving complaints, both the complainant and the accused may contact:

### **Accrediting Agency:**

Middle States Commission on Higher Education  
3624 Market Street Second Floor West  
Philadelphia, PA 19104  
Tel.:(267)-284-5000 [www.msche.org](http://www.msche.org)

### **Licensing Agency:**

Board of Postsecondary Institutions  
PO BOX 19900  
San Juan PR 00910-1900  
Tel.:(787)-722-2121 [www.ce.pr.gov](http://www.ce.pr.gov)

### **FERPA Compliance:**

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, D.C. 20202-5901

### **Discrimination Issues:**

Civil Rights Office  
[www.cdc.pr.gov](http://www.cdc.pr.gov)

## NOTICES, LIMITS, QUALIFICATIONS, REPRESENTATIONS



## MISREPRESENTATION

CCU recognizes the importance of developing, implementing, and maintaining a policy against deliberate misrepresentation. To comply with this policy, the Institution has developed procedures to guarantee that there is no deliberate misrepresentation regarding the nature of the study programs offered through the diplomas, associate degrees, baccalaureate, and master's degrees programs, their financial costs, or on the employability of its graduates.

The firm objective and desire of the Columbia Central University Management is to offer its prospects, students, administrators, faculty, and the community in general; correct and truthful information related to their licenses, accreditations, location, physical facilities, equipment, academic programs, study costs, financial aid, and employability rates of their graduates.

## NOTICE OF LIMITS OF LIABILITY

CCU offers its students some services for which it does not impose charges, such as parking facilities. For these services, the university does not assume any responsibility, and these vary depending on the campus.

## CHANGE NOTIFICATION

The student who requests and is admitted to CCU, certifies, and accepts that their relationship with this university will be subjected to the dispositions contained in this catalog and to the university regulations. CCU reserves the right to make changes to this catalog, even during its validity.

## INSTITUTIONAL STATEMENT ON EQUAL OPPORTUNITIES

### NON-DISCRIMINATION

Columbia Central University guarantees equal opportunities to its applicants for employment and admission, as well as to students and employees, both in terms of study and employment opportunities, as well as in the enjoyment of the services and academic programs offered and in terms and conditions of work.

### NON-DISCRIMINATION NOTIFICATION

Columbia Central University does not discriminate against any person based on race, color, religion, gender, sexual orientation, gender identity, social or national origin, marital status, age, social condition, political or religious ideal, physical, or mental disability, status veteran, being a victim of violence (domestic, sexual assault, stalking), or other factor protected by law.

Discrimination of any kind will not be tolerated. It is prohibited at the University, in internal or external activities, in administrative, admission, and educational processes including support services. Any candidate for admission or student, as well as any applicant for employment or employee who understands that they have been subjected to discrimination for the above reasons, may initiate a written complaint with the designated official. The establishment and enforcement of this policy, as well as its publication, is according to with federal regulations for the implementation of Title IV of the Federal Higher Education Act of 1965, as amended, and with Section 504 of the Rehabilitation Act of 1973.

The following person has been designated by the University to answer questions related to non-discrimination policies:

Norelis Rodríguez  
Title IX Coordinator  
Human Resources Director  
Angora Industrial Park  
Building G, Angora Ave.  
Caguas, PR 00725  
norodriguez@columbiacentral.edu  
787-704-1020, ext. 140

## CHANGE OF STATUS

The student must inform the university of any change in his/her status that alters in any way the information in the required documents and those others that he/she submitted over time.

## ACADEMIC RECORDS

The academic record and all other information related to the student will be treated confidentially. The disclosure of any content of the student's academic record will be done through the parameters established in the FERPA Act ("Family Educational Right and Privacy Act"). For more information, please refer to this in the Institutional Policy Manual.

Access to student records will be allowed to those institutional officials who, individually or collectively, act in the educational interest of students and whose access to such records is authorized by law.

## FREQUENCY OF CLASS OFFERINGS

The university undertakes to offer the courses required by the programs as they are demanded by the suggested sequence of classes, at least once a year, in one of its day, evening, Saturday or online sessions.

## CLASS SUBSTITUTION

The university reserves the right to substitute equivalent classes for the programs that make up the programs if they do not substantially affect their educational objectives.

## ACADEMIC FREEDOM

By academic freedom, the university understands the discretion that the professor must present and discuss the topics that make up the course in the way that the professor understands best to achieve the objectives and to evaluate the students about achievement of those goals.

## STUDENT PARTICIPATION

The university encourages and respects student participation and the right to dissent. However, in the exercise of these rights, privileges, and prerogatives, the student must ensure that they do not affect the security or image of the university, hinder its normal operation, or endanger its educational purpose, which is the reason for this University.

The university is committed to guaranteeing the exercise of democratic principles in a responsible and constructive manner, as applied to private educational institutions and according to with the terms, definitions and conditions established in the Student Regulations that this university has duly promulgated and adopted published in the Institutional Policy Manual.

## POLICY APPLICABILITY

Institutional policies apply to all university students: regular and non-regular, presential, and online, youth and adults, of the different programs and academic modalities of the campuses. In other words, they apply to everyone equally, of course, to the extent and dimension in which it corresponds to each.

## ACADEMIC INFORMATION

## ACADEMIC ORGANIZATION

CCU starts from the belief that education is a life-long process and that the person. Through this process, changes interest and needs while accumulating knowledge derived from their work and professional activities. In keeping with this, the university has structured its academic phase in such a way as to offer the student maximum flexibility to achieve their educational goals, according to their interests, needs and level of knowledge.

The CCU faculty understands that the best structure is a modular one that offers the student several levels of study programs and that also caters for the individual differences and preferences of the students.

At present, the current academic structure is composed of four levels: the Certificate Level, Associate Degree Level, the Baccalaureate Level, and the Master's Level \*.

The Certificate is a vocational-technical academic level. Its purpose is to train the student in a short time to meet the demand of the job market. The Associate Degree is the first level of studies at the university level and its emphasis is also vocational-technical. Unlike the Certificate, this level includes general education courses that offer the student more extensive training. However, if the student already has a certificate and wishes to continue studies in that same academic area, then the university may consider that knowledge to validate it, as far as possible, towards their university studies, so that they do not lose what they have acquired. The courses corresponding to the first and second year are those contained in the curriculum of the Certificate and/or Associate Degree programs.

The Baccalaureate Degree is the second level of studies at the university level. The courses corresponding to the third and fourth year are those contained in the curriculum of the Baccalaureate programs. The Graduate or Master \* program is the highest-level of studies offered at the university. The master's degree welcomes any student who has completed a baccalaureate and meets the admission requirements to the master's program \*.

\* Only available in the Caguas Campus

## CODIFICATION LEVELS

1	First Level	Certificates and Associate Degrees – Lower Division
2	Second Level	Associate Degree – Lower Division
3	Third Level	Bachelorette – Higher Division
4	Fourth Level	Bachelorette – Higher Division
5	Fifth Level	Master – Graduate Division
6	Sixth Level	Master – Graduate Division

## COURSE CODING SYSTEM

Courses are identified by a four-letter code, followed by a 4- or 5-digit number.

The letters identify the name of the course in English, the first number identifies the level, and the remaining numbers are assigned in sequence. Laboratory courses will be identified with an “L” after their numerical coding. Some of the Associate Degree and Certificate Professional Education and General Education courses may be coded three.

## GENERAL DOCUMENTS REQUIRED FOR PROGRAMS CONTAINING THE PRACTICE COMPONENT (as applicable)

The documents listed below are not part of the documents required for the student to be admitted to Columbia Central University, but it is necessary to detail them, as some of the academic programs offered at the university require students to do an internship in a real work setting as part of the requirements to complete the study program and obtain the degree. It will be the student responsibility to comply with the practice center requirements and it is compulsory that during the course of studies the student is managing them and thus can begin their practice and that their studies are not interrupted because they are not aware of them. These requirements may vary depending on what is established by the practice center to which the student attends:

1. Certification of Cardiopulmonary Resuscitation (CPR)
2. Original Negative Criminal Record Certificate
3. Original Health Certificate

4. HIPAA Certificate
5. Hepatitis B vaccine
6. Varicella Vaccine
7. Influenza Vaccine
8. Negative Certification of Law 300

If the student refuses or fails to meet any of the requirements established by the practice center, he/she could be unable to carry out his/her practice and, consequently, not pass the practice component of the study program, nor meet the graduation requirements of the academic program.

**Note:** The documents required for the practice may vary depending on the study program. Please refer to the Academic Program to which the student was admitted for detailed information on the requirements for the practice.

## COMPLIANCE WITH REGULATED PROFESSION REQUIREMENTS

Some professions have revalidation requirements to practice the profession. That is why students and graduates who aspire to practice a regulated profession must comply with the legislation, regulations, and requirements established by the board that grants the license, which applies to their profession. The requirements to revalidate may vary from one jurisdiction to another.

Additionally, some employers in the private sector or government agencies have revalidation, examination, or test requirements to apply for employment. That is why in these cases the students or graduates who apply for employment must meet the additional requirements to the studies or diplomas offered and conferred by the university.



## POLICY FOR PAYMENT OF REGISTRATION FOR THE BOARD EXAM

This policy is extensive and applicable to all course students whose exercise or practice in the Commonwealth of Puerto Rico requires the approval of a certification or revalidation exam. The policy guarantees the university's commitment to promote the exercise of the processing and completion of the revalidation exam among students as required by the State, through the payment, assumed by the university, of the registration for the revalidation exam of your discipline, as applicable.

Columbia Central University, as a responsible educational institution, guarantees the imparting and exchange of knowledge and skills by offering practical experiences that facilitate the student's transition to the labor market.

A fundamental part of the university's commitment resides in the genuine interest of maximizing the professional success of its graduates. This success, in most of the health professions is measured after passing a certification or revalidation exam administered by the Examining Board governing the discipline that applies.

Given the responsibility for the academic achievement of students and to promote the healthy and effective process of transition to the world of work, Columbia Central University establishes its Institutional Policy for the Payment of the Bar Examination Registration.

Columbia Central University undertakes to process and defray the payment of the bar exam registration to graduates, exam candidates, under the following terms and conditions and if they complete the following requirements:

1. Have delivered all the documents applicable of the examination request to the Placement Office on the dates indicated and according to the instructions given by a representative of said office.
2. Having attended the orientations, reviews, or other activities related to the revalidation examination process that have been convened by the university, on the established dates.
3. Having completed the application for examination registration for the first time.

The university will not issue a payment, nor will it reimburse payments for the application or examination registration to graduates who do not meet the requirements described above. Student who has been paid for an exam and does not show up to take it, will be responsible for

reimbursing the cost of the exam. For these situations in which case the student has to reimburse the exam registration, the cost of said registration will be added to their university account.

### Exceptions

- This policy does not apply to graduates who have tried to take the exam in multiple occasions and to whom the institution has already paid for the registration of said exam.
- This policy also does not apply to graduates who have not submitted to the exam's call and have reimbursed or have pending reimbursement of the registration fee to take their exam.

## POLICY FOR DOCUMENTATION AND EVALUATION OF EXTERNAL WORK ACTIVITIES

Columbia Central University (CCU) reaffirms its commitment to offering the highest quality educational services to its students. The university recognizes that the co-curricular and academic activities that the student carries out outside the classroom are conducive to the development and acquisition of knowledge, skills, abilities, and competencies that, indirectly, expand and complement the learning and teaching processes. This policy will be applicable in each academic term in which courses are offered with assignment of an Independent Supplementary Component.

CCU demonstrates consistent compliance with regulations and policies applicable to its programs. The tasks and homework activities assigned to the students by the faculty with the objective of working outside the classroom is an additional learning mechanism. Columbia Central University also recognizes the importance of supplementing class material and discussion with additional external work activities that are designed to support the learning objectives of the course.

The learning activities that students carry out can include, but are not limited to: article analysis, special projects, modules, video analysis, and answering guiding questions after analyzing a reading, among others. The syllabus that is given to each student at the beginning of each course will specify the additional hours of external work, the assigned learning activities, and the value in terms of percentage that they represent in the final grade of said course.

This policy aims to ensure that the assignment of external work is according to the established regulations, promote means to ensure correct documentation and evidence of the activities considered as external, and facilitate the supervision processes of the faculty in a simple

and uniform manner. Columbia Central University will provide a document for the registration of activities to document and evidence the assignment and evaluation of external work tasks according to with the established regulations and the CIS assigned to each course.

The professor will guide the student and explain the instructions to follow to complete the required learning activities. In addition, the student will discuss the evaluation criteria for each activity. The professor will have a record of the activities assigned to the students through which it is certified that they have met the hours of external work and the learning objectives. The professor will deliver a sample of the external work done by the student to the Academic Coordinator of his/her Program. In the grade report that the professor presents the Registrar, the grade awarded to the student for carrying out the External Work will be identified.

## GRADUATION REQUIREMENTS

All those students who have fulfilled the requirements of their study program and, in addition, have:

1. Achieved a GPA of 3.00 or higher for graduate-level programs
2. Achieved a general academic average of 2.00 or more depending on the program and level.  
Refer to the study program if it is different from the 2.00
3. Approved at the university at least 24 credits of residency
4. Fulfilled its financial obligations
5. Approved the courses as established by the minimum qualification policy of their study program
6. Requested at the Registrar's Office or online services at [www.columbiacentral.edu](http://www.columbiacentral.edu) for a graduation evaluation with at least 2 terms prior to graduation; so that the student have the courses available to complete their degree on the established date.

## ACADEMIC DISTINCTIONS

The university grants the distinctions detailed below in recognition of academic achievement and performance, based on the graduation average.

1. **ACADEMIC EXCELLENCE** - for those who achieve an academic graduation average of 4.00 at the graduate level.
2. **SUMMA CUM LAUDE** - for those who achieve an academic graduation average of 4.00 to 3.90.
3. **MAGNA CUM LAUDE** - for those who achieve an academic graduation average between 3.89 and 3.75.
4. **CUM LAUDE** - for those who achieve an academic graduation average between 3.74 and 3.60.
5. The **VALEDICTORIAN** is also awarded. This distinction is conferred after a selection process in which the following criteria are used, choosing an institutional one:
  - a. Have passed all courses at the university.
  - b. Have obtained an academic graduation average of 4.00.
  - c. Be recommended by the faculty.
  - d. Have demonstrated leadership and initiative by participating in the different activities carried out at the university.
  - e. Have observed behavioral excellence (discipline) and worthy of admiration among the university community.
  - f. Have shown a high spirit of companionship, empathy, and good human relationships.
  - g. Have contributed positively to the university and the community in general.
  - h. Having exhibited characteristics such as: responsibility, interest, and good willingness to carry out assigned work or projects.

### **Distinguished Graduate Award**

Evaluation criteria:

1. Be among the highest academic graduation averages in the graduating class and in the program.
2. Have demonstrated leadership and initiative by participating in different activities at Columbia Central University.
3. Have demonstrated interest, disposition, ability, knowledge, and love for their profession in their specialty courses.
4. Have demonstrated behavioral excellence (discipline) and worthy of admiration among the entire Columbia Central University community.

### **José Rodríguez Peña Award (Sony)**

This award is given to students in the Medical Emergencies Certificate Program. The evaluation criteria for this award are the following:

1. Judicious and responsible towards the work done.
2. Optimistic in the face of adverse situations.
3. Security and firmness in decisions made under pressure.
4. Enthusiastic with serving others and feel love for the profession.
5. Peaceful and serene in any situation.

## HONOR ROLL

### Philosophy

The CCU Honor Roll provides all those students who accumulate an outstanding academic average within a single program, the opportunity to be deserving of recognition for their academic performance.

### Objectives

1. Recognize the academic performance of those students who have accumulated an outstanding academic average and who meet all the criteria for recognition.
2. Give recognition to all participating students in a summit activity to be held annually.
3. Recognize all selected students through publications to the student community, if applicable.

### Selection Criteria

1. Have a GPA of 3.75 or higher
2. Have a minimum of 24 credits approved in CCU in the same program within the academic year. The credits must be approved with grades.
3. Remain as an active student throughout the year if the student does not finish the study program in which he/she is worthy of said recognition.

### Selection Process

1. Identify the students who accumulate an academic average and who meet all the selection criteria to belong to the Honor Roll.

2. The Guidance and Counseling Office will evaluate and certify the students who meet the selection criteria. This evaluation will be carried out in the term of September-December of the following year, being this same term in which the recognition activity is held.

### **Privileges**

1. The student credit transcript will reflect that the student was in the Honor Roll.
2. Recognition will be given in the activity that will be offered annually.
3. Will have preferential treatment at the time of registration processes

## **RESULTS OF THE TEACHING-LEARNING PROCESS**

Information on the results of the teaching-learning process is available to prospective visitors/students through the Academic Directors/Coordinators. They may request the information and discuss doubts they have related to the appraisal process or the results with each of them.

## **PROGRAMS UNDER MODULAR STRUCTURES**

Programs under the modular structure are offered in terms of 8 weeks.

## **GENERAL EDUCATION COMPONENT**

The General Education Component (CEG) of Columbia Central University (CCU) contributes to the development of an integral being in the students at the different schools. The courses are part of the academic offerings and it works in harmony with the different schools.

The CCU General Education Component has identified 6 basic skills. These are Oral Communication, Written Communication, Quantitative and Qualitative Reasoning, Critical Thinking, Information Literacy, and Technological Skills. The CEG cannot be a separate entity in the university but must work in harmony with the different schools and their programs. In this

way, the integration of skills in the different courses, both general and specialty, is made possible, which contributes to the integral development of each student.

The courses belong to several disciplines: linguistics, humanities, social sciences, natural sciences, and mathematics. These courses contribute, among other aspects: in the cultural, social, and environmental aspects of each academic program. The CEG has the interest of helping students who enroll in CCU to achieve their academic goal and that may be useful to our society and contribute to the fulfillment of the university mission.

## ACADEMIC PROGRAMS



## BUSINESS ADMINISTRATION

## **MASTER'S IN BUSINESS ADMINISTRATION\***

The Master's in Business Administration (MBA) is the highest degree conferred by Columbia Central University (CCU) in the School of Business. The program seeks to provide knowledge and skills of synthesis, analysis, and research applicable to work settings. Currently, the MBA has three specialties: Management (offered through presential and online educational means), Administration of Health Organizations, and Human Resources. According to the specialty, the MBA graduate will be qualified to perform optimally as a business administrator, manage the administration of health organizations (this specialty does not qualify to manage health organizations under Act No. 31 of December 30, May 1975), in addition to be able to plan and direct in globalized, multicultural, and continuous development of human resources.

### **ADDITIONAL REQUIREMENTS OF THE MASTER'S PROGRAM IN BUSINESS ADMINISTRATION WITH A SPECIALIZATION IN MANAGEMENT, THROUGH ONLINE EDUCATIONAL MEANS:**

For the development of the activities that will allow to achieve the objectives of the program, it is convenient that the student can have:

access to a computer

- Internet access
- The programs that the computer should have are word processor (Word), spreadsheet (Excel), presentations (Power Point), and Adobe Reader.

### **GRADUATION REQUIREMENTS:**

All students who:

1. Complete their study program with a 3.00 GPA.
2. Have met their financial obligations.

\* Only available at the Caguas Campus.

## MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH A SPECIALIZATION IN MANAGEMENT \* (PRESENIAL AND ONLINE MODALITY)

The Master of Business Administration with a specialty in Management consists of 24 credits in the core courses component and 15 in the specialty component. In total, the master's degree consists of 39 credits. It offers courses focused on human resource management, technological aspects, business strategies, operations management, supervision and leadership, and the global implications of business administration. Graduates will be practical professionals and well versed in theory. It provides growth opportunities to professionals with knowledge in different disciplines, the skills, and competencies necessary to develop their inquisitive capacity in the business field.

### CURRICULAR STRUCTURE CORE COURSES

#### Prescribed Core: 24 credits

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ACCO	5104	Managerial Accounting	45	3
ECON	5102	Managerial Economics	45	3
FINA	5105	Managerial Finance	45	3
HUBE	5101	Organizational Behavior	45	3
MANA	5107	Business Ethics and Policy Formulation	45	3
MARK	5106	Marketing Management	45	3
QUME	5103	Quantitative Methods	45	3
RSCH	5113	Research Methodology	45	3

**Sub-Total:**

**360 hours**

**24 credits**

## SPECIALTY COURSES

**Specialty, prescribed: 9 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
MANA	5108*	Business Strategies	45	3
MANA	6141	Global Business Operation	45	3
SEMI	6160*	Integrative Seminar in Administration	45	3

**Sub-Total:** **135 hours      9 credits**

## SPECIALTY ELECTIVES

**Electives: 6 credits to choose from**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
HURE	6131	Human Resources Management	45	3
HURE	6153	Supervision and Leadership	45	3
MANA	6143	Technology Management	45	3
MANA	6159	Operation Management & Logistics	45	3

**Sub-Total:** **90 hours      6 Credits**

The curricular structure of the specialty in Management includes the following components:

COMPONENT	CREDIT
Prescribed Core Courses	24
Prescribed Specialized Courses	9
Elective Courses of Specialization	6
<b>Total</b>	<b>39</b>

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION  
WITH A SPECIALIZATION IN MANAGEMENT  
(PRESENTIAL AND ONLINE MODALITIES)**

**SUGGESTED STUDY PROGRAM \*\***

**TIME: ONE YEAR**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE- REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 9 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
ECON	5102	Managerial Economics	----	3
MANA	6141	Global Business Operations	----	3
<b>SECOND TERM: 9 CREDITS</b>				
HUBE	5101	Organizational Behavior	----	3
MARK	5106	Marketing Management	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 9CREDITS</b>				
ELECTIVE		Elective Specialty Course	----	3
MANNA	5108 *	Business Strategies	ACCO 5104 ECON 5102 MARK 5106	3
QUME	5103	Quantitative Methods	----	3
<b>FOURTH TERM: 6CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
FINA	5105	Managerial Finance	----	3
<b>FIFTH TERM: 6 CREDITS</b>				
MANA	5107	Business Ethics and Policy Formulation	----	3
SEMI	6160 *	Integrative Seminar in Administration	MANA 5108 MANA 6141 QUME 5103 RSCH 5113	3

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH A  
SPECIALIZATION IN MANAGEMENT  
(PRESENTIAL AND NON-PRESENTIAL MODALITIES)**

**SUGGESTED PROGRAM OF STUDIES \*\***

**TIME: ONE AND A HALF YEAR**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUISITE</b>	<b>CREDITS</b>
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102	Managerial Economics	----	3
MANA	6141	Global Business Operation	----	3
<b>SECOND TERM: 6 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 6CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
MARK	5106	Marketing Management	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
MANA	5108 *	Business Strategies	ACCO 5104 ECON 5102 MARK 5106	3
QUME	5103	Quantitative Methods	----	3
<b>FIFTH TERM: 6CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
HUBE	5101	Organizational Behavior	----	3
<b>SIXTH TERM: 6 CREDITS</b>				
FINA	5105	Managerial Finance	----	3
MANA	5107	Business Ethics and Policy Formulation	----	3
<b>SEVENTH TERM: 3 CREDITS</b>				
SEMI	6160 *	Integrative Seminar in Administration	MANA 5108 MANA 6141 QUME 5103 RSCH 5113	3

\* Only available at the Caguas Campus

\*\*Courses with pre-requirements

\*\*\* The core course template is a requirement for all specialties of the graduate program (MBA).

\* ^ The MANA 5108 specialty elective course has ACCO 5104, ECON 5102, FINA 5105, and MARK 5106 as pre-requirements. \* Only available at the Caguas Campus.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps complete the degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems.

#### MINIMUM RATING POLICY

Students enrolled in the Master of Business Administration with a specialty in Management must obtain a minimum grade of **B** in all courses.

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION

## SPECIALIZING IN HUMAN RESOURCES \*

The Master of Business Administration with a specialty in Human Resources consists of 24 credits in the core course component and 15 in the specialty component. In total, the master's degree consists of 39 credits. The Human Resources specialty offers courses focused on human resource management, labor law, compensation and benefits, supervision and leadership, and collective bargaining. In addition, the understanding of the human resources management to implement the organizational strategy, through people.

### CURRICULAR STRUCTURE

#### CORE COURSES

**Prescribed Core: 24 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ACCO	5104	Managerial Accounting	45	3
ECON	5102	Managerial Economics	45	3
FINA	5105	Managerial Finance	45	3
HUBE	5101	Organizational Conduct	45	3
MANNA	5107	Business Ethics and Policy Formulation	45	3
MARK	5106	Marketing Management	45	3
QUME	5103	Quantitative Methods	45	3
RSCH	5113	Research Methodology	45	3

**Sub-Total:** 360 hours 24 credits

#### SPECIALTY COURSES

**Specialty, prescribed: 9 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
HURE	6131	Human Resources Management	45	3
HURE	6152	Labor Legislation	45	3
SEMI	6160 *	Integrative Seminar in Administration	Four. Five	3

**Sub-Total:** 135 hours 9 credits

#### SPECIALTY ELECTIVES



**Electives: 6 credits to choose**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
HURE	6151	Collective Bargaining	45	3
HURE	6153	Supervision and Leadership	45	3
HURE	6154	Compensation Systems and Benefits	Four. Five	3

**Sub-Total:****90 hours****6 credits**

The curricular structure of the specialty in Human Resources includes the following components:

COMPONENT	CREDIT
Prescribed Core Courses	24
Prescribed Specialized Courses	9
Elective Courses of Specialization	6
<b>Total</b>	<b>39</b>

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION  
SPECIALIZING IN HUMAN RESOURCES**

**SUGGESTED PROGRAM OF STUDIES \*\***

**TIME: ONE YEAR**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 9 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
ECON	5102	Managerial Economics	----	3
HURE	6131	Human Resources Management	----	3
<b>SECOND TERM: 9 CREDITS</b>				
HUBE	5101	Organizational Conduct	----	3
MARK	5106	Marketing Management	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 9CREDITS</b>				
ELECTIVE		Elective Course	----	3
HURE	6152	Labor Legislation	----	3
QUME	5103	Quantitative Methods	----	3
<b>FOURTH TERM: 6CREDITS</b>				
ELECTIVE		Elective Specialty Course	----	3
FINA	5105	Managerial Finance	----	3
<b>FIFTH TERM: 6 CREDITS</b>				
SEMI	6160 *	Integrative Seminar in Administration	HURE 6131 HURE 6152 QUME 5103 RSCH 5113	3
MANNA	5107	Business Ethics and Policy Formulation	----	3

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION  
SPECIALIZING IN HUMAN RESOURCES**

**SUGGESTED PROGRAM OF STUDIES \*\***

**TIME: ONE YEAR AND A HALF YEAR**

<b>COURS E</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE- REQUIREMENT S</b>	<b>CREDITS</b>
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102	Managerial Economics	----	3
HURE	6131	Human Resources Management	----	3
<b>SECOND TERM: 6 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
HURE	6152	Labor Legislation	----	3
<b>THIRD TERM: 6 CREDITS</b>				
MARK	5106	Marketing Management	----	3
RSCH	5113	Research Methodology	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE		Elective Course of Specialization	----	3
QUME	5103	Quantitative Methods	----	3
<b>FIFTH TERM: 6 CREDITS</b>				
HUBE	5101	Organizational Conduct	----	3
ELECTIVE		Specialty Elective Course		3
<b>SIXTH TERM: 6 CREDITS</b>				
FINA	5105	Managerial Finance	----	3
MANA	5107	Business Ethics and Policy Formulation	----	3
<b>SEVENTH TERM: 3 CREDITS</b>				
SEMI	6160 *	Integrative Seminar Administration	RSCH 5113 HURE 6131 HURE 6152 QUME 5103	3

-Courses without pre-requirements

\* Courses with pre-requirements

The core course template is a requirement for all specialties of the graduate program (MBA).

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems.

## MINIMUM GRADING POLICY

Students enrolled in the Master of Business Administration must obtain a minimum grade of **B** in all courses.

## MASTER'S DEGREE IN BUSINESS ADMINISTRATION WITH A SPECIALIZATION IN ADMINISTRATION OF HEALTH ORGANIZATIONS \*

The Master of Business Administration with specialization in Administration of Health Organizations consists of 24 credits in the core courses component and 15 in the specialty component. In total, the master's degree consists of 39 credits. The specialty offers courses focused on the legal and ethical aspects, managerial aspects, strategic planning, accounting, and information systems in the administration of health organizations. In addition, it analyzes the role of rational and adequate management in the successful operation of a business.

### CURRICULAR STRUCTURE

#### CORE COURSES

##### Prescribed Core: 24 credits

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ACCO	5104	Managerial Accounting	45	3
ECON	5102	Managerial Economics	45	3
FINA	5105	Managerial Finance	45	3
HUBE	5101	Organizational Behavior	45	3
MANNA	5107	Business Ethics and Policy Formulation	45	3
MARK	5106	Marketing Management	45	3
QUME	5103	Quantitative Methods	45	3
RSCH	5113	Research Methodology	45	3

**Sub-total:**

**360 hours**

**24 credits**

## SPECIALTY COURSES

**Specialty, prescribed: 9 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
MAHE	6139	Legal and Regulatory Aspects in Health Systems Management	45	3
MAHE	6140*	Planning, Assessment, and Control of Health Systems	45	3
SEMI	6160*	Integrative Seminar in Administration	45	3

**Sub-Total:** **135 hours**      **9 credits**

## SPECIALTY ELECTIVES

**Electives: 6 credits to choose from**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
MAHE	6138	Health System Organization Management	45	3
MAHE	6141	Accounting in Health Systems	45	3
MAHE	6157	Information Systems in Health Services	45	3

**Sub-Total:** **90 hours**      **6 credits**

The curricular structure of the specialty in Administration of Health Organizations includes the following components:

COMPONENT	CREDIT
Prescribed Core Courses	24
Prescribed Specialized Courses	9
Elective Courses of Specialization	6
<b>Total</b>	<b>39</b>

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION  
WITH SPECIALIZATION IN ADMINISTRATION OF HEALTH ORGANIZATIONS**

**SUGGESTED PROGRAM OF STUDIES \*\***

**TIME: ONE YEAR**

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 9 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
ECON	5102	Managerial Economics	----	3
MAHE	6139	Legal Aspects and Regulations in Health Systems Management	----	3
<b>SECOND TERM: 9 CREDITS</b>				
HUBE	5101	Organizational Conduct	----	3
MARK	5106	Marketing Management	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 9 CREDITS</b>				
ELECTIVE*		Elective Course of Specialization	----	3
MAHE	6140*	Planning, Assessment, and Control of Health Systems	MAHE 6139	3
QUME	5103	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE*		Elective Course of Specialization	----	3
FINA	5105	Managerial Finance	----	3
<b>FIFTH TERM: 6 CREDITS</b>				
SEMI	6160*	Integrative Seminar in Administration	MAHE 6139 MAHE 6140 QUME 5103 RSCH 5113	3
MANA	5107	Business Ethics and Policy Formulation	----	3

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION  
WITH A SPECIALIZATION IN ADMINISTRATION OF HEALTH ORGANIZATIONS**

**SUGGESTED PROGRAM OF STUDIES \*\***

**TIME: ONE AND A HALF YEAR**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102	Managerial Economics	----	3
MAHE	6139	Legal Aspects and Regulations in Health Systems Management	----	3
<b>SECOND TERM: 6 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 6 CREDITS</b>				
ELECTIVE*		Specialty Elective Course	----	3
MARK	5106	Marketing Management	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
MAHE	6140*	Planning, Assessment, and Control of Health Systems	MAHE 6139	
QUME	5103	Quantitative Methods	----	3
<b>FIFTH TERM: 6 CREDIT</b>				
ELECTIVE*		Specialty Elective Course	----	3
HUBE	5101	Organizational Conduct	----	3
<b>SIXTH TERM: 6 CREDIT</b>				
FINA	5105	Managerial Finance	----	3
MANA	5107	Business Ethics and Policy Formulation	----	3
<b>SEVENTH TERM: 3 CREDITS</b>				
SEMI	6160 *	Integrative Seminar in Administration	MAHE 6139 MAHE 6140 QUME 5103 RSCH 5113	3

The Master is available at the Caguas Campus.



-Courses without pre-requirements.

\* Course with pre-requirements

\* ^ The MAHE 6140 specialty elective course has MAHE 6139 as a Pre-requirement

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems.

### MINIMUM RATING POLICY

Students enrolled in the Master of Business Administration with a specialty in Health Organization Administration must obtain a minimum grade of **B** in all courses.

## BACHELOR'S IN BUSINESS ADMINISTRATION (BBA)

The Bachelor's in Business Administration (BBA) is aimed at the adult student who wishes to climb leadership positions within a company, either because he/she works in it or wants to start his/her own business. Therefore, you need to monitor, build, and apply the knowledge, skills and abilities acquired in the program to effectively contribute to the development of the company.

The curricular content of the BBA reflects a broad spectrum of administration within which are contained both general management, marketing, entrepreneurship, economics, human resources management, accounting, finance, information systems, occupational health and safety, operations management, statistics, and strategic planning, among others. The structure of the program introduces the student to academic experiences from the first term of studies.

BBA students will work on a research proposal and carry out an internship in a private company or public agency where they apply what they previously learned in the courses.

### **Additional program requirements:**

1. Orientation with the Director of the School of Administration

### **Graduation requirements:**

All those students who have fulfilled the requirements of their study program and, in addition, have:

1. Completed at least 120 credits between courses taken at CCU and those transferred from other institutions or programs.
2. Of the 24 credits that must be approved in the university, 12 will be in Professional Education.
3. Achieved a minimum GPA of 2.25 in Professional Education courses.
4. Achieved a minimum GPA of 2.25.

**BACHELOR'S IN BUSINESS ADMINISTRATION (BBA)  
CURRICULUM STRUCTURE  
GENERAL EDUCATION COURSES**

**Prescribed: 33 credits**

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
COPR	3011* ^	Contemporary Problems	45	3
ENGL	1101	Basic English I	60	3
ENGL	1102*	Basic English II	45	3
HIST	3004	History of Puerto Rico	45	3
HUMA	3005	World History I	45	3
HUMA	3006	World History II	45	3
SCIE	4001	General Science	45	3
SCIE	4002	Environmental Science	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102*	Basic Spanish II	45	3
<b>Sub - total:</b>			<b>525 hours</b>	<b>33 credits</b>

**GENERAL EDUCATION ELECTIVES**

**Electives: The student must select 2 courses for a total of 6 credits**

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>HOURS CONTACTS</b>	<b>CREDITS</b>
ART	2009	Art History	45	3
COMU	3010	Effective Communication	45	3
ECON	2012	Puerto Rican Economy	45	3
ENGL	3001	Conversational and Compositional English	45	3
HURE	1104	Human Relations	45	3
POSC	2013	Introduction to Political Science	45	3
PSYC	2014	Principles of Psychology	45	3
SEMI	3008 **	Life Reflection Seminar		
SOCI	2015	Principles of Sociology	45	3
SPAN	3002 *	Advanced Spanish	45	3
<b>Sub - total:</b>			<b>90 hours</b>	<b>6 credits</b>

## RELATED COURSES

**Prescribed: 3 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMP	1205	Introduction to Computers	60	3

**Sub-total:** **60 hours**      **3 credits**

## VOCATIONAL EDUCATION COURSES

**Prescribed: 57 credits**

COURSES	CODE	COURSE NAME	HOURS CONTACT	CREDITS
ACCO	2200	Administrative Accounting	60	3
ACCO	4001 *	Management Accounting	45	3
ECON	1204	Principles of Economics	45	3
ENTR	1001	Entrepreneurship	45	3
FINA	4002 *	Corporate Finance	45	3
MANA	1207	Principles of Management	45	3
MANA	2303	Legal and Ethical Aspects	45	3
MANA	2403 *	Human Resources Management	45	3
MANA	3002 *	Effective Supervision	45	3
MANA	4004 *	Operations Management	45	3
MANA	4005 *	Customer Service	45	3
MANA	4006 *	Strategic Planning	45	3
MANA	4011 *	Organizational Behavior	45	3
MANA	4012 *	Negotiation and Mediation at Work	45	3
MANA	4013 *	Management Research	45	3
MANA	4014 * ^ *	Seminar and Internship in Administration	105	3
MARK	1301	Marketing Principles	45	3
MATH	1206	Business Mathematics	60	3
STAT	3103	Statistics	45	3

**Sub-total:** **945 hours**      **57 credits**

**PROFESSIONAL EDUCATION COURSES (Vocational Technician) \*\*\***

**Prescribed: 21 credits**

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
ENGL	2206 *	Business Writing in English	45	3
MANA	2020	Claims Practice Liability	45	3
MANA	2413 *	Integrated Systems Management	45	3
MANA	4000 *	Effective Communication for Managers	45	3
MANA	4009 *	Advanced Management	45	3
SECU	1040 *	OSHA Safety and Regulations	45	3
SPAN	2207 *	Commercial Writing in Spanish	45	3
<b>Sub - total:</b>			<b>315 hours</b>	<b>21 credits</b>

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component upon enrollment in the last term

\* ^ \* Capstone Course of Professional Education

\*\* Course for students enrolled in the ProSigue alternative.

\*\*\* This section of the curriculum may be satisfied through professional, technical-vocational courses or work experience.

**BACHELOR'S IN BUSINESS ADMINISTRATION (BBA)****CURRICULUM: MAY 2018****SUGGESTED PROGRAM OF STUDIES \*\***

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 15 CREDITS</b>				
COMP	1205	Introduction to Computers	---	3
ENTR	1001	Entrepreneurship	---	3
MANA	1207	Principles of Management	---	3
MARK	1301	Marketing Principles	---	3
SEMI	1105	College Success and Professional Seminar	---	3
<b>SECOND TERM: 15CREDITS</b>				
ACCO	2200	Administrative Accounting	---	3
ECON	1204	Principles of Economics	---	3
MANA	2303	Legal Aspects and Ethics	---	3
MANNA	2403 *	Human Resources Management	MANA 1207	3
MATH	1206	Business Mathematics	---	3
<b>THIRD TERM: 15 CREDITS</b>				
ENGL	1101	Basic English I	---	3
MANA	2413 *	Integrated Systems Management	COMP 1205	3
MANNA	3002 *	Effective Supervision	MANA 1207 MANA 2403	3
MANA	4005 *	Customer Service	MARK 1301	3
SECU	1040 *	OSHA Safety and Regulations	MANA1207 MANA 2403	3
<b>FOURTH TERM: 15 CREDITS</b>				
ENGL	1102 *	Basic English II	ENGL 1101	3
HUMA	3005	World History I	---	3
MANA	4000 *	Effective Communication for Managers	MANA 1207 MANA 2403	3
SPAN	1101	Basic Spanish I	---	3
STAT	3103	Statistics	---	3

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIFTH TERM: 15 CREDITS</b>				
ACCO	4001 *	Management Accounting	ACCO 2200	3
ENGL	2206 *	Business Writing in English	ENGL 1102	3
MANA	2020	Claim Practices of Civil Responsibility	---	3
MANA	4006 *	Strategic Planning	MANA 1207 MATH 1206	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>SIXTH TERM: 15 CREDITS</b>				
FINA	4002 *	Corporate Finance	ACCO 2200	3
MANA	4004 *	Operations Management	MANA 1207 STAT 3103	3
MANA	4011 *	Organizational Behavior	MANA 1207	3
SCIE	4001	General Science	---	3
SPAN	2207 *	Commercial Writing in Spanish	SPAN 1102	3
<b>SEVENTH TERM: 15 CREDITS</b>				
HIST	3004	History of Puerto Rico	---	3
MANA	4009 *	Advanced Management	MANA 1207 MANA 4006 MARK 1301	3
MANA	4012 *	Negotiation and Mediation at Work	MANA 1207 MANA 2303	3
MANA	4013 *	Research Management	MANA 1207 MATH 1206 STAT 3103	3
SCIE	4002	Environmental Science	---	3
<b>EIGHTH TERM: 15 CREDITS</b>				
ELECTIVE		General Education Elective	---	3
ELECTIVE		General Education Elective	---	3
COPR	3011 * ^	Contemporary Problems	---	3
HUMA	3006	World History II	---	3
MANA	4014 * ^ *	Seminar and Internship in Administration	MANA 1207 MANA 4004 MATH 1206 STAT 3103	3

**Grand total of Bachelor of Business Administration: 120 credits and 1,935 hours**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM RATING POLICY

Students enrolled in the Bachelor of Business Administration will comply with the following:

4. Obtain, at least, a grade of C to pass the following courses:

ACCO 2200	ACCO 4001	COMP 1205	COPR 3011
ECON 1204	ENGL 2206	ENTR 1001	FINE 4002
MANA 1207	MANA 2020	MANA 2303	MANA 2403
MANA 2413	MANA 3002	MANA 4000	MANA 4004
MANA 4005	MANA 4006	MANA 4009	MANA 4011
MANA 4012	MANA 4013	MARK 1301	MATH 1206
SCIE 4001	SCIE 4002	SECU 1040	SPAN 2207
STAT 3103			

5. Obtain at least a grade of B to pass the MANA 4014 course (Seminar and Internship in Administration).
6. Although a minimum qualification of C to pass the Professional Education courses, the student must ensure that they meet the minimum required average of 2.25 for this line. If he does not comply, he must repeat courses until he reaches the minimum average required to graduate.



## ASSOCIATE DEGREE IN BUSINESS ADMINISTRATION (ADBA)

University level program with the main purpose of preparing people in the administration area in a short time. The curricular content reflects a broad spectrum of administration, within which are contained courses in both general management and human resources, among others. The program consists of 72 credits. It introduces the student to core disciplines of administration such as management, human resources management, marketing, economics, accounting, occupational health and safety, and statistics, among others. It provides the student with the administrative knowledge and skills necessary to enter the world of work, recognizing problems that may arise and providing viable alternatives, consistent with a dynamic organizational environment.

### Additional program requirement:

1. Orientation with the Director of the School of Administration

### Graduation requirements:

All those students who have fulfilled the requirements of their study program and, in addition, have:

Achieved a minimum GPA of 2.25 in Professional Education courses.

1. Achieved a minimum GPA of 2.00.
2. Approved at the university for at least 24 credits, 12 of them in Professional Education.

### CURRICULUM STRUCTURE

#### GENERAL EDUCATION COURSES Prescribed: 18 credits

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	1101	Basic English I	60	3
ENGL	1102	Basic English II	45	3
HUMA	3005	World History I	45	3
SEMI	1105	University Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102	Basic Spanish II	45	3

Sub - total:

300 hours

18 credits 199



## RELATED COURSES

**Prescribed: 3 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMP	1205	Introduction to Computers	60	3

**Sub - total: 60 hours 3 credits**

## VOCATIONAL EDUCATION COURSES

**Prescribed: 39 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ACCO	2200	Administrative Accounting	60	3
ACCO	4001 *	Managerial Accounting	45	3
ECON	1204	Principles of Economics	45	3
ENTR	1001	Entrepreneurship	45	3
MANA	1207	Principles of Administration	45	3
MANA	2303	Legal Aspects and Ethics	45	3
MANA	2403 *	Human Resources Management	45	3
MANA	3002 *	Effective Supervision	45	3
MANA	4005 *	Customer Service	45	3
MANA	4006 *	Strategic Planning	45	3
MARK	1301	Marketing Principles	45	3
MATH	1206	Business Mathematics	60	3
STAT	3103	Statistics	45	3

**Sub-total: 615 hours 39 credits**

## PROFESSIONAL EDUCATION COURSES (Vocational Technician) \*\*\*

**Prescribed: 12 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	2206*	Commercial Writing in English	45	3
MANA	2413*	Integrated Systems Management	45	3
MANNA	4000*	Effective Communication for Managers	45	3
SECU	1040*	OSHA Safety and Regulations	45	3

**Sub - total: 180 hours 12 credits**

\* Courses with PRE-REQUIREMENTS

\* ^ Capstone Course of the General Education Component upon enrollment in the last term

\* ^ \* Capstone Course of Professional Education

\*\* Course for students enrolled in the ProSigue alternative.

\*\*\* This section of the curriculum may be satisfied through professional courses, vocational technicians, or work experience.

**ASSOCIATE DEGREE IN BUSINESS ADMINISTRATION**  
**CURRICULUM: MAY 2018**  
**SUGGESTED STUDY PROGRAM \*\***

COURSES	CODE	COURSE NAME	PRE - REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
COMP	1205	Introduction to Computers	-	3
ENTR	1001	Entrepreneurship	-	3
MANA	1207	Principles of Management	-	3
MARK	1301	Marketing Principles	-	3
SEMI	1105	College Success and Professional Seminar	-	3
<b>SECOND TERM: 15CREDITS</b>				
ACCO	2200	Administrative Accounting	-	3
ECON	1204	Principles of Economics	-	3
MANA	2303	Legal Aspects and Ethics	-	3
MANA	2403 *	Human Resources Management	MANA 1207	3
MATH	1206	Business Mathematics	-	3
<b>THIRD TERM: 15 CREDITS</b>				
ENGL	1101	Basic English I	-	3
MANA	2413 *	Integrated Systems Management	COMP 1205	3
MANA	3002 *	Effective Supervision	MANA 1207 MANA 2403	3
MANA	4005 *	Customer Service	MARK 1301	3
SECU	1040 *	OSHA Safety and Regulations	MANA 1207 MANA2403	3
<b>FOURTH TERM: 15 CREDITS</b>				
ENGL	1102 *	Basic English II	ENGL 1101	3
HUMA	3005	World History I	-	3
MANA	4000 *	Effective Communication for Managers	MANA 1207 MANA 2403	3
SPAN	1101	Basic Spanish I	-	3
STAT	3103	Statistics	-	3
<b>FIFTH TERM: 12 CREDITS</b>				
ACCO	4001 *	Management Accounting	ACCO 2200	3
ENGL	2206 *	Business Writing in English	ENGL 1102	3
MANA	4006 *	Strategic Planning	MANA 1207 MATH 1206	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3

**Grand Total of Associate Degree in Business Administration: 72 credits and 1,155 hours**

\* Courses with pre-requirements

\*\*The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems.

**MINIMUM RATING POLICY**

Students enrolled in the Associate Degree in Business Administration will comply with the following:

1. Obtain, at least, a grade of C to pass the following courses:

ACCO 2200	ACCO 4001	COMP 1205	ECON 1204
ENGL 2206	ENTR 1001	MANA 1207	MANA 2303
MANA 2403	MANA 2413	MANA 3002	MANA 4000
MANA 4005	MANA 4006	MARK 1301	MATH 1206
SECU 1040	STAT 3103		

2. Although a minimum qualification of C To pass the Professional Education courses, the student must ensure that they meet the minimum required average of **2.25** for this line. If you do not comply, you must repeat.

## ASSOCIATE DEGREE IN OFFICE ADMINISTRATION

University level program with the main purpose of preparing, in a short time, people in the office administration area. The curricular content reflects a broad spectrum of office administration and business administration, within which courses are contained in both office systems (emphasizing current technological applications and those in greatest demand in the market, to produce and process documents, worksheets, calculations, presentations and electronic publications, databases) such as management, human resources, marketing, customer service, legal office, medical office, among others. The program consists of 73 credits, with 12 courses (36 credits) acceptable in the CCU Bachelor of Business Administration. It provides the student with the administrative knowledge and skills necessary to enter the world of work, recognizing problems that may arise and providing viable alternatives, consistent with a dynamic organizational environment.

### **Additional requirement of the program:**

Orientation with the Director of the Business Administration Program

### **Graduation requirements:**

All students who have fulfilled the requirements of their study program and, in addition, have:

1. Achieved a minimum average of 2.25 in Professional Education courses.
2. Achieved a minimum GPA of 2.00.

### **CURRICULUM STRUCTURE GENERAL EDUCATION COURSES**

#### **Prescribed: 18 credits**

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
ENGL	1101	Basic English I	60	3
ENGL	1102 **	Basic English II	45	3
ENGL	3001	Conversational and Compositional English	45	3
SEMI	1105 *	University Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 **	Basic Spanish II	45	3

**Sub - total:** 300 hours 18 credits 204



## PROFESSIONAL EDUCATION COURSES

**Prescribed: 43 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ACCO	2200	Administrative Accounting	60	3
COMP	1701	Computer Keyboard	60	3
INFO	1704	Data Processing in Spreadsheet	60	3
INFO	1705	Presentations and Electronic Publications	60	3
INFO	2701 *	Integration of Office Systems	60	3
MANA	1207	Principles of Management	45	3
MANA	2403 *	Human Resources Management	45	3
MANA	4011 *	Organizational Behavior	45	3
OADM	1400 *	Document Production	60	3
OADM	1401	Databases	45	3
SECR	1706	Professional Image Development	45	3
SECR	1707	Document Management	45	3
SECR	2702	Administrative Office Procedures	45	3
SECR	2709 *	Office Practice	150	4
<b>Sub - total:</b>			<b>825 hours</b>	<b>43 credits</b>

## PROFESSIONAL ELECTIVE COURSES (Choose 6 credits)

**Electives: 6 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
MANA	4005*	Customer Service	45	3
MARK	1301	Marketing Principles	45	3
SECR	2715	Administrative Procedures of the Legal Office	45	3
SECR	2716	Administrative Procedures of Medical Office	45	3
<b>Sub - total:</b>			<b>90 hours</b>	<b>6 credits</b>

## VOCATIONAL EDUCATION COURSES (VOCATIONAL TECHNICIAN)

**Prescribed: 6 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	2206 *	Commercial Writing in English	45	3
SPAN	2207 *	Commercial Writing in Spanish	45	3
<b>Sub-total:</b>			<b>90 hours</b>	<b>6 credits</b>

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# ASSOCIATE DEGREE IN OFFICE ADMINISTRATION

CURRICULUM: SEPTEMBER 2019

## SUGGESTED PROGRAM OF STUDIES \*\*

COURSE	CODE	COURSE NAME	PRE-REQUIREMENT	CREDITS
<b>FIRST TERM - 15 CREDITS</b>				
COMP	1701	Computer Keyboarding	--	3
MANA	1207	Principles of Management	--	3
SECR	1707	Document Management	--	3
SEMI	1105 ***	College Success and Professional Seminar	-	3
SPAN	1101	Basic Spanish I	--	3
<b>SECOND TERM - 15 CREDITS</b>				
ACCO	2200	Administrative Accounting	--	3
OADM	1400 *	Document Production	COMP 1701	3
ENGL	1101	Basic English I	--	3
INFO	1704	Data Processing in Spreadsheets	--	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>THIRD TERM - 15 CREDITS</b>				
OADM	1401	Databases	--	3
ENGL	1102 *	Basic English II	ENGL 1101	3
INFO	1705	Presentations and Electronic Publications	-	3
MANA	2403 *	Human Resources Management	MANA 1207	3
SECR	1706	Professional Image Development	--	3
<b>FOURTH TERM - 15 CREDITS</b>				
	ELECTIVE	Vocational Education Elective	-	3
ENGL	3001	Conversational and Compositional English	--	3
INFO	2701 *	Integration of Office Systems	OADM 1400 INFO 1704 INFO 1705	3
SECR	2702	Office Administrative Procedures	--	3
SPAN	2207 *	Commercial Writing in Spanish	SPAN 1102	3
<b>FIFTH TERM - 13 CREDITS</b>				
	ELECTIVE	Professional Education Elective	--	3
ENGL	2206 *	Business Writing in English	ENGL1102	3
MANA	4011 *	Organizational Behavior	MANA 1207	3
SECR	2709 * ^	Office Practice	SECR 1707 SECR 2702	4

Grand total of Associate Degree in Office Administration: 73 credits and 1,305 hours



\* Courses for students enrolled in PRO-follow alternative. The SEMI 1105 course is equivalent to SEMI 3008-Life Reflection Seminar (you can take one or the other).

\*\* Courses with pre-requirements

\* Courses with pre-requirements, in electives Medical Billing: 150 hours

\*\* Electives in Management : 135 hours

### MINIMUM RATING POLICY

Students enrolled in the Associate Degree in Office Administration must obtain, at least, a grade of **C** by passing the following courses:

ACCO 2200	COMP 1701	ENGL 2206	INFO 1704
INFO 1705	INFO 2701	MANA 1207	MANA 2403
MANA 4005	MANA 4011	MARK 1301	OADM 1400
OADM 1401	SECR 1706	SECR 1707	SECR 2702
SECR 2715	SECR 2716	SEMI 1105	SPAN 2207

Students enrolled in the **SECR 2709 (Office Practice) course** must obtain, at a minimum, a grade of **B** To pass the course.

Although a minimum grade of C can be obtained to pass Professional Education courses, the student must ensure that they meet the minimum required average of 2.25 for this line. If the student does not comply, he/she must repeat courses until the minimum average required to graduate is reached.

## CERTIFICATE IN BUSINESS ADMINISTRATION (CBA)

Non-university level program with the main purpose of preparing people in a short time in the administration area. The curricular content reflects a broad spectrum of administration, within which are contained both management and human resources, among others. The program consists of 45 credits. It introduces the student to core disciplines of administration such as management, human resources management, marketing, economics, accounting, occupational health, and safety, among others.

### Additional program requirement:

1. Orientation with the Director of the School of Administration

### Graduation requirements:

All those students who have fulfilled the requirements of their study program and, in addition, have:

1. Achieved a GPA of 2.00 or higher.
2. Have achieved a minimum average of 2.25 in Professional Education courses.
3. Approved at the university for at least twenty-four (24) credits, 12 of them in Professional Education.

### CURRICULUM STRUCTURE

Prescribed: 45 credits

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	1101	Basic English I	60	3
SEMI	1105 **	College Success and Professional Seminar	45	3
COMP	1205	Introduction to Computers	60	3
ACCO	2200	Administrative Accounting	60	3
ECON	1204	Principles of Economics	45	3
ENTR	1001	Entrepreneurship	45	3
MANA	1207	Principles of Management	45	3
MANA	2303	Legal Aspects and Ethics	45	3
MANA	2403 *	Human Resources Management	45	3
MANA	2413 *	Integrated Systems Management	45	3
MANA	3002 *	Effective Supervision	45	3
MANA	4005 *	Customer Service	45	3
MARK	1301	Marketing Principles	45	3
MATH	1206	Business Mathematics	60	3
SECU	1040 *	OSHA Safety and Regulations	45	3

Total:

735 hours

45 credits 208



**CERTIFICATE IN BUSINESS ADMINISTRATION  
SUGGESTED STUDY PROGRAM \*\***

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
COMP	1205	Introduction to Computers	----	3
ENTR	1001	Entrepreneurship	----	3
MANA	1207	Principles of Management	----	3
MARK	1301	Marketing Principles	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 15CREDITS</b>				
ACCO	2200	Administrative Accounting	----	3
ECON	1204	Principles of Economics	----	3
MANA	2303	Legal Aspects and Ethics	----	3
MANA	2403 *	Human Resources Management	MANA 1207	3
MATH	1206	Business Mathematics	----	3
<b>THIRD TERM: 15 CREDITS</b>				
ENGL	1101	Basic English I	----	3
MANA	2413 *	Integrated Systems Management	COMP 1205	3
MANA	3002 *	Effective Supervision	MANA 1207 MANA 2403	3
MANA	4005 *	Customer Service	MARK 1301	3
SECU	1040 *	OSHA Safety and Regulations	MANA 1207 MANA 2403	3

**Grand Total of the Business Administration Certificate: 45 credits and 735 hours**

-Courses without pre-requirements

\*Courses with pre-requirements

\*\*The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have PRE-REQUIREMENTS in an order that allows them to continue taking the other courses without problems.

## MINIMUM RATING POLICY

Students enrolled in the Certificate in Business Administration will comply with the following:

1. Obtain, at least, a grade of C to pass the following courses:

ACCO 2200	COMP 1205	ECON 1204	ENTR 1001
MANA 1207	MANA 2303	MANA 2403	MANA 2413
MANA 3002	MANA 4005	MARK 1301	MATH 1206
SECU 1040			

2. Although a minimum grade of C can be obtained to pass Professional Education courses, the student must ensure that they meet the minimum required GPA of **2.25** for this line. If he does not comply, he must repeat courses until he reaches the minimum average required to graduate.

# SCHOOL OF TECHNOLOGY

## BACHELOR'S IN INFORMATION TECHNOLOGY, NETWORKS, AND SECURITY

The Bachelor of Information Technology, Networks, and Security at Columbia Central University is aimed at the student who wants to develop as a professional in computing. The student will learn 2 core pedagogical aspects; (1) the ability to design, implement, manage, and maintain network systems according with the existing technology and (2) the ability to repair and maintain mobile entertainment, communication and security platforms and systems. While studying, the student will be able to challenge the CompTIA (A + and Network +) and Microsoft certifications, such as: "Microsoft Certified Solutions Associate" (MCSA) and "Microsoft Certified Solution Expert" (MCSE; Server Infrastructure). Currently these certifications are required and valued in the labor field. The program consists of 120 credits and is designed to be completed in 3 years and 4 months.

### **Additional program requirement:**

1. Orientation with the Academic Coordinator

### **Graduation requirements:**

1. Have completed at least 120 credits between those taken at CCU and those transferred from other institutions or programs.
2. Have achieved a minimum average of 2.50 in Professional Education courses.
3. Have achieved a minimum GPA of 2.25.
4. Of the 24 credits that must be approved at the Institution, 12 will be in Professional Education.

## CURRICULUM STRUCTURE GENERAL EDUCATION COURSES

**Prescribed: 27 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMU	3010	Effective Communication	45	3
COPR	3011 **	Contemporary Problems	45	3
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
ENGL	3001	Conversational and Compositional English	45	3
HIST	3004	History of Puerto Rico	45	3
SEMI	1105 ***	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3

**Sub - total:** **435 hours      27 credits**

## GENERAL EDUCATION ELECTIVES

**Electives: 6 credits to choose**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ART	2009	Art History	45	3
ECON	2012	Puerto Rican Economy	45	3
HURE	1104	Human Relations	45	3
POSC	2013	Introduction to Political Science	45	3
PSYC	2014	Principles of Psychology	45	3
SCIE	4001	General Science I	45	3
SEMI	3008 **	Seminar Life Reflection	45	3
SOCI	2015	Principles of Sociology	45	3
SPAN	3002 *	Advanced Spanish	45	3

**Sub-total:** **90 hours      6 credits**

## CONCENTRATION COURSES

**Prescribed: 75 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMP	1205	Introduction to Computers	60	3
COMP	1503	Design and Assembly of Personal Computers	60	3
COMP	1504 *	Fundamentals of Operating Systems	60	3
COMP	1514	Components of Personal Computer	60	3
COMP	2407 *	Implementation of Informatic Security	60	3
COMP	2418 *	Network Fundamentals	75	4
COMP	2422 *	Server Administration	60	3
COMP	2423 *	Installation and Configuration of Servers	60	3
COMP	2424 *	Server Implementation	60	3
COMP	2425 *	Desk Support Technician I	60	3

COURSES	CODE	COURSE NAME	HOURS CONTACT	CREDITS
COMP	2426 *	Open Code Operating Systems	75	4
COMP	2427 *	Desk Support Technician II	60	3
COMP	2428 *	Exam Review CompTIA Network + Certification	60	3
COMP	2515 *	Diagnosis and Repair of Electronic Devices	120	6
COMP	2516 *	Exam Review CompTIA A + Certification	75	4
COMP	2517 *	Printers	15	1
COMP	3421 *	Server Configuration	60	3
COMP	3423 *	Advanced Implementation of Server Infrastructure	60	3
COMP	3424 *	Fundamentals of Analysis Wireless, Web, and Forensic	60	3
COMP	3501 *	Scripting Languages	60	3
COMP	4001 *	Ethical Hacking in Network Environment	75	4
COMP	4426 *	Supervised Project	75	4
MATH	2005	Technical Mathematics	60	3

**Sub-total:**

**1,470 hours**

**75 credits 214**

+



## TECHNICAL EDUCATION ELECTIVES - PROFESSIONAL \*\*

Electives: 12 Credits to choose

COURSES	CODE	COURSE NAME	HOURS CONTACT	CREDITS
COMP	1401 *	Programs for Computer Applications	60	3
COMP	1402 *	Database Structures	60	3
COMP	1408 *	Visual Basic Net Programming	60	3
COMP	2408 *	Database Development and SQL	60	3
COMP	2414 *	Design and Creation of WEB Portals	60	3
KEBO	1205	Keyboarding	60	3

Sub - total:

240 hours

12 credits

\*\* This section of the curriculum will be satisfied by technical / professional courses from a program accredited Computer Science.

**BACHELOR'S IN INFORMATION TECHNOLOGY, NETWORKS, AND SECURITY**

**SUGGESTED DAY STUDY PROGRAM \*\***

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
COMP	1205	Introduction to Computers	----	3
COMP	1503	Design and Assembly of Personal Computers	----	3
COMP	1514	Components of Personal Computers	----	3
ENGL	1101	Basic English I	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 13 CREDITS</b>				
COMP	1504	Fundamentals of Operating Systems	----	3
COMP	2515 *	Diagnostic and Repair of Electronic Devices	COMP 1205 COMP 1514	6
COMP	2517 *	Printers	COMP 1205	1
ENGL	1102 *	Basic English II	ENGL 1101	3
<b>THIRD TERM: 11 CREDITS</b>				
COMP	2407 *	Implementation of Informatic Security	COMP 1205	3
COMP	2418 *	Network Fundamentals	COMP 1504	4
COMP	2516 *	Review for the CompTIA A + Certification Exam	COMP 1205 COMP 1503 COMP 1504 COMP 1514 COMP 2515 COMP 2517 ENGL 1101	4
<b>FOURTH TERM: 12 CREDITS</b>				
COMP	2423 *	Installation and Configuration of Servers	COMP 1504  COMP 2418	3
COMP	2425 *	Desktop Support Technician I	COMP 2515	3
ENGL	3001	Conversational and Compositional English	----	3
MATH	2005	Technical Mathematics	----	3
<b>FIFTH TERM: 12 CREDITS</b>				
COMP	2422 *	Server Administration	COMP 2423	3
COMP	2427 *	Desk Support Technician II	COMP 2425	3
ELECTIVE		Professional Technical Elective	----	3
SPAN	1101	Basic Spanish I	----	3

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>SIXTH TERM: 13 CREDITS</b>				
COMP	2426 *	Open-Source Operating Systems	COMP 1504	4
COMP	2428 *	Review for the CompTIA Network+ Certification Exam	COMP 2418	3
ELECTIVE		Professional Technical Elective	----	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>SEVENTH TERM: 12 CREDITS</b>				
COMP	3421 *	Server Configuration	COMP 2422	3
COMU	3010	Effective Communication	----	3
ELECTIVE		Professional Technical Elective	----	3
ELECTIVE		General Education Elective	----	3
<b>EIGHTH TERM: 12 CREDITS</b>				
COMP	2424 *	Server Implementation	COMP 3421	3
COMP	3501 *	Scripting Languages	COMP 1504	3
ELECTIVE		Professional Technical Elective	----	3
ELECTIVE		General Education Elective	----	3
<b>NINTH TERM: 9 CREDITS</b>				
COMP	3423 *	Advanced Implementation of Infrastructure Servers	COMP 2424	3
COMP	3424 *	Fundamentals of Wireless, Web, and Forensic Analysis	COMP 1504	3
HIST	3004	History of Puerto Rico	----	3
<b>TENTH TERM: 11 CREDITS</b>				
COMP	4001 *	Ethical Hacking in Network Environment	COMP 2422 COMP 2423 COMP 2424	4
COMP	4426 *	Supervised Project	COMP 2422 COMP 2423 COMP 2424 last period COMP 2516	4
COPR	3011 ^ *	Contemporary Problems	last period	3

**BACHELOR'S IN INFORMATION TECHNOLOGY, NETWORKS, AND SECURITY**

**SUGGESTED STUDY PROGRAM NIGHT \*\***

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 12 CREDITS</b>				
COMP	1205	Introduction to Computers	----	3
COMP	1503	Design and Assembly of Personal Computers	----	3
COMP	1514	Components of Personal Computers	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12 CREDITS</b>				
COMP	1504	Fundamentals of Operating Systems	----	3
COMP	2515 *	Diagnostic and Repair of Electronic Devices	COMP 1205 COMP 1514	6
ENGL	1101	Basic English I	----	3
<b>THIRD TERM: 11 CREDITS</b>				
COMP	2407 *	Implementation of Informatic Security	COMP 1205	3
COMP	2418 *	Network Fundamentals	COMP 1504	4
COMP	2517 *	Printers	COMP 1205	1
ENGL	1102 *	Basic English II	ENGL 1101	3
<b>FOURTH TERM: 10 CREDITS</b>				
COMP	2516 *	Review of the CompTIA A + Certification Exam	COMP 1205 COMP 1503 COMP 1504 COMP 1514 COMP 2515 COMP 2517 ENGL 1101	4
ENGL	3001	Conversational and Compositional English	----	3
MATH	2005	Technical Mathematics	- - -	3
<b>FIFTH TERM: 9 CREDITS</b>				
COMP	2423 *	Installation and Configuration of Servers	COMP 1504 COMP 2418	3
COMP	2425 *	Desk Support Technician I	COMP 2515	3
ELECTIVE		Elective Professional Technician	----	3

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>SIXTH TERM: 10 CREDITS</b>				
COMP	2422 *	Server Administration	COMP 2423	3
COMP	2426 *	Open-Source Operating Systems	COMP 1504	4
COMP	2427 *	Desktop Support Technician II	COMP 2425	3
<b>SEVENTH TERM: 12 CREDITS</b>				
COMP	2428 *	Certification for the CompTIA Network + Exam Review	COMP 2418	3
COMP	3421 *	Server Configuration	COMP 2422	3
ELECTIVE		Professional Technical Elective	----	3
SPAN	1101	Basic Spanish I	----	3
<b>EIGHTH TERM: 12 CREDITS</b>				
COMP	2424 *	Implementation of Servers	COMP 3421	3
COMU	3010	Effective Communication	----	3
ELECTIVE		Professional Technical Elective	----	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>NINTH TERM: 12 CREDITS</b>				
COMP	3424 *	Fundamentals of Wireless, Web, and Forensic Analysis	COMP 1504	3
COMP	3501 *	Scripting Language	COMP 1504	3
ELECTIVE		General Education Elective	----	3
HIST	3004	History of Puerto Rico	----	3
<b>TENTH TERM: 10 CREDITS</b>				
COMP	3423 *	Advanced Implementation of Infrastructure Servers	COMP 2424	3
COMP	4001 *	Ethical Hacking in Network Environment	COMP 2422 COMP 2423 COMP 2424	4
ELECTIVE		Professional Technical Elective	----	3
<b>ELEVENTH TERM: 10 CREDITS</b>				
COMP	4426 *	Supervised Project	COMP 2422 COMP 2423 COMP 2424 last period COMP 2516	4
COPR	3011 ^ *	Contemporary Problems	Last period	3
ELECTIVE		General Education Elective	----	3

**Grand total of Bachelor's Degree in Information Technology, Networks, and Security: 120 credits and 2,235 hours**

-Courses without pre-requirements

\* Courses with pre-requirements

^ \* "Capstone" course of the General Education Component to enroll in the last term and without pre-requirements.

\*\*\* The SEMI 1105 course is equivalent to the SEMI 3008.

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems. Courses without pre-requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

#### **MINIMUM RATING POLICY**

Students enrolled in the Baccalaureate in Information Technology, Networks, and Security must obtain at least a grade of C when passing all Professional courses, except the Supervised Project (COMP 4426) that must be approved with a B or higher.

## ASSOCIATE DEGREE IN CYBER SECURITY

This program provides a set of tools based on security concepts. Knowledge and development of skills in the student to train them at an intermediate level technically and operationally so that they can perform effectively and competently in the work areas of cybersecurity that the company requires. Cyber security ensures that the security properties of an organization's assets and users are achieved and maintained against the corresponding security risks in the cyber environment. It emphasizes the pillars of cybersecurity: confidentiality, integrity, and accountability. This program enables people to monitor information systems, detect their vulnerability, be it internal or external, develop and/or implement methods both to prevent and to mitigate or avoid the escape or hijacking of sensitive information as well as cybercrimes in general.

### CURRICULAR STRUCTURE

#### GENERAL EDUCATION COURSES

**Prescribed: 18 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMU	3010	Effective Communication	45	3
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3

**Sub-total :**

**300 hours**

**18 credits**

## RELATED COURSES

**Prescribed: 29 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMP	1205	Introduction to Computers	60	3
COMP	1504	Fundamentals of Operating Systems	60	3
COMP	2418 *	Fundamentals of Networks	75	4
COMP	2423 *	Installation and Configuration of Servers	60	3
COMP	2426 *	Open-Source Operating Systems	75	4
COMP	2428 *	CompTIA Network + Certification Exam Review	60	3
COMP	3424 *	Fundamentals of Wireless, Web, and Forensic Analysis	60	3
COMP	3501 *	Scripting Languages	60	3
MANA	1207	Principles of Management	45	3

**Sub-total:**

**555 hours**

**29 credits**

## PROFESSIONAL EDUCATION COURSES

**Prescribed: 24 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
CISE	1000	Cyber Security Fundamentals	45	3
CISE	1002 *	Security in Systems and Mobile Communications	60	3
CISE	1003 *	Cyberattack Techniques and Cyber Defense Systems	105	5
CISE	2000 *	CompTIA Security + Certification Exam Review	60	3

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
CISE	2002 *	Audit	45	3
CISE	2003 *	Review of Ethical Hacking Certification	60	3
CISE	2004 *	Supervised Project	75	4

**Sub-total:**

**450 hours**

**24 credits**



# ASSOCIATE DEGREE IN CYBER SECURITY

## SUGGESTED PROGRAM OF STUDIES \*\*

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
CISE	1000	Fundamentals of Cyber Security	----	3
COMP	1205	Introduction to Computers	----	3
COMP	1504	Fundamentals of Operating Systems	----	3
ENGL	1101	Basic English I	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 14 CREDITS</b>				
CISE	1002 *	Security in Systems and Mobile Communications	COMP 1205	3
COMP	2418 *	Network Fundamentals	COMP 1504	4
COMP	2426 *	Open-Source Operating Systems	COMP 1504	4
SPAN	1101	Basic Spanish I	----	3
<b>THIRD TERM: 14 CREDITS</b>				
CISE	1003 *	Cyberattack Techniques and Cyber Defense Systems	CISE 1000	5
COMP	2423 *	Installation and Configuration of Servers	COMP 1504 COMP 2418	3
COMP	2428 *	CompTIA Network +Certification Exam Review	COMP 2418	3
ENGL	1102 *	Basic English II	ENGL 1101	3

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FOURTH TERM: 15 CREDITS</b>				
CISE	2000 *	Review of the CompTIA Security + Certification Exam	COMP 2428	3
CISE	2002 *	Audit	CISE 1000	3
COMP	3424 *	Fundamentals of Wireless Analysis, Web, and Forensic	COMP 1504	3
COMP	3501 *	Scripting Languages	COMP 1504	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>FIFTH TERM: 13 CREDITS</b>				
CISE	2003 *	Review of Ethical Hacking Certification	CISE 2000	3
CISE	2004 * ^ *	Supervised Project	CISE 1000, CISE 1002, CISE 1003, CISE 2000, CISE 2002, CISE 2003	4
COMU	3010	Effective Communication	----	3
MANA	1207	Principles of Management	----	3

**Grand Total of the Associate Degree in Cybersecurity: 71 credits and 1,305 hours**

---- Courses without pre-requirements

\* Courses with pre-requirements

\* ^ \* Courses with pre-requirements and “Capstone” course to enroll in the last term.

### MINIMUM RATING POLICY

Students enrolled in the Associate Degree in Cyber Security must obtain at least a grade of C by passing all Professional courses, except for the Supervised Project (CISE 2004), which must be passed with a B or higher.

## CERTIFICATE IN COMPUTER REPAIR TECHNICIAN

This program is designed to train and graduate technicians with the knowledge, skills, and aptitudes necessary to perform successfully in the field of computers repairs and electronic devices (personal computers, tablets, cell phones, and video game consoles). The graduate will be able to assemble, configure, maintain, and repair electronic devices. Additionally, the program introduces aspects related to the design, installation, and maintenance of networks. While studying, the student will be able to challenge the CompTIA A + certification. It consists of 36 credits and can be completed in one year.

### Additional program requirement:

1. Orientation with the Academic Coordinator

### Graduation requirements:

1. Have completed 36 credits between those taken at Columbia Central University and those transferred from other institutions or programs.
2. Have achieved a minimum GPA of 2.00 or more.

## CURRICULUM STRUCTURE

**Prescribed: 36 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
COMP	1205	Introduction to Computers	60	3
COMP	1503	Design and Assembly of Personal Computers	60	3
COMP	1504 *	Fundamentals of Operating Systems	60	3
COMP	1514	Components of Personal Computers	60	3
COMP	2407 *	Computer Security Implementation	60	3
COMP	2418 *	Network Fundamentals	75	4
COMP	2515 *	Diagnostic and Repair of Electronic Devices	120	6
COMP	2516 *	Review for the CompTIA A + Certification Exam	75	4
COMP	2517 *	Printers	15	1

**Sub - total:**

**690 hours**

**36 credits**

## CERTIFICATE IN COMPUTER REPAIR TECHNICIAN

### SUGGESTED PROGRAM OF STUDIES \*\*

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 12 CREDITS</b>				
COMP	1205	Introduction to Computers	---	3
COMP	1503	Design and Assembly of Personal Computers	---	3
COMP	1514	Components of Personal Computers	---	3
ENGL	1101	Basic English I	---	3
<b>SECOND TERM: 13 CREDITS</b>				
COMP	1504 *	Fundamentals of Operating Systems	---	3
COMP	2515 *	Diagnostic and Repair of Electronic Devices	COMP 1205 COMP 1514	6
COMP	2517 *	Printers	COMP 1205	1
ENGL	1102 *	Basic English II	ENGL 1101	3
<b>THIRD TERM: 11 CREDITS</b>				
COMP	2407 *	Computer Security Implementation	COMP 1205	3
COMP	2418 *	Fundamentals of Networking	COMP 1504	4
COMP	2516 *	Review for the CompTIA A + Certification Exam	COMP 1205 COMP 1503 COMP 1504 COMP 1514 COMP 2515 COMP 2517 ENGL 1101 ENGL 1102	4

**Grand total of Certificate in Computer Repair Technician: 36 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems.

### **MINIMUM RATING POLICY**

Students enrolled in the Certificate in Computer Repair Technician must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

## SCHOOL OF HEALTH SCIENCES

## MASTER'S IN NURSING SCIENCES

### SPECIALIZED IN ADULTS AND THE ELDERLY \*

The purpose of the master's program is to prepare a highly trained professional by providing comprehensive quality care, such as leadership, with a high concept of human values, decision-making in the areas of administration and education, using scientific principles that allow them to successfully face and excellence the present and future challenges. The student will practice his/her role as educator and administrator with commitment, responsibility, and quality.

#### **Additional requirements of the program for those students who are interested in enrolling in courses offered at Distance:**

For the development of the activities that will allow to achieve the program objectives, it is convenient that the student can count on:

- access to a computer
- Internet access
- The programs that the computer should have are word processor (Word), attractive presentations (Power Point) and Adobe Reader.

#### **Additional requirements for nursing courses that require practice in a center \*\*.**

1. Criminal record certificate from the Puerto Rico Police
2. Current Health Certificate
3. Birth Certificate
4. Negative offender certificate for old people and children (Law 300)
5. HIPPA certification
6. Photos
7. Mask Test
8. Hepatitis B Vaccines-If more than 10 years have passed, blood test for immunity.
9. Varicella Vaccines. If you have had chickenpox, test for chickenpox titers.
10. Seasonal Influenza Vaccine
11. Cualquier otra prueba requerida por el centro de práctica
12. CPR
13. Doping test - depends on the practice center

14. Current membership

15. License Issued by the Current Board of Nursing

### GRADUATION REQUIREMENTS:

Graduation candidates will be all students who:

1. Complete your study program with a 3.00 GPA.
2. Have met their financial obligations.

\* Only available in the Caguas Campus

\*\* As required by the practice center

## CURRICULUM STRUCTURE

### CORE COURSES \*\*\*

Prescribed: 18 credits

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
NURS	5110	Nursing Theories and Models	30	2
NURS	5111 **	Proposal for Advanced Research in Nursing	45	3
NURS	5112 **	Project for Advanced Research in Nursing	45	3
NURS	6143	Advanced Pathophysiology	45	3
PHAR	6150	Advanced Pharmacology	30	2
PHEX	6144	Estimated Health in Advanced Practice	60	2
QUME	5103	Quantitative Methods	45	3

**Sub-Total:** 300 hours 18 credits

### SPECIALTY COURSES \*\*\*

Prescribed Specialty: 8 credits

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
NURS	6141 **	Advanced Thematic Seminar for Adults and the Elderly I	90	4
NURS	6142 **	Advanced Thematic Seminar for Adults and the Elderly II	90	4

**Sub-Total:** 180 credits 8 credits



## ROLE IN EDUCATION IN NURSING SCIENCES

### CORE COURSES ELECTIVES

Core elective: 6 credits to choose

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
EDUC	6140	Assessment Techniques	45	3
EDUC	6145	Andragogy	45	3
EDUC	6147	Assessment Techniques	45	3
NURS	6146	Teaching and Learning Methods in Nursing	45	3

Sub-Total:

90 hours

6 credits

### ROLE COURSES IN EDUCATION

Prescribed: 9 credits

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
NURS	6151	Curriculum Development in Nursing Education	45	3
NURS	6152 **	Educational Processes in Nursing Teaching	60	4
NURS	6153 **	Educational Practice in Nursing Teaching	90	2

Sub-Total:

195 hours

9 credits

**MASTER'S IN NURSING SCIENCE SPECIALIZED IN ADULTS AND THE ELDERLY**

**ROLE IN EDUCATION IN SCIENCE IN NURSING**

**SUGGESTED PROGRAM OF STUDY \*\***

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 5 CREDITS</b>				
NURS	5110	Nursing Theories and Models	----	2
NURS	6143	Advanced Pathophysiology	----	3
<b>SECOND TERM: 5 CREDITS</b>				
PHAR	6150	Advanced Pharmacology	----	2
QUME	5103	Quantitative Methods	----	3
<b>THIRD TERM: 5 CREDITS</b>				
NURS	5111 *	Proposal for Advanced Research in Nursing	QUME 5103	3
PHEX	6144	Estimated Health in Advanced Practice	----	2
<b>FOURTH TERM: 7 CREDITS</b>				
ELECTIVE * ^		Core Elective Course of the Role of Education	----	3
NURS	6141 *	Advanced Thematic Seminar Adults and the Elderly I	NURS 6143 PHAR 6150 PHEX 6144	4
<b>FIFTH TERM: 7 CREDITS</b>				
NURS	6142 *	Advanced Thematic Seminar Adults and the Elderly II	NURS 6141	4
NURS	6151	Curriculum Development in Nursing Education	----	3
<b>SIX TERM: 7 CREDITS</b>				
NURS	5112 *	Advanced Research Project in Nursing	NURS 5111	3
NURS	6152 *	Educational Processes in Nursing Teaching	NURS 6151	4
<b>SEVENTH TERM: 5 CREDITS</b>				
ELECTIVE * ^		Core Elective Course of the Role of Education	----	3
NURS	6153 *	Educational Practice in Nursing Teaching	NURS 6152	2

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## MASTER'S IN NURSING SCIENCE SPECIALIED IN ADULTS AND THE ELDERLY

### \* CURRICULAR STRUCTURE

#### NURSING SERVICE MANAGEMENT ROLE CORE ELECTIVES COURSES

**Core electives: 6 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
HUBE	5101	Organizational Conduct	45	3
HURE	6131	Human Resources Management	45	3
MAHE	6138	Health System Organization Management	45	3
MAHE	6139 * ^	Legal Aspects and Regulations in Health Systems Management	45	3
MANA	6132	Decision Making Techniques	45	3

**Sub-Total:**

**90 hours**

**6 credits**

#### MANAGEMENT ROLE COURSES

**Prescribed: 9 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
MAHE	6140 **	Planning, Assessment, and Control of Health Systems	45	3
NURS	6149 **	Management Processes in Nursing Services	60	4
NURS	6150 **	Management Practice in Nursing Services	90	2

**Sub-Total:**

**195 hours**

**9 credits**

The curricular structure of the Master's in Nursing Science with a Specialty in Adults and the Elderly includes the following components:

COMPONENT	CREDIT
Prescribed Core Courses	18
Specialty Courses	8
Elective Core Courses	6

Courses in Education or Management Role	9
<b>Total</b>	<b>41</b>

**MASTER'S IN NURSING SCIENCE SPECIALIZED IN ADULTS AND THE ELDERLY  
ROLE IN NURSING SERVICES MANAGEMENT**

**SUGGESTED PROGRAM OF STUDY \*\***

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUISITES</b>	<b>CREDITS</b>
<b>FIRST TERM: 5 CREDITS</b>				
NURS	5110	Theories and Models in Nursing	----	2
NURS	6143	Advanced Pathophysiology	----	3
<b>SECOND TERM: 5 CREDITS</b>				
PHAR	6150	Advanced Pharmacology	----	2
QUME	5103	Quantitative Methods	----	3
<b>THIRD TERM: 5 CREDITS</b>				
NURS	5111 *	Proposal for Advanced Research in Nursing	QUME 5103	3
PHEX	6144	Estimated Health in Advanced Practice	----	2
<b>FOURTH TERM: 7 CREDITS</b>				
ELECTIVE * ^		Elective Core Course of the Management Role	----	3
NURS	6141 *	Advanced Thematic Seminar for Adults and the Elderly I	NURS 6143 PHAR 6150 PHEX 6144	4
<b>FIFTH TERM: 7 CREDITS</b>				
MAHE	6140 *	Planning, Assessment, and Control of Health Systems	MAHE 6139	3
NURS	6142 *	Advanced Thematic Seminar for Adults and the Elderly II	NURS 6141	4
<b>SIXTH TERM: 7 CREDITS</b>				
NURS	5112 *	Advanced Research Project in Nursing	NURS 5111	3
NURS	6149*	Management Processes in Nursing Services	MAHE 6140	4
<b>SEVENTH TERM: 5 CREDITS</b>				
ELECTIVE * ^		Elective Core Course of the Management Role	----	

NURS	6150*	Management Practice in Nursing Services	NURS 6149	2
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**Only available in the Caguas Campus**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ The MAHE 6139 core elective course is a pre-requisite of the MAHE 6140 specialty course of the Role in Management.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems.

\*\*\* The template for core courses and adult and senior specialty courses is required for all specialties of the graduate program (MSN).

### **MINIMUM RATING POLICY**

Students enrolled in the Master's in Nursing Science with a Specialty in Adults and the Elderly must obtain a minimum grade of **B** in all courses.

## BACHELOR'S IN NURSING SCIENCE RN TO BSN

The purpose of the Bachelor's in Nursing Science RN to BSN program is to prepare associate degree nurses at the baccalaureate level. The graduate of this program will be able to use critical judgment when designing care plans to promote, maintain, and restore the health of the individuals they serve. She (He) is a leader in her/his care who, by collaborating with the interdisciplinary team, offers quality health services.

The program also has as one of its goals to emphasize the knowledge required by the Puerto Rico Nurses Examining Board for the granting of the Generalist Nurse License, which allows the legal practice of the profession in Puerto Rico. Rich. To graduate, between credits taken at Columbia Central University and those transferred from other institutions or programs, they must have completed at least 124 credits.

The Bachelor's in Nursing Science RN to BSN program rests on the Associate Degree program.

### **Additional requirement for admission to the program:**

The applicant for the Bachelor's in Nursing Science RN to BSN must meet the following requirements:

1. Possess an Associate Degree in Nursing Science
2. Receive training by Eduvirtual for those students who are interested in the online modality.

### **Additional program requirement:**

1. Orientation with the Academic Coordinator

### **Additional requirements for nursing courses that require practice in a center \*:**

Requirements must be submitted to the office of the Clinical Practice Administrative Assistant in the undergraduate Nursing Sciences programs. Failure to deliver or complete these documents implies that the student will not be authorized to take the Program courses.

1. Criminal record certificate from the Puerto Rico Police

2. Current health certificate
3. Birth certificate
4. Negative offender certificate for old people and children (Law 300)
5. Certificate of protective techniques
6. HIPPA Certification
7. Photo identification
8. Face seal test
9. Hepatitis B vaccines in case of more than 10 years of having received it, a blood test is required to demonstrate immunity.
10. Varicella Vaccine (2 doses) in case of having had chickenpox, a blood test or varicella titers is required to demonstrate immunity.
11. Seasonal Flu Vaccine
12. Culture of nose, throat, and stool
13. Certificate of Cardiopulmonary Resuscitation (CPR)
14. Doping tests (depends on the practice center)
15. OSHA certification

\* As required by the practice center

**Graduation requirements:**

1. For graduates with an Associate Degree of Science in Nursing from CCU
  - a. Graduates with an Associate Degree in Nursing Science from CCU are required to complete 52 credits from the Bachelor's in Nursing Science RN to BSN for a grand total of 124 credits. These are detailed as follows:

b.

Component	Associate Degree Level of Nursing Science	Bachelor Level in Nursing Science RN to BSN	Credits
General Education	15	15	30
Electives	0	9	9
Related Courses	13	9	22
Education Career/ Concentration	44	19	63
<b>Total</b>	<b>72</b>	<b>52</b>	<b>124</b>

B. In the case of transfer students, they must pass the 52 credits of the Bachelor's in Nursing Science RN to BSN.

C. All students:

- a. Have achieved an average of 2.75 in professional courses.
- b. Have achieved an average of 2.25 in related courses.
- c. Have achieved a minimum GPA of 2.25.

**Additional requirements of the Bachelor's in Nursing Science program RN to BSN through the online modality:**

For the development of the activities that will allow to achieve the objectives of the program, it is convenient that the student can have:

- access to a computer
- access to the internet
- the programs that the computer should have are word processor (Word), attractive presentations (power point), and Adobe Reader.



## CURRICULUM STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 15 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMU	3010	Effective Communication	45	3
COPR	3011 **	Contemporary Problems	45	3
HIST	3004	History of Puerto Rico	45	3
HUMA	3006	Universal History II	45	3
SOCI	2015	Principles of Sociology	45	3

**Sub - total:** **225 hours** **15 credits**

\*\* General Education Capstone course to enroll in the last term.

### GENERAL EDUCATION ELECTIVES

(9 credits to choose from)

**Electives: 9 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ART	2009	History of Art	45	3
COMP	1205	Introduction to Computers	60	3
ECON	2012	Puerto Rican Economy	45	3
ENGL	3001 ***	Conversational and Compositional English	45	3
POSC	2013	Introduction to Political Science	45	3
SPAN	3002 *	Advanced Spanish	45	3

**Sub - total:** **135 or 150 hours** **9 credits**

\*\*\* It is offered in person only

## RELATED COURSES

**Prescribed: 9 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
CHEM	3501	Fundamentals of Inorganic Chemistry	60	3
CHEM	3502 *	Fundamentals of Organic Chemistry	60	3
STAT	3103	Statistics	45	3

**Sub - total:** **165 hours** **9 credits**

## CONCENTRATION COURSES

**Prescribed: 19 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
NURS	3503	Nursing Theories in Health Promotion	45	3
NURS	3504	Health Estimate for Prevention	90	4
NURS	3505 *	Principles of Research in Health and Nursing	60	3
NURS	4113 *	Nursing Process with Families and Community	90	4
NURS	4114 **	Theory and Practice in the Administration of Nursing Services	135	5

**Sub - total:** **420 hours** **19 credits**

# BACHELOR'S IN NURSING SCIENCE RN TO BSN

## SUGGESTED STUDY PROGRAM \*\*

(Presential and Online modality)

COURSE	CODE	COURSE NAME	PRE-REQUISITES	CREDITS
<b>FIRST TERM: 13 CREDITS</b>				
COMU	3010	Effective Communication	---	3
NURS	3503	Nursing Theories in Health Promotion	---	3
NURS	3504	Health Estimate for Prevention	---	4
STAT	3103	Statistics	---	3
<b>SECOND TERM: 15 CREDITS</b>				
CHEM	3501	Foundations of Inorganic Chemistry	---	3
ELECTIVE		General Education	---	3
HIST	3004	History of Puerto Rico	---	3
NURS	3505 *	Principles of Health and Nursing	Research NURS 3503 NURS 3504 STAT 3103	3
SOCI	2015	Principles of Sociology	-- -	3
<b>THIRD TERM: 13 CREDITS</b>				
CHEM	3502 *	Fundamentals of Organic Chemistry	CHEM 3501	3
ELECTIVE		General Education	---	3
HUMA	3006	World History II	---	3
NURS	4113 *	Nursing Process with Families and Community	NURS 3503 NURS 3504 NURS 3505 STAT 3103	4
<b>FOURTH TERM: 11 CREDITS</b>				
COPR	3011 **	Contemporary Problems	-	3
NURS	4114 * ^ *	Theory and Practice in the Administration of Nursing Services	NURS 3503 NURS 3504 NURS 3505 NURS 4113 STAT 3103	5
ELECTIVE		General Education	-	3

**Grand total of Bachelor's in Nursing Science RN to BSN: 124 \*\*\* credits**

-Courses without pre-requisites

\* Courses with pre-requisites

\*\* Course with pre-requisites and “Capstone” course to be enrolled in the last term.

\*\*\* For students with an Associate Degree in Nursing Science from CCU it is required to complete the 52 credits of the Bachelor’s in Nursing Science RN to BSN for a grand total of 124 credits. In the case of transfer students, they must pass the 52 credits of the Bachelor’s in Nursing Science RN to BSN.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems. Courses without pre-requirements do not have a specific order. The student can register in them in the term that they are offered.

### **MINIMUM RATING POLICY**

Students enrolled in the Bachelor’s in Nursing Science RN to BSN must obtain, at a minimum, a grade of C to pass the following courses:

CHEM 3501 NURS 3504 STAT 3103 CHEM 3502 NURS 3505

COPR 3011 NURS 4113 NURS 3503 NURS 4114

## BACHELOR'S IN NURSING SCIENCE

The Baccalaureate Program in Nursing Sciences prepares the student to perform in a profession with high labor demand. Its main purpose is to develop qualified general nurses, leaders in health care. The student will develop the necessary skills for decision-making in health settings. The program consists of 125 credits. Classes are divided into general, related, and concentration courses. Through the courses the student will be exposed to clinical practices in which they will perform functions and will use the skills and knowledge learned in theoretical classes with real patients. The student will be prepared to face and meet the health service needs of patients with different conditions and in various settings. The program trains the student to acquire the necessary skills that will help them challenge the revalidation exam offered by the Nurses Examining Board and Nurses of Puerto Rico and thus be able to obtain the license that empowers them to practice in accordance with Law 254, in the category of Generalist Nurse.

### PROGRAM OBJECTIVES

1. Train the student with the skills, competencies, and attitudes necessary to apply the nursing processes in their different roles by offering direct care to patients in a variety of health settings and diversity of populations such as general nurses.
2. Apply effective communication skills, analytical critical thinking, and the use of technology to preserve and guarantee the quality of the health care service offered to the patient and their family.
3. To develop in the student the capacity for critical judgment for problem solving and decision making so that he/she can practice nursing from a humanistic, holistic perspective, based on critical thinking.
4. Develop in the student professional attitudes, soft skills, effective interpersonal skills, and responsibility based on the ethical basis of the profession.
5. Develop in the student the knowledge required to handle impact situations so that they can perform with safety, sensitivity, ethics, and empathy with patients and their families or managers.
6. Provide differentiating elements to the nursing profession that increase the quality of life of the human being through evidence-based practice and cultural sensitivity.

7. Prepare students to act as agents of administration, health promotion, and disease prevention in communities with democratic and participatory leadership.
8. Train the student so that he/she can know, interpret, and understand the biological, psychological, and social conditions that favor the good state of physical, emotional, and spiritual health of the human being in a holistic approach.

## **PRACTICE REQUIREMENTS**

It is required to take the practice component of the program, the following current and original documents:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines (3 doses)
4. HIPAA Law Certificate
5. Cardiopulmonary Resuscitation (CPR) Certification
6. Doping Test\*
7. Respiratory Test \*
8. Vaccine Influenza \*
9. Varicella Vaccine \*
10. Fit Test or Masks \*
11. Negative Certification of Law 300-Law on Verification of Credentials and Criminal History of Providers to Children, People with Disabilities, and Health Professionals.
12. Certification for Tuberculin Test Reading and Administration (CPI) \*

\* **Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

## **REQUIREMENTS OF REVALIDATION**

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Criminal Record Certificate (less than 3 months from issuance)
2. Health Certificate
3. Birth Certificate and Social Security Card

4. High School Credit Transcript
5. Credit Transcript, Diploma, or Certification of Bachelor in Nurse Science obtained at CCU (formerly EDIC College).
6. Application completed in all its parts, including the Affidavit with 2x2 photo and two letter-size envelopes with postage stamp.
7. Payment to the Secretary of the Treasury in the amount of \$25.00 dollars for the right to a revalidation examination by money order, bank, or certified check provided that the fees for the license application and examination shall not be reimbursed to the applicant.

## BACHELOR'S IN NURSING SCIENCES

**CURRICULUM: SEPTEMBER 2020**

### CURRICULAR STRUCTURE

#### GENERAL EDUCATION COURSES

**Prescribed: 21 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3
COMP	1205	Introduction to Computers	60	3
MATH	2002	General Mathematics	45	3

**Sub-total:**

**360 hours**

**21 credits**

## ELECTIVES GENERAL EDUCATION

**Prescribed: The student will select three courses for a total of 9 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMU	3010	Effective Communication	45	3
COPR	3011	Contemporary Problems	45	3
HIST	3004	History of Puerto Rico	45	3
HUMA	3006	Universal History	45	3
SOCI	2015	Principles of Sociology	45	3

**Sub-total:**

**135 hours**

**9 credits**

## RELATED COURSES

**Prescribed: 19 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
BIOL	1601	Human Anatomy and Physiology I	60	3
BIOL	1602 *	Human Anatomy and Physiology II	60	3
BIOL	1603	Microbiology	75	4
CHEM	3501	Foundations of Inorganic Chemistry	60	3
PSYC	2014	Principles of Psychology	45	3
STAT	3103	Statistics	45	3

**Sub-total:**

**345 hours**

**19 credits**



**BACHELOR'S IN NURSING SCIENCE**  
**CURRICULUM: SEPTEMBER 2020**  
**CURRICULUM STRUCTURE**

**CONCENTRATION COURSES (CORE)**

**Prescribed: 76 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
NURS	2501	Introduction to the Nursing Profession	45	3
NURS	2531 *	Nursing Role in Patient's Health History and Physical Examination	45	3
NURS	2541 *	Pharmacology	45	3
NURS	2551 *	Nursing Role in Drug Administration: Laboratory	60	2
NURS	2561 *	Foundations of the Nursing Profession	75	4
NURS	2571 *	Foundations of the Nursing Profession: Practice	90	2
NURS	3101 *	Nursing Role in Mental Health and Psychiatry	75	4
NURS	3111 *	Nursing Role in Mental Health and Psychiatry: Practice	90	2
NURS	3120 *	Nursing Role in the Care of Adults and the Elderly I	90	5
NURS	3131 *	Nursing Role in the Care of Adults and the Elderly I: Practice	90	2
NURS	3141 *	Nursing Role in the Care of Adults and the Elderly II	90	5
NURS	3150 *	Nursing Role in the Care of Adults and the Elderly II: Practice	90	2
NURS	3160 *	Nursing Role in Maternity Care	75	4
NURS	3170 *	Nursing Role in Maternity Care: Practice	90	2
NURS	3180 *	Nursing Role in Pediatric Care	75	4
NURS	3190 *	Nursing Role in Pediatric Care: Practice	90	2

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
NURS	4010 *	Nursing Role in Health Information Systems	45	3
NURS	4030	Nursing Role in Nutrition	45	3
NURS	4040	Cultural Diversity in The Nursing Profession	45	3
NURS	4050 *	Nursing Role in Evidence-Based Practice: Research Process	45	3
NURS	4060 *	Nursing Role in Family and Community Care	60	4
NURS	4070 *	Nursing Role in Family and Community Care: Practice	90	2
NURS	4080 *	Nursing Seminar	45	3
NURS	4090 *	Nursing Role in Management and Leadership: Seminar	Four. Five	3
NURS	4100 *	Practicum: Nursing Management and Leadership: Clinical Experience	135	3
<b>Sub-total:</b>			<b>1,770 hours</b>	<b>76 credits</b>

**BACHELOR'S IN NURSING SCIENCE CURRICULUM:  
SEPTEMBER 2020**

**SUGGESTED PROGRAM OF STUDIES**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 15 CREDITS</b>				
BIOL	1601	Human Anatomy and Physiology I	----	3
COMP	1205	Introduction to Computers	----	3
NURS	2501	Introduction to the Nursing Profession	----	3
MATH	2002	General Mathematics	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12 CREDITS</b>				
BIOL	1602 *	Human Anatomy and Physiology II	BIOL 1601	3
NURS	2561	Foundations of the Nursing Profession	BIOL 1601 NURS 2501	4
NURS	2571	Foundations of the Nursing Profession: Practice	BIOL 1601 NURS 2501	two
SPAN	1101	Basic Spanish I	----	3
<b>THIRD TERM: 15 CREDITS</b>				
BIOL	1603	Microbiology	----	4
NURS	2531	Nursing Role in Patient's Health History and Physical Examination	----	3
NURS	2541	Pharmacology	NURS 2501 NURS 2561 NURS 2571	3
NURS	2551	Nursing Role in Drug Administration: Laboratory	MATH 2002 NURS 2501 NURS 2561 NURS 2571	2
SPAN	1102 *	Basic Spanish II	SPAN 1101	3

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FOURTH TERM: 16 CREDITS</b>				
CHEM	3501	Inorganic Chemistry Fundamentals	----	3
NURS	3101	Nursing Role in Mental Health and Psychiatry	NURS 2501 NURS 2531 NURS 2541 NURS 2551 NURS 2561 NURS 2571	4
NURS	3111	Nursing Role in Mental Health and Psychiatry: Practice	NURS 2501 NURS 2531 NURS 2541 NURS 2551 NURS 2561 NURS 2571	2
NURS	3120	Nursing Role in the Care of Adults and the Elderly I	NURS 2501 NURS 2571 NURS 2531 NURS 2541 NURS 2551 NURS 2561	5
NURS	3131	Nursing Role in the Care of Adults and the Elderly I: Practice	NURS 2501 NURS 2571 NURS 2531 NURS 2541 NURS 2551 NURS 2561	2
<b>FIFTH TERM - 16 CREDITS</b>				
ENGL	1101	Basic English I	----	3
NURS	3141	Nursing Role in the Care of Adults and the Elderly II	NURS 3120 NURS 3131	5
NURS	3150	Nursing Role in the Care of Adults and the Elderly II: Practice	NURS 3120 NURS 3131	two
NURS	3160	Nursing Role in Maternity Care	NURS 2501 NURS 2531 NURS 2541 NURS 2551 NURS 2561 NURS 2571	4
NURS	3170	Nursing Role in Maternity Care: Practice	NURS 2501 NURS 2531 NURS 2541 NURS 2551 NURS 2561 NURS 2571	2

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>SIXTH TERM: 15 CREDITS</b>				
ELECTIVE		General education	----	3
ENGL	1102	Basic English II	ENGL 1101	3
NURS	3180	Nursing Role in Pediatric Care	NURS 2501 NURS 2531 NURS 2541 NURS 2551 NURS 2561 NURS 2571	4
NURS	3190	Nursing Role in Pediatric Care: Practice	NURS 2501 NURS 2531 NURS 2541 NURS 2551 NURS 2561 NURS 2571	2
NURS	4030	Nursing Role in Nutrition	----	3
<b>SEVENTH TERM: 12 CREDITS</b>				
ELECTIVE		General education	----	3
STAT	3103	Statistics	----	3
NURS	4010	Nursing Role in Health Information Systems	----	3
NURS	4090	Nursing Role in Management and Leadership: Seminar	----	3
<b>EIGHTH TERM: 12 CREDITS</b>				
NURS	4040	Cultural Diversity in the Nursing Profession	----	3
NURS	4050	Nursing Role in Evidence-Based Practice: Research Process	STAT 3103	3
NURS	4060	Nursing Role in Family and Community Care	NURS 4010 NURS 4030 NURS 4090	4
NURS	4070	Nursing Role in Family and Community Care: Practice	NURS 4010 NURS 4030 NURS 4090	2

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS:
<b>NINTH TERM 12 CREDITS</b>				
ELECTIVE * ^		General education	----	3
PSYC	2014	Principles of Psychology	----	3
NURS	4080	Nursing Seminar	NURS 3140 NURS 3150 NURS 3160 NURS 3170 NURS 3180 NURS 3190 NURS 4010 NURS 4030 NURS 4040 NURS 4050 NURS 4090	3
		Practicum - Management and Leadership in Nursing - Clinical Experience	NURS 3140 NURS 3150 NURS 3160 NURS 3170 NURS 3180 NURS 3190 NURS 4010 NURS 4030 NURS 4040 NURS 4050 NURS 4090	3

<b>GENERAL EDUCATION-ELECTIVE COURSES TO CHOOSE: 9 CREDITS</b>				
COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
COMMU	3010	Effective Communication	-----	3
COPR	3011	Contemporary Problems	-----	3
HIST	3004	History of Puerto Rico	-----	3
HUMA	3006	World History	-----	3
SOCI	2015	Principles of Sociology	-----	3

**Grand total of Bachelor of Science in Nursing: 125 credits and 2,610 hours**

---- Courses without pre-requirements

\* ^ “Capstone” course of General Education, to be registered in the last term

\* ^ \* Course with pre-requirements and “Capstone” course of Professional Education, to be registered in the last term.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems. Courses without pre-requirements do not have a specific order. The student can register in them in the term that they are offered.

#### MINIMUM RATING POLICY

Students enrolled in the Bachelor’s in Nursing Science must obtain at least a grade of C (70% or higher) to pass all professional and concentration courses, except those clinical practice courses that must be passed with a B (80%) or plus.

1. The following courses must be approved with a grade of C or higher:

BIOL 1601	BIOL 1602 *	BIOL 1603	SEMI 1105	CHEM 3501	PSYC 2014
STAT 3103	NURS 2501	NURS 2561	NURS 2531	NURS 2541	NURS 2551
NURS 3101	NURS 3120	NURS 3141	NURS 3160	NURS 3180	NURS 4030
NURS 4010	NURS 4040	NURS 4050	NURS 4060	NURS 4080	NURS 4090

2. The following courses must be approved with a grade of B or higher:

NURS 2571 *	NURS 3111 *	NURS 3131 *	NURS 3150 *	NURS 3170 *	NURS 3190 *
NURS 4070 *	NURS 4100 *				

## BACHELOR'S IN DIAGNOSTIC IMAGING WITH CONCENTRATION ON CT AND MRI

The Bachelor's in Diagnostic Imaging with a Concentration in CT and MRI is an academic program that offers students the opportunity to become trained and qualified professionals in the health field through the performance of diagnostic imaging. These professionals perform radiology studies that help the radiologist make a better diagnosis of the conditions that affect patients. Through this program, the student will also acquire the skills and competencies necessary to perform studies in the modalities of computed tomography and magnetic resonance imaging.

The program lasts 36 months and consists of 135 credits. The courses are divided into general education courses, related courses, and concentration courses. The program has 5 clinical practices, which are aligned to theory and laboratory courses to allow students to apply their knowledge in real-world clinical settings.

Candidates for the program must be 18 years or older or must have met this requirement by the time they start their first internship. Upon completion of the 135 credits, students will receive a Bachelor's Degree in Diagnostic Imaging with a concentration in CT and MRI.

This program trains students to acquire the necessary skills that will help them pass the exam offered by the Examining Board of Radiological Technologists in Diagnostic Imaging and Radiotherapy Technologists of Puerto Rico and obtain their license once the requirements of the law have been met.

### PROGRAM OBJECTIVES

The Baccalaureate program in Diagnostic Imaging with a Concentration in Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) is aimed at equipping the student with the knowledge, skills, attitudes, and competencies necessary so that they can exercise optimal performance in a variety of scenarios of health services and before a diversity of populations as established by the Regulations of the Examining Board of Radiological Technologists in Diagnostic Imaging and Radiotherapy Technologists of PR and the ARRT.

1. Students will develop patient care focused on providing superior quality care.
2. Students will demonstrate critical thinking skills in the clinical setting.



3. Students shall adopt a philosophy of lifelong learning through continuing education and professional involvement.
4. Students must embrace the core values of CCU (formerly EDIC College) and ARRT.
5. Students will be able to communicate effectively in a variety of methods.

### **PRACTICE REQUIREMENTS**

It is required to take the practice component of the program, the following current and original documents:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines
4. Varicella Vaccines
5. HIPAA Law Certificate
6. Cardiopulmonary Resuscitation (CPR) Certification
7. Negative Certification of Law 300-Law of Verification of Credentials and Criminal History of Children, People with Disabilities, and Health Professional Providers
8. Doping\* Test
9. Respiratory Test \*
10. Influenza Vaccine \*
11. Clinical Practice Presentation Letter
12. Practice Authorization Form

**\* Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

### **REQUIREMENTS FOR REVALIDATION**

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Criminal Record Certificate (less than 3 months from issuance)
2. Health Certificate
3. Birth Certificate and Social Security Card
4. High School Credit Transcript

5. Credit Transcript, Diploma, Certification of Associate Degree in Radiological Technology obtained at CCU (formerly EDIC College) sent directly to the Examining Board of Radiology Technologists at the following address:

Examining Board of Radiology Technologists

Call Box10200

Santurce, PR 00908-0200

6. Application completed in all its parts, including the Affidavit with 2x2 photo and 2 letter-size envelopes with postage stamp.
7. Payment to the Secretary of the Treasury in the amount of \$40.00 dollars for the right to a revalidation examination by money order.

All radiological technologists aspiring to the certification license in the CT and MRI specialties

must present the following documents (original and copy) to request revalidation:

1. Birth Certificate.
2. Negative Criminal Record Certificate. (No more than 6 months from the date the application is to be filed.)
3. Radiological technologist license
4. Valid Registration Card or Certification as a Radiological Technologist
5. Degree and/or Diploma Certification (Post Associate and/or Baccalaureate).
6. Transcript of Official Credit with the Degree Awarded (Post Graduate Associate and/or Baccalaureate) in Diagnostic Imaging Technology with a specialty in the requested specialty. It should be sent directly from the University or College and directly to:

Board of Radiological Technologists (SPECIALTY)

PO Box 10200,

Santurce, Puerto Rico 00908-0200

7. Application completed in all its parts, including the Affidavit with 2x2 photo and 2 letter-size envelopes with postage stamp.
8. Payment to the Secretary of the Treasury for admission to revalidation for \$30.00 for each specialty.

**BACHELOR'S IN DIAGNOSTIC IMAGING WITH A  
CONCENTRATION ON CT AND MRI  
CURRICULUM: SEPTEMBER 2020**

**CURRICULAR STRUCTURE**

**GENERAL EDUCATION COURSES**

**Prescribed: 20 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
SPAN	201	Basic Spanish I	45	3
SPAN	202	Basic Spanish II	45	3
ENGL	201	Basic English I	45	3
ENGL	202	Basic English II	45	3
MATH	201	Introductory Algebra	45	3
COMP	200	Introduction to Computers	60	2
PSYC	200	Principles of Psychology	45	3

**Sub-total: 330 hours 20 credits**

**ELECTIVES GENERAL EDUCATION**

**Prescribed: Students will be able to select 5 courses for a total of 15 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
HUMA	301	Humanities	45	3
ART	301	Appreciation of the Arts	45	3
CISO	301	Introduction to Social Sciences	45	3
COMU	301	Effective Communication	45	3
HIST	301	History of Puerto Rico	45	3
SPAN	301	20th Century Puerto Rican Literature	45	3

**Sub-total: 225 hours 15 credits**

**RELATED COURSES**

**Prescribed: 19 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
ANAT	201	Human Anatomy and Physiology I	75	4
ANAT	202	Human Anatomy and Physiology II	75	4
ANAT	203	Sectional Anatomy	60	3
PHSC	200	Introduction to Physics	45	3
PHSC	201	Radiological Physics	45	3
MEDT	200	Medical Terminology	30	2

**Sub-total: 330 hours 19 credits**

**BACHELOR IN DIAGNOSTIC IMAGING WITH A CONCENTRATION  
ON CT AND MRI CURRICULUM: SEPTEMBER 2020**

**CURRICULAR STRUCTURE**

**CORE COURSES**

**Prescribed: 78 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
RADI	200	Introduction to Radiology	30	2
RADI	218	Patient Care and Management	30	2
RADI	202	Radiographic Positioning and Related Anatomy I	30	2
RADI	202L	Radiographic Positioning and Related Anatomy I: Laboratory	30	1
RADI	203	Modality and Equipment Knowledge Imaging	30	2
RADI	204	Integrative Seminar	60	2
RADI	205	Principles of Radiographic Exposure	45	3
RADI	206	Principles of Radiobiology and Radiological Protection	30	2
RADI	207	Radiographic Positioning and Related Anatomy II	30	2
RADI	207L	Radiographic Positioning and Related Anatomy II: Laboratory	30	1
RADI	208	Clinical Internship I	135	3
RADI	217	Radiographic Quality Assurance and Control	30	2
RADI	210	Radiographic Positioning and Related Anatomy III	30	2
RADI	210L	Radiographic Positioning and Related Anatomy III: Laboratory	30	1
RADI	211	Clinical Internship II	135	3
RADI	220	Pharmacology and Contrast Means in Diagnostic Imaging	Four. Five	3
RADI	213	Radiological Pathology	30	2
RADI	214	Radiographic Positioning and Related Anatomy IV	30	2

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
RADI	214L	Radiographic Positioning and Related Anatomy IV: Laboratory	30	1
RADI	215	Clinical Internship III	135	3
RADI	250	Advanced Sectional Anatomy	60	4
RADI	300	Physics - Instrumentation and Images in Computed Tomography	45	3
RADI	301	Procedures for the Formation of Images by Computed Tomography	45	3
RADI	302	Pathological Correlation by Computed Tomography	45	3
RADI	305	Physics - Principles, Parameters, and concepts of Magnetic Resonance	45	3
RADI	303	Procedures for Obtaining Images by Magnetic Resonance	45	3
RADI	304	Pathological Correlation by Magnetic Resonance	45	3
RADI	403	Pre-Board Seminar of Radiological Technology, CT, and MRI	45	3
RADI	401	Clinical Internship in Computerized Tomography	270	6
RADI	402	Clinical Internship in Magnetic Resonance	270	6
<b>Sub-total:</b>			<b>1,890 hours</b>	<b>78 credits</b>

### CORE ELECTIVES

**Prescribed: The student will select a 3-credit course**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
RADI	306	Ethics and Law in Imaging Science	45	3
RADI	307	Computers in Imaging and Medical Informatics	45	3
RADI	404	Research Methods and Computer Literacy	45	3
RADI	405	Educational Principles for Technologists	45	3
<b>Sub-total:</b>			<b>45 hours</b>	<b>3 credits</b>

**BACHELOR IN DIAGNOSTIC IMAGING WITH A CONCENTRATION  
ON CT AND MRI  
CURRICULUM: SEPTEMBER 2020**

**SUGGESTED PROGRAM OF STUDIES**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE- REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 14 credits</b>				
ENGL	201	Basic English I	-----	3
MATH	201	Introductory Algebra	-----	3
ANAT	201	Human Anatomy and Physiology I	-----	4
COMP	200	Introduction to Computers	-----	2
RADI	200	Introduction to Radiology	-----	2
<b>SECOND TERM: 14 CREDITS</b>				
ENGL	202	Basic English II	ENGL 201	3
PHSC	200	Introduction to Physics	MATH 201	3
ANAT	202	Human Anatomy and Physiology II	ANAT 201	4
RADI	218	Patient Care and Management	-----	2
MEDT	200	Medical Terminology	-----	2
<b>THIRD TERM: 13 CREDITS</b>				
SPAN	201	Basic Spanish I	-----	3
PHSC	201	Radiological Physics	PHSC 200	3
RADI	202	Radiographic Positioning and Related Anatomy I	ANAT 201, RADI 200, RADI 201	two
RADI	202L	Radiographic Positioning and Related Anatomy I: Laboratory	ANAT 201, RADI 200, RADI 201	1
RADI	203	Knowledge in Imaging Modalities and Equipment	RADI 200	2
RADI	204	Integrating Seminar	RADI 200, MEDT 200	2
<b>FOURTH TERM: 14 CREDITS</b>				
SPAN	202	Basic Spanish II	SPAN 201	3
RADI	205	Principles of Radiographic Exposure	RADI 200, PHSC 201	3

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
RADI	206	Principles of Radiobiology and Radiation Protection	PHSC 201	2
RADI	207	Radiographic Positioning and Related Anatomy II	RADI 202, RADI 202L	two
RADI	207L	Radiographic Positioning and Related Anatomy II: Laboratory	RADI 202, RADI 202L	1
RADI	208	Clinical Internship I	ANAT 202, RADI 202, RADI 202L, RADI 204	3
<b>FIFTH TERM - 14 CREDITS</b>				
PSYC	200	Principles of Psychology	--- --	3
RADI	217	Quality Assurance and Radiographic Control	RADI 205	2
RADI	210	Radiographic Positioning and Related Anatomy III	RADI 207, RADI 207L	2
RADI	210L	Radiographic Positioning and Related Anatomy III: Laboratory	RADI 207, RADI 207L	1
RADI	211	Clinical Internship II	RADI 205, RADI 206, RADI 207, RADI 207L, RADI 208	3
RADI	220	Pharmacology and Contrast Media in Diagnostic Imaging	RADI 200, RADI 201	3
<b>SIXTH TERM: 14 CREDITS</b>				
ELECTIVE		Elective General Education	- -	3
ANAT	203	Sectional Anatomy	ANAT 202	3
RADI	213	Radiological Pathology	ANAT 202, RADI 217	2
RADI	214	Radiographic Positioning and Related Anatomy IV	RADI 210, RADI 210L, RADI 212	2

RADI	214L	Radiographic Positioning and Related Anatomy IV: Laboratory	RADI 210, RADI 210L, RADI 212	1
<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
RADI	215	Clinical Internship III	RADI 211, RADI 210, RADI 210L, RADI 212, RADI 217	3
<b>SEVENTH TERM: 13 CREDITS</b>				
ELECTIVE		Elective Concentration	- -	3
ELECTIVE		General Education Elective	- -	3
ELECTIVE		General Education Elective	- -	3
RADI	250	Advanced Sectional Anatomy	ANAT 203	4
<b>EIGHTH TERM: 12 CREDITS</b>				
ELECTIVE		General Education Elective	-	3
RADI 300	300	Physics - Instrumentation and Images in Computed Tomography	RADI 250	3
RADI 301	301	Procedures for Imaging by Computed Tomography	RADI 250	3
RADI 302	302	Pathological Correlation by Computed Tomography	RADI 250	3
<b>NINTH TERM: 12 CREDITS</b>				
ELECTIVE		Elective General Education	-----	3
RADI	305	Physics - Principles, Parameters, and Concepts of Magnetic Resonance	RADI 250	3
RADI	303	Procedures for obtaining images by Magnetic Resonance	RADI 250	3
RADI	304	Pathological Correlation by Magnetic Resonance	RADI 250	3



TENTH TERM - 15 CREDITS				
RADI	403	Pre-Seminar Revalidation of Radiological Technology, CT, and MRI	All the concentration courses of the program	3
COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
RADI	401	Clinical internship in Computed Tomography	RADI 250, RADI 300, RADI 301, RADI 302	6
RADI	402	Clinical internship Magnetic Resonance	RADI 250, RADI 303, RADI 304, RADI 305	6

**Grand Total of the Bachelor's Degree in Diagnostic Imaging with a Concentration in CT and MRI: 135 credits and 2,820 hours.**

#### MINIMUM RATING POLICY

Students enrolled in the Baccalaureate in Diagnostic Imaging with a Concentration in CT and MRI must obtain at least a grade of "C" (70) to pass the following courses:

ANAT 201	RADI 202	RADI 206	RADI 214
ANAT 202	RADI 202L	RADI 207	RADI 214L
ANAT 203	RADI 203	RADI 207L	RADI 217
RADI 200	RADI 204	RADI 210	RADI 220
RADI 218	RADI 205	RADI 210L	RADI 250
PHSC 202	MEDT 200	RADI 213	RADI 300
RADI 301	RADI 304	RADI 307	RADI 405
RADI 302	RADI 305	RADI 403	
RADI 303	RADI 306	RADI 404	

Students enrolled in the following courses must obtain a minimum grade of "B" (80) to pass the course:

RADI 208	RADI 215	RADI 211	RADI 401
RADI 402			

## ASSOCIATE DEGREE IN NURSING SCIENCES

The program develops nursing professionals, training them to function in health settings that offer nursing services to the client and their family, whether hospitalized, at an outpatient level or in the community, according to their preparation. The program aims to prepare future nursing professionals in the associate degree to deal with the health problems of our society, by promoting and maintaining the health of the individual, family and community, through the satisfaction of their needs and prevention diseases, under the guidance and direction of the general nursing professional.

The associate degree for nursing professionals in this program will possess the preparation required to meet the requirements established by the Puerto Rico Nursing Examining Board. This will allow them to obtain a license as an associate nurse to legally practice your profession. The program prepares the student to continue studies leading to the Bachelor's in Nursing Science RN to BSN, offering the knowledge bases of health, nursing, and general sciences.

### **Additional program requirements:**

1. Orientation with the Academic Coordinator

### **Additional requirements for nursing courses that require clinical experience in a center \*.**

1. Criminal record certificate from the Puerto Rico Police
2. Current health certificate
3. Birth certificate
4. Negative offender certificate for old people and children (Law 300)
5. Certificate of protective techniques
6. HIPPA Act Certification
7. Photo identification
8. Face seal test
9. Certificate of Hepatitis B vaccines. In case of more than 10 years of having received it, a blood test is required to prove immunity
10. Certificate of Varicella vaccines (2 doses). In case of having suffered chickenpox, a blood test or varicella titers is required to demonstrate immunity.
11. Certificate of seasonal influenza vaccines
12. Certificate of Culture of nose, throat, and stool

13. Certificate of Cardiopulmonary Resuscitation (CPR)
14. Doping test (depends on the clinical experience center)
15. Other documents and / or tests, as required by the clinical experience center

**Additional graduation requirements:**

1. Have achieved an average of 2.50 in professional courses.
2. Have achieved an average of 2.00 in general and related courses.

\* As required by the clinical experience center

### CURRICULUM STRUCTURE GENERAL EDUCATION COURSES

**Prescribed: 15 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CRÉDITOS
ENGL	1101	Basic English I	60	3
ENGL	1102*	Basic English II	45	3
SEMI	1105**	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish	60	3
SPAN	1102*	Basic Spanish II	45	3

**Sub - total:**

**255 hours**

**15 credits**

### RELATED COURSES

**Prescribed: 13 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CRÉDITOS
BIOL	1601	Human Anatomy and Physiology I	60	3
BIOL	1602*	Human Anatomy and Physiology II	60	3
BIOL	1603	Microbiology	75	4
COMP	1205	Introduction to Computers	60	3

**Sub - total:**

**255 horas**

**13 credits 265**



## EDUCATION COURSES PROFESSIONAL

**Prescribed: 44 credits**

COURSE	CODE	NAME COURSE	HOURS CONTACT	CREDITS
NURS	1604	Nursing Process	45	3
NURS	1609 *	Nursing Process Maternal Child	135	5
NURS	1610	Principles of Pharmacology	90	4
NURS	1611 *	Nursing Fundamentals	135	6
NURS	1612 *	Physiopathology of the Human Body	60	3
NURS	2612 *	Nursing Process for Children and Adolescents	135	5
NURS	2613 *	Nursing Process of the Mental and Emotional Health of the Human Being	135	5
NURS	2614 *	Nursing Process of Adults and Geriatric I	135	5
NURS	2615 *	Nursing Process of Adults and Geriatric II	135	5
NURS	2616 **	Integrative Seminar	45	3

**Sub - total:**

**1,050 hours**

**44 credits**

# ASSOCIATE DEGREE IN NURSING SCIENCES

## SUGGESTED PROGRAM OF STUDIES \*\*

### Day Session

COURSES	CODE	NAME OF THE COURSE	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 12 CREDITS</b>				
BIOL	1601	Human Anatomy and Physiology I	----	3
COMP	1205	Introduction to Computers	----	3
NURS	1604	Nursing Process	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 13 CREDITS</b>				
BIOL	1602 *	Human Anatomy and Physiology II	BIOL 1601	3
NURS	1610	Principles of Pharmacology	----	4
NURS	1611 *	Fundamentals of Nursing	BIOL 1601 NURS 1604	6
<b>THIRD TERM: 12 CREDITS</b>				
BIOL	1603	Microbiology	----	4
NURS	1612 *	Physiopathology of the Human Body	BIOL 1601 BIOL 1602 NURS 1611	3
NURS	2613 *	Nursing Process of the Mental and Emotional Health of the Human Being	NURS1610 NURS 1611	5
<b>FOURTH TERM: 13 CREDITS</b>				
NURS	1609 *	Maternal and Child Nursing Process	BIOL1603 NURS 1612 NURS 2613	5
NURS	2612 *	Nursing Process for Children and Adolescents	BIOL 1603 NURS 1612 NURS 2613	5
SPAN	1101	Basic Spanish I	----	3
<b>FIFTH TERM: 11 CREDITS</b>				
ENGL	1101	Basic English I	----	3
NURS	2614 *	Nursing Process of Adults and Geriatric I	NURS 1609 NURS 2612	5
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>SIXTH TERM: 11 CREDITS</b>				
ENGL	1102 *	Basic English II	ENGL 1101	3
NURS	2615 *	Nursing Process of Adults and Geriatric II	NURS 2614	5
NURS	2616 * ^	Seminar Integrative	NURS 2614	3

# ASSOCIATE DEGREE OF SCIENCE IN NURSING

## CURRICULUM SUGGESTED \*\* Session Night

COURSE	CODE	NAME OF COURSE	prerequisites	CREDITS
<b>FIRST TERM: 9CREDITS</b>				
BIOL	1601	Human Anatomy and Physiology I	--	3
NURS	1604	Nursing Process	--	3
SEMI	1105	College Success and Professional Seminar	--	3
<b>SECOND TERM: 12CREDIT</b>				
BIOL	1602 *	Human Anatomy and Physiology II	BIOL 1601	3
COMP	1205	Introduction to Computers	--	3
NURS	1611 *	Foundations of Nursing	BIOL 1601 NURS 1604	6
<b>THIRD TERM: 10 CREDITS</b>				
NURS	1610	Principles of Pharmacology	--	4
NURS	1612 *	Physiopathology of the Human Body	BIOL 1601 BIOL 1602 NURS 1611	3
SPAN	1101	Basic Spanish I	--	3
<b>FOURTH TERM: 9 CREDITS</b>				
BIOL	1603	Microbiology	--	4
NURS	2613 *	Nursing Process of the Mental and Emotional Health of the Human Being	NURS 1610 NURS 1611	5
<b>FIFTH TERM: 10CREDITS</b>				
UNRS	1609 *	Maternal and Child Nursing Process	BIOL 1603 NURS 1612 NURS 2613	5
NURS	2612 *	Nursing Process for Children and Adolescents	BIOL 1603 NURS 1612 NURS 2613	5
<b>SIXTH TERM: 11 CREDITS</b>				
ENGL	1101	Basic English I	--	3
NURS	2614 *	Nursing Process of Adults and Geriatric I	NURS 1609 NURS 2612	5
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>SEVENTH TERM: 11 CREDITS</b>				
ENGL	1102 *	Basic English II	ENGL 1101	3
NURS	2615 *	Nursing Process of Adults and Geriatric II	NURS 2614	5
NURS	2616 * ^	Integrative Seminar	NURS 2614	3

**Grand total of Associate Degree of Science in Nursing: 72 credits and 1,560 hours**

-Courses without pre-requisites

\* Courses with pre-requisites

\*\* The SEMI 1105 course is equivalent to SEMI 3008

\* ^ Course with pre-requisite and “Capstone” to enroll in the last term.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student can enroll in them, in the semester they are offered.

#### MINIMUM GRADING POLICY

Students enrolled in the Associate Degree in Nursing Sciences must obtain, at least, a grade of C to pass the following courses:

BIOL 1601	NURS 1609	NURS 2612	NURS 2616
BIOL 1602	NURS 1610	NURS 2613	SEMI 1105
BIOL 1603	NURS 1611	NURS 2614	NURS 1604
NURS 1612	NURS 2615		

## ASSOCIATE DEGREE IN THERAPEUTIC MASSAGE

The purpose of the Associate Degree Program in Therapeutic Massage is to prepare the therapist with the knowledge and skills in holistic therapies and treatments, prevention, conditioning, and specialty, including a variety of courses in oriental philosophies. The program includes general education courses that will help the student to develop oral and written communication language skills and provide the necessary tools for student and professional success. The program consists of 63 credits. Includes general education courses and professional courses.

### Additional requirement of the program:

1. Orientation with the Academic Coordinator

### Graduation requirements:

1. Have achieved an average of 2.50 in professional education courses.
2. Have achieved an average of 2.00.

## ASSOCIATE DEGREE IN THERAPEUTIC MASSAGE

### STRUCTURE CURRICULAR EDUCATION COURSES GENERAL

Prescribed: 15 credits

COURSE	CODE	NAME OF COURSE	HOURS CONTACT	CREDITS
ENGL	1101	Basic English I	60	3
ENGL	1102*	Basic English II	45	3
SEMI	1105 **	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3
Sub - total:			255 hours	15 credits

### RELATED COURSES

Prescribed: 4 credits

COURSES	CODE	COURSE NAME	HOURS CONTACT	CREDITS
ENTR	1001	Entrepreneurship	45	3
FIAD	1001	CPR / HIV / PRIM AUX	30	1
Sub - total:			75 hours	4 credits



## PROFESSIONAL EDUCATION COURSES

**Prescribed: 44 credits**

COURSES	CODE	COURSE NAME	HOURS CONTACT	CREDITS
MASS	1213	Aromatherapy and Hydrotherapy	75	3
MASS	1619	Anatomy and Physiology for Massage Therapists	60	4
MASS	1615	Swedish Massage Therapy	90	4
MASS	1621	Structural Kinesiology	75	3
MASS	1622	Spa Technique for Massage Therapists	75	3
MASS	1625	Sports Massage	75	3
ETIC	2001	Ethics for Massage Therapists	15	1
MASS	1620	Pathophysiology for Massage Therapists	45	3
MASS	1624	Eastern Philosophies	90	4
MASS	1222	Special Populations	75	3
MASS	1626	Clinical Massages	75	3
MASS	2107	Energy Medicine	90	4
MASS	2102	Thai Massage	75	3
MASS	2106	Professional Massage Seminar	45	3

**Sub - total:**

**960 hours**

**44 credits**

**ASSOCIATE DEGREE IN THERAPEUTIC MASSAGE  
SUGGESTED STUDY PROGRAM \*\***

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 12 CREDITS</b>				
SEMI	1105	College Success and Professional Seminar	----	3
MASS	1619	Anatomy and Physiology for Massage Therapists	----	4
MASS	1615	Swedish Massage Therapy	----	4
FIAD	1001	CPR / HIV / PRIM AUX	----	1
<b>SECOND TERM: 12 CREDITS</b>				
MASS	1620	Pathophysiology for Massage Therapists	----	3
MASS	1621	Structural Kinesiology	----	3
MASS	1622	Technique of Spa for Massage Therapists	----	3
MASS	1213	Aromatherapy and Hydrotherapy	----	3
<b>THIRD TERM: 13 CREDITS</b>				
SPAN	1101	Basic Spanish I	----	3
MASS	1624	Oriental Philosophies	----	4
ENGL	1101	Basic English I	----	3
MASS	1625	Sports Massage	----	3
<b>FOURTH TERM: 12 CREDITS</b>				
MASS	1222	Special Populations	****	3
MASS	1626	Clinical Massage	****	3
ENGL	1102 *	Basic English II	ENGL 1101	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIFTH TERM: 14 CREDITS</b>				
ETIC	2001	Ethics for Massage Therapist	****	1
MASS	2102	Thai Massage	****	3
ENTR	1001	Entrepreneurship	****	3
MASS	2106	Professional Massage Seminar	****	3
MASS	2107	Energy Medicine	****	4

**Grand total of Associate Degree in Therapeutic Massage: 63 credits and 1,290 hours**

-Courses without prerequisites

\*\* The SEMI 1105 course is equivalent to SEMI 3008.

\* ^ Courses with prerequisites and “Capstone” course to enroll in the last term.

\* Courses with prerequisites

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student can enroll in them, in the term that they are offered.

#### MINIMUM GRADING POLICY

Students enrolled in the Associate Degree in Therapeutic Massage must obtain at least a grade of C to pass the following courses:

ENTR 1001	FIAD 1001	ETIC 2001	SEMI 1105
MASS 1615	MASS 1619	MASS 1622	
MASS 1624	MASS 1213	MASS 1621	
MASS 1625	MASS 1620	MASS 2106	
MASS 1626	MASS 2102	MASS 2107	

## ASSOCIATE DEGREE IN PHARMACY TECHNICIAN

The purpose of the program is to develop pharmacy technicians trained to function in health settings that offer pharmacy services, whether in community, chain, institutional, specialized pharmacy, manufacturing houses, drug stores and health plan agencies, among others. The program aims to prepare future pharmacy technicians through specialty courses and Internship hours to exercise the occupation with a good pharmacy practice guide that will include the norms and standards to provide quality services, based on responsibilities and functions that are consistent with the provisions of law, under the guidance and direction of the pharmacist.

The Pharmacy Technician will possess the preparation required to meet the requirements established by Law # 247 of September 3, 2004, as amended known as the Puerto Rico Pharmacy Law. This will allow you to obtain a certification as a Pharmacy Technician to legally practice your profession in Puerto Rico.

### **Additional program requirements for the internship:**

1. Orientation with the Academic Coordinator.
2. Identify the pharmacist and the internship center.
3. Compile all the documents requested by the Puerto Rico Board of Pharmacy.
4. Complete the application to begin your internship provided by the Puerto Rico Board of Pharmacy with the purpose of requesting the provisional Certificate to begin the internship. The Pharmacy Board will approve the request with the number of hours submitted. Columbia Central University (CCU) students will need to request a minimum of 36 - 40 contact hours per week.
5. Documents to be delivered to the Puerto Rico Board of Pharmacy:
  - a. Original criminal record certificate issued by the Puerto Rico Police (no more than thirty days from the date the application is filed)
  - b. Affidavit
  - c. Postal or bank money order in favor of the Secretary of the Treasury
  - d. Original negative certification of assumes (no more than thirty days from the date the application is filed)
  - e. Photo 2X2
  - f. Birth certificate

- g. Copy of social security card
  - h. Registration and registration of the preceptor
  - i. Two envelopes (pre-addressed) stamped
- 6. Authorization from the Pharmacy Examining Board to carry out the pharmacy internship.  
The authorization confirms the pharmacist as preceptor and the availability of the pharmacy where he will be interned.
- 7. Record of internship hours: (1000 hours in total)
  - a. 500 hours per academic term: Pharmacy Technician Intern must perform at least 36 - 40 hours per week to complete their internship.
  - b. Two evaluations per term:
    - First evaluation (250 hours)
    - Second evaluation (500 hours)

**Graduation requirements:**

- 1. Have achieved a minimum GPA of 2.50 in Professional Education courses.
- 2. Have achieved a minimum GPA of 2.00.

## ASSOCIATE DEGREE IN PHARMACY TECHNICIAN

### STRUCTURE CURRICULAR

#### EDUCATION COURSES GENERAL

**Prescribed: 15 credits**

COURSE	CODE	NAME OF COURSE	HOURS CONTACTS	CREDITS
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105 **	College Success and Professional Seminar	45	3
SPAN	1101	Spanish I	60	3
SPAN	1102 *	Spanish II	45	3

**Sub - total: 255 hours 15 credits**

#### PROFESSIONAL EDUCATION COURSES

**Prescribed: 68 credits**

COURSES	CODE	COURSE NAME	HOURS CONTACTS	CREDITS
PHAR	1618	Pharmaceutical Mathematics	90	5
PHAR	1619	Pharmacy and Marketing	60	4
PHAR	1620	Pharmaceutical Legislation	45	3
PHAR	1621 *	Pharmacognosy	60	4
PHAR	1622 *	Dosage	75	4
PHAR	1623 *	Dispatch Techniques	105	5
PHAR	1624	Pharmacotherapy I	90	5
PHAR	1625 *	Pharmacotherapy II	90	5
PHAR	2101 *	Pharmaceutical Chemistry	45	3
PHAR	2102 *	Institutional Pharmacy	45	3
PHAR	2103 *	Sterile Preparations and Aseptic Techniques	45	3
PHAR	2112 *	Internship I	500	11
PHAR	2113 *	Internship II	500	11
SEMI	2507 *	Integration Seminar to the Role of the Pharmacy Technician		Feb. 30

**Sub - total: 1.780 hours 68 credits**

# ASSOCIATE DEGREE IN PHARMACY TECHNICIAN

## \*\* SUGGESTED SYLLABUS

COURSE	CODE	COURSE NAME	prerequisites:	CREDITS
<b>FIRST TERM 15 CREDITS</b>				
PHAR	1618	MathematicsPharmaceutical	---	5
PHAR	1619	Pharmacy and Marketing	---	4
SEMI	1105	College Success and Professional Seminar	---	3
SPAN	1101	Basic Spanish I	---	3
<b>SECOND TERM: 15 CREDITS</b>				
PHAR	1622 *	Dosage	PHAR 1618	4
PHAR	1624	Pharmacotherapy I	---	5
PHAR	2101 *	Pharmaceutical Chemistry	PHAR 1618	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3
<b>THIRD TERM: 15 CREDITS</b>				
ENGL	1101	Basic English I	---	3
PHAR	1621 *	Pharmacognosy	PHAR 1618	4
PHAR	1625 *	Pharmacotherapy II	PHAR 1624	5
PHAR	2102 *	Institutional Pharmacy	PHAR 1618	3
<b>FOURTH TERM: 14 CREDITS</b>				
ENGL	1102 *	Basic English II	ENGL 1101	3
PHAR	1620	Pharmaceutical Legislation	---	3
PHAR	1623 *	Dispatch Techniques	PHAR 1618 PHAR 1621 PHAR 1622 PHAR 1624 PHAR 1625	5
PHAR	2103 *	Sterile Preparations and Aseptic Techniques	PHAR 1618 PHAR 2102	3
<b>FIFTH TERM: 13 CREDITS</b>				
PHAR	2112 *	Internship I	ENGL 1101 ENGL 1102 PHAR 1618 PHAR 1619 PHAR 1620 PHAR 1621 PHAR 1622 PHAR 1623 PHAR 1624 PHAR 1625 PHAR 2101 PHAR 2102	11

COURSES	CODE	NAME	PRE-REQUIREMENTS	CREDITS
			PHAR2103 SEMI 1105 SPAN 1101 SPAN 1102	
SEMI	2507 *	Seminar Integration to the Role of the Pharmacy Technician	PHAR 1618 PHAR 1619 PHAR 1620 PHAR 1621 PHAR 1622 PHAR 1623 PHAR 1624 PHAR 1625 ENGL 1101 ENGL 1102 SPAN 1101 SPAN 1102 PHAR 2101 PHAR 2102 PHAR2103 SEMI 1105	2
<b>SIXTH TERM 11 CREDITS</b>				
PHAR	2113*	Confinement II	ENGL 1101 ENGL 1102 PHAR 1618 PHAR 1619 PHAR 1620 PHAR 1621 PHAR 1622 PHAR 1623 PHAR 1624 PHAR 1625 PHAR 2101 PHAR 2102 PHAR 2103 PHAR 2112 SEMI 1105 SEMI 2507 SPAN 1101 SPAN 1102	11



**Grand total of Associate Degree in Pharmacy Technician: 83 credits and 2,035 hours.**

\* Courses with pre-requirements

\*\* The SEMI 1105 course is equivalent to the SEMI 3008.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems.

#### **MINIMUM RATING POLICY**

Students enrolled in the Associate Degree program in Pharmacy Technician must obtain a minimum grade of **C** to pass the following courses:

PHAR 1618	PHAR 1622	PHAR 2101	SEMI 2507
PHAR 1619	PHAR 1623	PHAR 2102	
PHAR 1620	PHAR 1624	PHAR 2103	
PHAR 1621	PHAR 1625	SEMI 1105	

Students enrolled in the Associate Degree program in Pharmacy Technician must obtain a minimum grade of **B** to pass the following courses:

PHAR 2112	PHAR 2113
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## ASSOCIATE DEGREE IN RADIOLOGICAL TECHNOLOGY

The Associate Degree in Radiological Technology is an academic offering that provides the student the opportunity to become a professional in the field of health highly prepared and qualified to perform radiographic studies that will help the radiologist to provide an adequate diagnosis of the condition that affects the patient. It consists of 83 credits. The classes are divided into: general courses, related courses, professional courses, an integrative seminar and three clinical practices. These go hand in hand with the cognitive courses to put into practice what was discussed in class in real clinical settings. All candidates for the program must be 18 years of age or older or reach them on or before their first internship. Upon completion of 83 credits, the student will receive an associate degree in Radiological Technology.

This program trains the student to acquire the necessary competencies that will help them challenge the revalidation exam offered by the Examining Board of Radiological Technologists in Diagnostic Imaging and Radiotherapy Technologists of Puerto Rico and obtain their license once the requirements of the law have been met.

### PROGRAM OBJECTIVES

Develop a professional with basic clinical knowledge and skills in radiological technology, so that they can offer services on a scientific basis and according to current technological advances.

1. Develop competencies in students so that their behavior is professional when interacting with their patients, colleagues, and other members of the team allied to health.
2. To develop in the student the skills to provide a service that is sensitive to the patient needs and respecting human dignity without discriminating because of race, color, sex, disability, or economic situation.

### PRACTICE REQUIREMENTS

It is required to take the practice component of the program, the following current and original documents:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines
4. Varicella Vaccines
5. HIPAA Law Certificate

6. 6. Cardiopulmonary Resuscitation (CPR) Certification
7. Negative certification of Law 300-Law of Verification of Credentials and Criminal History of Suppliers to Children, People with Disabilities, and Health Professionals
8. Doping\* Test
9. Respiratory Test \*
10. Influenza Vaccine \*
11. Letter clinical practice presentation
12. Practice authorization form

\* **Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

## REQUIREMENTS OF REVALIDATION

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Criminal Record Certificate (less than 3 months from issuance)
2. Health Certificate
3. Birth Certificate and Social Security Card
4. High School Credit Transcript
5. Credit Transcript or Diploma or Certification of Associate Degree in Radiological Technology obtained at CCU (formerly EDIC College), sent directly to the Examining Board of Radiology Technologists at the following address:  

Examining Board of Radiology Technologists  
 Call Box 10200  
 Santurce, PR 00908-0200
6. Application completed in all its parts, including the Affidavit with 2x2 photo and 2 letter-size envelopes with postage stamp.
7. Payment to the Secretary of the Treasury in the amount of \$40.00 dollars for the right to a revalidation examination by money order.

**ASSOCIATE DEGREE IN RADIOLOGICAL TECHNOLOGY  
CURRICULUM: JANUARY 2021**

**Curricular Structure**

**EDUCATION COURSES GENERAL**

**Prescribed: 24 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3
PSYC	2014	Principles of Psychology	45	3
MATH	2010	Introductory Algebra	45	3
COMP	1205	Introduction to Computers	60	3

**Sub-total**

**405 hours**

**24 credits**

**RELATED COURSES**

**Prescribed: 17 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
MEDT	2000	Medical Terminology	30	2
BIOL	1601	Human Anatomy and Physiology I	60	3
BIOL	1602	Human Anatomy and Physiology II	60	3
PHSC	2010	Radiological Physics	45	3
ANAT	2030	Sectional Anatomy	60	3
PHSC	2000	Introduction to Physics	45	3

**Sub-total**

**300 hours**

**17 credits**

**PROFESSIONAL COURSES (CORE)**

<b>COURSE</b>	<b>CODE</b>	<b>NAME</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
RADI	2000	Introduction to Radiology	30	2
RADI	2010	Patient Management and Care	45	3
RADI	2020	Radiographic Positioning and Anatomy Related I	30	2

Prescribed: 42 credits

COURSE	COURSE CODE	NAME	HOURS CONTACT	CREDITS
RADI	2020L	Radiographic Positioning and Anatomy Related I: Laboratory	30	1
RADI	2030	Knowing Modalities and Imaging Equipment	30	2
RADI	2040	Integrating Seminar	60	2
RADI	2050	Principles of Radiographic Exposure	45	3
RADI	2060	Principles of Radiobiology and Radiological Protection	30	2
RADI	2070	Radiographic Positioning and Anatomy Related II	30	2
RADI	2070L	Radiographic Positioning and Anatomy Related II: Laboratory	30	1
RADI	2080	Clinical Internship I	135	3
RADI	2100	Radiographic Positioning and Anatomy Related III	30	2
RADI	2100L	Radiographic Positioning and Anatomy Related III: Laboratory	30	1
RADI	2110	Clinical Internship II	135	3
RADI	2120	Contrast Media	30	2
RADI	2130	Radiological Pathology	30	2
RADI	2140	Radiographic Positioning and Anatomy Related IV	30	2
RADI	2140L	Radiographic Positioning and Anatomy Related IV: Laboratory	30	1
RADI	2150	Clinical Internship III	135	3
RADI	2160	Pre-test Seminar	15	1
RADI	2170	Quality Assurance and Radiographic Control	30	2

**Sub-total**

**990 hours**

**42 credits**

COMPONENT	CREDITS
General Education Courses	24
Related Courses	17
Professional Courses	42
<b>TOTAL</b>	<b>83 credits 1.695 hours</b>

**ASSOCIATE DEGREE IN TECHNOLOGY RADIATION  
CURRICULUM: JANUARY 2021**

**STUDY PROGRAM SUGGESTED**

COURSE	CODE	NAME OF COURSE	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 14 CREDITS</b>				
RADI	2000	Introduction to Radiology	----	2
ENGL	1101	Basic English I	----	3
MATH	2010	Introductory Algebra	----	3
BIOL	1601	Human Anatomy and Physiology I	----	3
SEMI	1105	College Success and Professional Seminar	- - - -	3
<b>SECOND TERM: 17 CREDITS</b>				
ENGL	1102	Basic English II	ENGL 1101	3
PHSC	2000	Introduction to Physics	----	3
BIOL	1602	Human Anatomy and Physiology II	BIOL 1601	3
RADI	2010	Patient Care and Management	----	3
MEDT	2000	Medical Terminology	----	2
COMP	1205	Introduction to Computers	----	3
<b>THIRD TERM: 13 CREDITS</b>				
SPAN	1101	Basic Spanish I	----	3
PHSC	2010	Radiological Physics	PHSC 2000	3
RADI	2020	Radiographic Positioning and Related Anatomy I	BIOL 1602, RADI 2000, RADI 2010	2
RADI	2020L	Radiographic Positioning and Related Anatomy I: Laboratory	BIOL 1602 RADI 2000, RADI 2010	1
RADI	2030	Knowing Modalities Imaging Equipment	RADI 2000	2
RADI	2040	Seminar Integrative	RADI 2000, MEDT 2000	2

COURSE	CODE	NAME OF COURSE	PRE-REQUIREMENTS	CREDITS
<b>FOURTH TERM: 14 CREDITS</b>				
SPAN	1102	Basic Spanish II	SPAN 1101	3
RADI	2050	Principles Radiographic Exposure	RADI 2000, PHSC 2010	3
RADI	2060	Principles of Radiobiology and Protection Protection	PHSC 2010	2
RADI	2070	Radiographic Positioning and Related Anatomy II	RADI 2020, RADI 2020L	2
RADI	2070L	Radiographic Positioning and Related Anatomy II: Laboratory	RADI 2020, RADI 2020L	1
RADI	2080	Clinical Internship I	BIOL 1602, RADI 2010, RADI 2020L, RADI 2040	3
<b>FIFTH TERM: 13 CREDITS</b>				
PSYC	2014	Principles of Psychology	----	3
RADI	2170	Quality Assurance and Radiographic Control	RADI 2050	2
RADI	2100	Radiographic Positioning and Related Anatomy III	RADI 2070, RADI 2070L	2
RADI	2100L	Radiographic Positioning and Related Anatomy III: Laboratory	RADI 2070, RADI 2070L	1
RADI	2110	Clinical Internship II	RADI 2050, RADI 2060, RADI 2070, RADI 2070L, RADI 2080	3
RADI	2120	Contrast Media	RADI 2000, RADI 2010, BIOL 1602, MEDT 2000	2

COURSE	CODE	NAME oF COURSE	prerequisites	CREDITS
SIXTH TERM 12 CREDITS				
ANAT	2030	Anatomy Sectional	BIOL 1601, BIOL 1602	3
RADI	2130	Pathology Radiological	BIOL 1602, RADI 2170	2
RADI	2140	Radiographic Positioning and Related Anatomy IV	RADI 2100, RADI 2100L, RADI 2120	2
RADI	2140L	Radiographic Positioning and Related Anatomy IV: Laboratory	RADI 2010, RADI 2100L, RADI 2120	1
RADI	2150	Clinical Internship III	RADI 2100, RADI 2100L, RADI 2110, RADI 2120, RADI 2170	3
RADI	2160	Pre-Revalidation Seminar	All courses prior to the sixth semester	1

**Grand total of Associate Degree in Radiological Technology: 83 credits and 1,695 hours**

---- Courses without pre-requirements

\* ^ “Capstone” course of General Education, to be enrolled in the last term

\* ^ \* Course with pre-requisites and “Capstone” course of Professional Education, to be enrolled in the last term finished.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student can register in them in the term that they are offered.



### MINIMUM GRADING POLICY

Students enrolled in the Associate Degree in Radiological Technology must obtain at least a grade of C (70% or higher) to pass all professional and concentration courses, except those clinical practice courses that must be approved with a B (80%) or more.

The following courses must be approved with a grade of C or higher:

SEMI 1105	MEDT 2000	BIOL 1601	BIOL 1602	PHSC 2010	ANAT 2030
PHSC 2000	RADI 2000	RADI 2010	RADI 2020L	RADI 2030	RADI 2040
RADI 2050	RADI 2060	RADI 2070	RADI 2070L	RADI 2100	RADI 2100L
RADI 2110	RADI 2120	RADI 2130	RADI 2140	RADI 2140L	RADI 2160
RADI 2170					

The following courses must be approved with a grade of B or higher:

RADI 2080	RADI 2110	RADI 2150
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## ASSOCIATE DEGREE IN MEDICAL SONOGRAPHY

The Associate Degree in Medical Sonography has as its main purpose to train competent professionals and committed, which contribute to the provision of direct services using new technologies and imaging modalities. This implies establishing and maintaining an interdisciplinary curriculum whose purpose is to develop critical thinking in participating students. This in turn will result in the training of a graduate capable of meeting the health needs of the community in its biological, psychological, and sociocultural context with a humanistic approach. The program consists of 84 credits. Classes are divided into: general courses, related courses, professional courses, and clinical practice. These go hand in hand with the cognitive courses to put into practice what was discussed in class in real clinical settings. Upon completion of 84 credits the student will receive an associate degree in Medical Sonography.

This program trains the student to acquire the necessary competencies that will help the student challenge the revalidation exam offered by the Examining Board of Radiological Technologists in Diagnostic Imaging and Radiotherapy Technologists of Puerto Rico and obtain the license once the student completes the requirements of the law. It also trains the student to acquire the necessary competencies that will help them challenge the tests offered by the ARDMS (American Registry of Diagnostic Medical Sonographers).

### OBJECTIVES OF THE PROGRAM

1. To develop a professional with the basic clinical knowledge and skills in the area of medical sonography, so that he can offer services on a scientific basis and according to the technological advances of the moment.
2. To develop competencies in the student so that his behavior is a professional one when interacting with his patients, colleagues and other members of the team allied to health.
3. Develop in the student the skills to provide a service sensitive to the particular needs of the patient and respecting human dignity without discrimination.

## PRACTICE REQUIREMENTS

The following original and current documents are required to take the practice component of the program:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines
4. HIPAA Law Certificate
5. Certification Cardiopulmonary Resuscitation (CPR)
6. Doping Test \*
7. Respiratory Test \*
8. Influenza Vaccine \*
9. Varicella Vaccine \*
10. Particle Adjustment Test \*
11. Negative Certification of Law 300-Verification of Credentials and Criminal History of Providers to Children, People with Disabilities and Health Professionals
12. Clinical practice cover letter
13. Practice authorization form

**\* Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

## REVALIDATION REQUIREMENTS

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Background Certificate less than 6 months from its issuance)
2. Health Certificate
3. Birth Certificate
4. Negative Certification of the Administration of Child Support (ASUME)
5. High School Credit Transcript
6. Credit Transcript or Diploma or Certification of the Associate Degree in Sonography

Medical obtained at CCU (formerly EDIC College).



7. Application completed in all its parts, including the Affidavit with 2x2 photo and two letter-size envelopes with postage stamp.
8. Payment to the Secretary of the Treasury in the amount of \$ 30.00 dollars for the right to a revalidation examination by money order, ATH or credit card.

**ASSOCIATE DEGREE IN SONOGRAPHY MEDICAL  
CURRICULUM: JANUARY 2021  
Curricular Structure**

**EDUCATION COURSES GENERAL**

**Prescribed: 24 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3
PSYC	2014	Principles of Psychology	45	3
MATH	2010	Introductory Algebra	45	3
COMP	1205	Introduction to Computers	60	3
<b>Sub-total</b>			<b>405 hours</b>	<b>24 credits</b>

**RELATED COURSES**

**Prescribed: 17 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
MEDT	2000	Medical Terminology	30	2
BIOL	1601	Human Anatomy and Physiology I	60	3
BIOL	1602	Human Anatomy and Physiology I	60	3
PHSC	2030	Ultrasound Physics and Instrumentation I	45	3
PHSC	2040	Ultrasound Physics and Instrumentation II	45	3
ANAT	2030	Sectional Anatomy	60	3
<b>Sub-total</b>			<b>300 hours</b>	<b>17 credits</b>

### PROFESSIONAL COURSE (CORE)

Prescribed: 43 credits

COURSE	CODE	NAME THE CUR SO	HOURS CONTACT	CREDITS
SONO	2000	Introduction to Medical Sonography	45	3
SONO	2200	Patient Care and Management of Sonographic Images	45	3
SONO	2010	Abdominal Sonography	75	4
SONO	2020	Sonography Gynecologic	75	4

COURSE	CODE	NAME OF COURSE	HOURS CONTACT	CREDITS
SONO	2130	Laboratory for the Integration of Clinical Skills in Medical Sonography	60	2
SONO	2050	Obstetric Sonography	75	4
SONO	2140	Clinical Practice I	90	2
SONO	2070	Sonography of Superficial Structures	75	4
SONO	2150	Pathology Applied to Sonography I	45	3
SONO	2160	Clinical Practice II	90	2
SONO	2180	Pathology Applied to Sonography II	45	3
SONO	2080	Pre-Exam Seminar	30	2
SONO	2170	Special Procedures in Medical Sonography	30	2
SONO	2190	Clinical Practice III	225	5

**Sub-total**

**1,005 hours**

**43 credits**

COMPONENT	CREDIT
General Education Courses	24
Related Courses	17
Professional Courses	43
<b>TOTAL</b>	<b>84 credits</b> <b>1,710 hours</b>

**ASSOCIATE DEGREE IN MEDICAL SONOGRAPHY  
CURRICULUM: JANUARY 2021**

**EDUCATION COURSES GENERAL**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUISITES:</b>	<b>CREDITS</b>
<b>FIRST TERM 14 credits</b>				
SEMI	1105	College Success and Professional Seminar	----	3
MEDT	2000	Medical Terminology	----	2
COMP	1205	Introduction to Computers	----	3
SONO	2000	Introduction to Medical Sonography	----	3
SONO	2200	Patient Management and Care in Sonographic Imaging	----	3
<b>SECOND TERM: 13 CREDITS</b>				
SPAN	1101	Basic Spanish I	---	3
BIOL	1601	Human Anatomy and Physiology I	----	3
MATH	2010	Introductory Algebra	----	3
SONO	2010	Abdominal Sonography	SONO 2000, SONO 2200, MEDT 2000	4
<b>THIRD TERM: 15 CREDITS</b>				
SPAN	1102	Basic Spanish II	SPAN 1101	3
BIOL	1602	Human Anatomy and Physiology II	BIOL 1601	3
PHSC	2030	Ultrasound Physics and Instrumentation I	MATH 2010	3
SONO	2020	Gynecological Sonography	SONO 2010, SONO 2200	4
SONO	2130	Laboratory of Integration of Clinical Skills in Medical Sonography	SONO 2000, SONO 2010, SONO 2200	2

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FOURTH TERM: 15 CREDITS</b>				
ANAT	2030	Sectional Anatomy	BIOL 1601, BIOL 1602	3
PHSC	2040	Ultrasound Physics and Instrumentation II	PHSC 2030	3
ENGL	1101	Basic English I	----	3
SONO	2050	Obstetric Sonography	SONO 2000, SONO 2200, MEDT 2000, PHSC 2030	4
SONO	2140	Clinical Practice I	SONO 2130	2
<b>FIFTH TERM: 15 CREDITS</b>				
ENGL	1102	Basic English II	ENGL 1101	3
PSYC	2014	Principles of Psychology	----	3
SONO	2070	Sonography of Surface Structures	SONO 2000, SONO 2200, PHSC 2040	4
SONO	2150	Pathology Applied to Medical Sonography I	BIOL 1602, SONO 2130	3
SONO	2160	Clinical Practice II	SONO 2140	2
<b>SIXTH TERM: 12 CREDITS</b>				
SONO	2180	Pathology Applied to Medical Sonography II	SONO 2150	3
SONO	2080	Pre-Board Seminar	SONO 2000, SONO 2010, SONO 2020, SONO 2050, SONO 2070, SONO 2130, SONO 2140, SONO 2150, SONO 2160, SONO 2200	2
SONO	2170	Special Procedures in Medical Sonography	SONO 2130	2
SONO	2190	Clinical Practice III	SONO 2160	5

## **Grand total of Associate Degree in Medical Sonography: 84 credits and 1,710 hours**

---- Courses without prerequisites

\* ^ "Capstone" Course of General Education, to be enrolled in the last term

\* ^ \* Course with Prerequisites and "Capstone" Professional Education course, to be enrolled in the last term

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student can register in them in the term that they are offered.

### **MINIMUM GRADING POLICY**

Students enrolled in the Associate Degree in Medical Sonography must obtain at least a grade of C (70% or higher) to pass all professional and concentration courses, except those clinical practice courses that must be approved with a B (80%) or more. The following courses must be approved with a grade of D or higher:

The following courses must be approved with a grade of C or higher:

MEDT 2000	BIOL 1601	BIOL 1602	PHSC 2030	PHSC 2040	ANAT 2030
SONO 2000	SONO 2200	SONO 2010	SONO 2020	SONO 2130	SONO 2050
SONO 2070	SONO 2150	SONO 2180	SONO 2080	SONO 2170	SEMI 1105

The following courses must be approved with a grade of B or higher:

SONO 2140	SONO 2160	SONO 2190
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## ASSOCIATE DEGREE IN OPTICAL SCIENCES

The Associate Degree in Optical Sciences curriculum represents a planned balance between the theory and clinical practice in all aspects of the profession. The program lasts 24 months and consists of 79 credits. The courses are divided into general education, related courses, professional courses, and clinical area. The program contains the elements necessary to obtain a complete education with mastery in the execution of the functions required in optical and / or optical laboratories. Upon completion of 79 credits, the student will receive an associate degree in Optical Sciences.

The Associate Degree in Optical Sciences combines scientific knowledge and clinical procedures with the skills and abilities to work in the office and in the adaptation of eyeglasses, contact lenses, optical aids and accessories that aid in the maintenance and/or improvement of the visual health of the patient.

This program enables the student to acquire the necessary skills that will help the student challenge the bar exam offered by the Puerto Rico Optical Examining Board and obtain the license once the student completes the requirements of the law.

### PROGRAM OBJECTIVES

1. To develop a professional with basic clinical knowledge and skills in optical sciences so that he can offer services on a scientific basis and according to the technological advances of the moment.
2. Develop competencies in the student so that his behavior is a professional one when interacting with his patients, colleagues and other members of the team allied to health.
3. To develop in the student the skills to provide a service sensitive to the particular needs of the patient and respecting human dignity without discriminating because of race, color, sex, disability or economic situation.

### PRACTICE REQUIREMENTS

The following original and current documents are required to take the practice component of the program:

1. Negative Criminal Record Certificate
2. Health Certificate

3. Cardiopulmonary Resuscitation (CPR) Certification
4. HIPAA Law Certificate
5. Negative certification of Law 300-Law of Verification of Credentials and Criminal History of Providers to Children, People with Disabilities and Health Professionals \*

\* **Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

## REQUIREMENTS FOR REVALIDATION

The following documents (original and copy) are required to revalidate and practice the profession:

1. Be of age and have resided in Puerto Rico for a period of 6 months immediately before making the request, including sporadic departures.
2. Negative Criminal Record Certificate (less than 3 months from its issuance)
3. Health Certificate
4. Birth Certificate
5. Negative Certification from the Administration of Child Support (ASUME)
6. High School Credit Transcript
- 7 Credit transcript or Diploma or Certification of the Associate Degree in Optical Sciences obtained at CCU (formerly EDIC College).
8. Application completed in all its parts, including the Affidavit with 2x2 photo and two letter-size envelopes with postage stamp.
9. Payment to the Secretary of the Treasury in the amount of \$ 25.00 dollars for the right to a revalidation examination by money order, ATH or credit card.
  - to. Pay for the exam at a cost of:
    - i. Stage I. \$ 25.00 (Theoretical Exam)
    - ii. Stage II \$ 25.00 (Practical Exam) - Failure to pass Stage 1 cannot be offered until Stage 1 is completed).
    - iii. Any person who fails any of the parts of the exam on three occasions may not undergo a new exam until the Examining Board is presented with reliable proof that they have taken and approved the remedial course or courses recognized or accredited by the same.

Any questions please contact:  
Board of Opticians of Puerto Rico  
PO Box 10200  
Santurce, PR 00908-020

**ASSOCIATE DEGREE IN OPTICAL SCIENCES  
CURRICULUM: JANUARY 2021**

**CURRICULUM STRUCTURE  
GENERAL EDUCATION COURSES**

**Prescribed: 24 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3
HURE	1104	Human Relations	45	3
MATH	2010	Introductory Algebra	45	3
COMP	1205	Introduction to Computers	60	3
<b>Sub-total</b>			<b>405 hours</b>	<b>24 credits</b>

**RELATED COURSES**

**Prescribed: 9 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
PHSC	2000	Introduction to Physics	45	3
BIOL	1009	General Biology	45	3
ENTR	1024	Business Development	45	3
<b>Subtotal</b>			<b>135 hours</b>	<b>9 credits</b>

**PROFESSIONAL COURSES (CORE)**

**Prescribed: 46 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
OPTI	2000	Anatomy and Physiology of the Eye	45	3
OPTI	2020	Ophthalmic Materials I	45	3
OPTI	2020L	Ophthalmic Materials I: Laboratory	30	1
OPTI	2130	Contact Lenses I	45	3
OPTI	2130L	Contact Lenses I: Laboratory	60	2
OPTI	2010	Principles of Physical Optics	45	3
OPTI	2040	Ophthalmic Materials II	30	2
OPTI	2040L	Ophthalmic Materials II: Laboratory	60	2
OPTI	2140	Contact Lenses II	15	1
OPTI	2140L	Contact Lenses II: Laboratory	60	2
OPTI	2060	Vision Abnormalities	45	3

COURSE	CODE	NAME OF COURSE	HOURS CONTACT	CREDITS
OPTI	2150	Pre-Sizing Internship	60	2
OPTI	2110	Prescription Dispatch I	45	3
OPTI	2110L	Prescription Dispatch I: Laboratory	60	2
OPTI	2100	Laws regulating Practice Optics	30	3
OPTI	2160	Prescription Dispatch II	45	3
OPTI	2120	Clinical Practice	405	9

**Sub- total** **1,125 hours** **46 credits**

COMPONENT	CREDITS
General Education Courses	24
Related Courses	9
Professional Courses	46
<b>TOTAL</b>	<b>79 credits</b> <b>1,665 hours</b>

# ASSOCIATE DEGREE IN OPTICAL SCIENCES

CURRICULUM: JANUARY 202 1

## SUGGESTED PROGRAM OF STUDIES

COURSE	CODE	NAME OF COURSE	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
SPAN	1101	Basic Spanish I	----	3
ENGL	1101	Basic English I	----	3
MATH	2010	Introductory Algebra	----	3
BIOL	1009	General Biology	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 15 CREDITS</b>				
SPAN	1102	Basic Spanish II	SPAN 1101	3
ENGL	1102	Basic English II	ENGL 1101	3
OPTI	2000	Anatomy and Physiology of the Eye	BIOL 1009	3
PHSC	2000	Introduction to Physics	----	3
COMP	1205	Introduction to Computers	----	3
<b>THIRD TERM: 12 CREDITS</b>				
OPTI	2020	Ophthalmic Materials I	PHSC 2000	3
OPTI	2020L	Ophthalmic Materials I: Laboratory	PHSC 2000	1
OPTI	2130	Contact Lenses I	OPTI 2000	3
OPTI	2130L	Contact Lenses I: Laboratory	OPTI 2000	2
OPTI	2010	Principles of Physical Optics	MATH 2010, PHSC 2000	3
<b>FOURTH TERM: 13 CREDITS</b>				
OPTI	2040	Ophthalmic Materials II	OPTI 2020, OPTI 2020L	2
OPTI	2040L	Ophthalmic Materials II: Laboratory	OPTI 2020, OPTI 2020L	2
ENTR	1024	Business Development	----	3
HURE	1104	Human Relations	----	3
OPTI	2140	Contact Lenses II	OPTI 2130, OPTI 2130L	1
OPTI	2140L	Contact Lenses II: Laboratory	OPTI 2130, OPTI 2130L	2

COURSE	CODE	NAME OF COURSE	PRE-REQUISITES	CREDITS
<b>FIFTH TERM 12 CREDITS</b>				
OPTI	2060	Vision Abnormalities	OPTI 2000	3
OPTI	2150	Pre-Sizing Internship	OPTI 2020 OPTI 2020L, OPTI 2040 OPTI 2040L	2
OPTI	2110	Prescription Dispatch I	OPTI 2040, OPTI 2040L, OPTI 2130, OPTI 2130L, OPTI 2140, OPTI 2140L	3
OPTI	2110L	Prescription Dispatch I: Laboratory	OPTI 2040, OPTI 2040L, OPTI 2140 OPTI 2140L	2
OPTI	2100	Laws Regulating the Optic Practice	----	2
<b>SIXTH TERM: 12 CREDITS</b>				
OPTI	2160	Prescription Dispatch II	OPTI 2110, OPTI 2110L	3
OPTI	2120	Clinical Practice (Internship)	All previous courses	9

**Grand total of Associate Degree in Optical Sciences: 79 credits and 1,665 hours**

---- Courses without pre requirements

\* ^ General Education Capstone Course, to enroll in the last term

\* ^ \* Course with prerequisites and “Capstone” course of Professional Education, to enroll in the last term

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses

without problems. Courses without prerequisites do not have a specific order. The student can register in them in the term that they are offered.

### **MINIMUM GRADING POLICY**

Students enrolled in the Associate Degree in Optical Sciences must obtain at least a grade of C (70% or higher) to pass all professional and concentration courses, except those clinical practice courses that must be approved with a B (80%) or more.

The following courses must be approved with a grade of C or higher:

SEMI 1105	PHSC 2000	BIOL 1009	ENTR 1024	OPTI 2000	OPTI 2010
OPTI 2020	OPTI 2020L	OPTI 2040	OPTI 2040L	OPTI 2060	OPTI 2100
OPTI 2110	OPTI 2110L	OPTI 2130	OPTI 2130L	OPTI 2140	OPTI 2140L
OPTI 2150	OPTI 2160				

The following courses must be approved with a grade of B or higher:

OPTI 2120



## ASSOCIATE DEGREE IN CARDIAC AND VASCULAR TECHNOLOGY

The main purpose of the Associate Degree in Cardiac and Vascular Technology is to train competent and committed professionals, who contribute to the provision of direct services using new technologies and non-invasive modalities for cardiac and vascular imaging. The program consists of 91 credits. Classes are divided into general courses, related courses, professional courses, and clinical practice. Upon completion of 91 credits, the student will receive an associate degree in Cardiac and Vascular Technology.

The student is trained to perform non-invasive diagnostic tests to detect heart and vascular diseases and, in this way, help to avoid the complications of those suffering from these conditions. This program in general will provide the student with the basic knowledge related to non-invasive diagnostic studies highlighting the vascular anatomy, its normal flow pattern, in addition to being able to recognize the main pathologies that affect them and the technical procedures for their evaluation.

This program enables the student to acquire the necessary competencies that will help them challenge the revalidation exam offered by the Examining Board of Radiological Technologists in Diagnostic Imaging and Radiotherapy Technologists of Puerto Rico and obtain their license once they complete the requirements of the law. It also trains the student to acquire the necessary competencies that will help them challenge the tests offered by the ARDMS (American Registry of Diagnostic Medical Sonographers).

### PROGRAM OBJECTIVES

1. To develop a professional with the basic clinical knowledge and skills in the disciplines of sonography and cardiac and vascular technology so that they can offer scientifically based services according to the technological advances of the moment.
2. Develop competencies in the student so that his behavior is alone Professional when interacting with his patients, colleagues and other members of the team allied to health.
3. Develop in the student the skills to provide a service sensitive to the particular needs of the patient and respecting human dignity without discrimination.
4. Develop the student's ability to work effectively with the work team, including problem solving skills.

## PRACTICE REQUIREMENTS

To take the practice component of the program, the following original and current documents are required:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines
4. HIPAA Law Certificate
5. Resuscitation Certification Cardiopulmonary (CPR)
6. Doping Test \*
7. Respiratory Test \*
8. Influenza Vaccine \*
9. Varicella Vaccine \*
10. Particle Adjustment Test \*
11. Negative Certification of Act 300-Credentials Verification Act and History Criminal of Providers to Children, People with Disabilities and Health Professionals
12. Clinical practice cover letter
13. Practice authorization form

**\* Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

## REQUIREMENTS OF REVALIDATION

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Criminal Certificate (less than 3 months from its issuance)
2. Health Certificate
3. Birth Certificate
4. Negative Certification der the Administration of Child Support (ASUME)
5. High School Credit Transcript
6. Credit Transcript or Diploma or Certification of the Associate Degree in Technology Cardiac and Vascular obtained at CCU (formerly EDIC College).

7. Application completed in all its parts, including the Affidavit with 2x2 photo and two letter-size envelopes with postage stamp.

8. Payment to the Secretary of the Treasury in the amount of \$ 30.00 dollars for the right to a revalidation examination by money order, ATH or credit card.

**ASSOCIATE DEGREE IN CARDIAC AND VASCULAR TECHNOLOGY  
CURRICULUM: JANUARY 2021**

**Curricular Structure**

**EDUCATION COURSES GENERAL**

**Prescribed: 24 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3
PSYC	2014	Principles of Psychology	45	3
MATH	2010	Introductory Algebra	45	3
COMP	1205	Introduction to Computers	60	3
<b>Sub-total</b>			<b>405 hours</b>	<b>24 credits</b>

**RELATED COURSES**

**Prescribed: 16 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
MEDT	2000	Medical Terminology	30	2
BIOL	1601	Human Anatomy and Physiology I	60	3
BIOL	1602	Human Anatomy and Physiology II	60	3
ANAT	2040	Anatomy and Physiology of the Heart	30	2
PHSC	2030	Ultrasound Physics and Instrumentation I	45	3
PHSC	2040	Ultrasound Physics and Instrumentation II	45	3
<b>Sub-total</b>			<b>270 hours</b>	<b>16 credits</b>

## PROFESSIONAL COURSES (CORE )

**Prescribed: 46 credits**

COURSE	CODE	NAME OF COURSE	HOURS CONTACT	CREDITS
SONO	2200	Handling and Care of the Patient in Pictures Sonographic	45	3
CARD	2150	Introduction to Sonography Cardiac and Vascular	45	3
CARD	2160	Electrocardiography and Holter Basic	60	3
CARD	2170	Lower Extremities Vascular Sonography and Clinical Applications	90	4
CARD	2180	Basic Echocardiography	90	4
CARD	2210	Sonographic Evaluation of Cardiac Pathologies	90	4
CARD	2190	Upper Extremities Vascular Sonography and Clinical Application	90	4
CARD	2060	Handling of Special Equipment	45	2
CARD	2300	Clinical Practice I	225	5
CARD	2220	Cerebrovascular Sonography and Clinical Applications	90	4
CARD	2240	Cardiac Pharmacology and Procedures	30	2
CARD	2250	Abdominal Doppler	90	4
CARD	2350	Clinical Practice II	225	5
CARD	2270	Pre-Board Seminar	30	2
CARD	2070	Cardiac Sonography Laboratory	60	2
<b>Sub-total</b>			<b>1.305 hours</b>	<b>51 credits</b>

COMPONENT	CREDITS
General Education Courses	24
Related Courses	16
C Professional courses	51
<b>TOTAL</b>	<b>91 credits</b> <b>1,980 hours</b>

**ASSOCIATE DEGREE IN CARDIAC AND VASCULAR TECHNOLOGY  
CURRICULUM: JANUARY 2020**

**SUGGESTED PROGRAM OF STUDIES**

COURSE	CODE	COURSE NAME	PRE-REQUISITES:	CREDITS
<b>FIRST TERM: CREDIT 15</b>				
CARD	2150	Introduction to Cardiac and Vascular Sonography	----	3
MATH	2010	Introductory Algebra	----	3
BIOL	1601	Human Anatomy and Physiology I	----	3
SONO	2200	Patient Management and Care in Sonographic Imaging	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 14 CREDITS</b>				
COMP	1205	Introduction to Computers	----	3
ENGL	1101	Basic English I	----	3
BIOL	1602	Human Anatomy and Physiology II	BIOL 1601	3
MEDT	2000	Medical Terminology	----	2
PHSC	2030	Ultrasound Physics and Instrumentation I	MATH 2010	3
<b>THIRD TERM: 16 CREDITS</b>				
ANAT	2040	Anatomy and Physiology of the Heart	BIOL 1602	2
PHSC	2040	Ultrasound Physics and Instrumentation II	PHSC 2030	3
ENGL	1102	Basic English II	ENGL 1101	3
PSYC	2014	Principles of Psychology	----	3
CARD	2160	Electrocardiography and Basic Holter	CARD 2150, MEDT 2000, SONO 2200	3
CARD	2240	Pharmacology and Cardiac Procedures	CARD 2150, SONO 2200	2

COURSECOURSE	CODE	NAME	PRE-REQUIREMENTS	CREDITS
<b>FOURTH TERM: 16 CREDITS</b>				
SPAN	1101	Basic Spanish I	----	3
CARD	2060	Management of Special Equipment	----	2
CARD	2180	Basic Echocardiography	CARD 2150, MEDT 2000, ANAT 2040, SONO 2200	4
CARD	2210	Sonographic Evaluation of Cardiac Pathologies	CARD 2150, ANAT 2040, MEDT 2000, SONO 2200	4
CARD	2070	Cardiac Sonography: Laboratory	PHSC 2040, SONO 2200, CARD 2150, CARD 2160	2
<b>FIFTH TERM - 16 CREDITS</b>				
CARD	2190	Upper Extremities Vascular Sonography and Clinical Application	CARD 2150, SONO 2200	4
SPAN	1102	Basic Spanish II	SPAN 1101	3
CARD	2220	Cerebral Vascular Sonography and Clinical Applications	CARD 2150, PHSC 2040, MEDT 2000	4
CARD	2300	Clinical Practice I	CARD 2070	5
<b>SIXTH TERM: 15 CREDITS</b>				
CARD	2170	Lower Extremity Vascular Sonography and Clinical Application	CARD 2150, SONO 2200	4
CARD	2250	Abdominal Doppler	CARD 2150, SONO 2200	4
CARD	2350	Clinical Practice II	All courses of the program	5
CARD	2270	Pre-Board Seminar	CARD 2060, CARD 2150, CARD, 2160, CARD 2180, CARD 2190, CARD 2210, CARD 2220, CARD 2300, CARD 2240, CARD 2070	2

**Grand total of Associate Degree in Cardiac Vascular Technology: 91 credits and 1,980 hours**

---- Courses without prerequisites

\* ^ General Education “Capstone” course, to be enrolled in the last term

\* ^ \* Course with prerequisites and “Capstone” Professional Education course, to enroll in the last term

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student can register in them in the term that they are offered.

### MINIMUM GRADING POLICY

Students enrolled in the Associate Degree in Cardiac and Vascular Technology must obtain at least a grade of C (70% or higher) to pass all professional and concentration courses, except those clinical practice courses that must be approved with B (80%) or more.

The following courses must be approved with a grade of C or higher:

SEMI 1105   MEDT 2000   BIOL 1601   BIOL 1602   PHSC 2030   PHSC 2040  
ANAT 2040   CARD 2150   SONO 2200   CARD 2160   CARD 2240   CARD 2060  
CARD 2180   CARD 2210   CARD 2070   CARD 2190   CARD 2220   CARDD 2170  
CARD 2250   CARD 2270   SEMI 1105

The following courses must be approved with a grade of B or higher:

CARD 2300   CARD 2350

## CERTIFICATE IN PROFESSIONAL THERAPEUTIC MASSAGE

The Professional Therapeutic Massage Certificate program aims to prepare professional therapists in the art of massage. The program includes proven healing therapies from eastern and western cultures to create a well-trained and successful massage practitioner. Many of the somatic therapies emphasize scientific manipulation of the body for the treatment of stress-related conditions. The Program consists of fifty (50) credits with a total of one thousand thirty-five (1,035) contact hours of theory and practice.

### **Additional requirement of the program:**

1. Orientation with the Academic Coordinator

### **Graduation requirements:**

1. Have achieved an average of 2.50 in professional education courses.
2. Have achieved a 2.00 GPA.

## **CERTIFIED THERAPEUTIC MASSAGE PROFESSIONAL STRUCTURE CURRICULAR**

**Prescribed: 50 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
ENGL	1101	Basic English I	60	3
SPAN	1101	Basic Spanish I	60	3
SEMI *	1105	College Success and Professional Seminar	45	3
ENTR	1001	Entrepreneurship	45	3
FIAD	1001	CPR / HIV / PRIM AUX	30	1
MASS	1213	Aromatherapy and Hydrotherapy	75	3
MASS	1615	Swedish Massage Therapy	90	4
MASS	1621	Structural Kinesiology	75	3
MASS	1622	Spa Technique for Massage Therapists	75	3
MASS	1625	Sports Massage	75	3
ETIC	2001	Ethics for Massage Therapist	15	1
MASS	1620	Pathophysiology for Massage Therapists	45	3
MASS	1624	Oriental Philosophies	90	4



COURSES	CODE	COURSE NAME	HOURS CONTACT	CREDITS
MASS	1222	Special Populations	75	3
MASS	1626	Clinical Massages	75	3
MASS	1619	Anatomy and Physiology for Masseurs	60	4
MASS	2106	Professional Massage Seminar	45	3

**Total:** 1,035 hours 50 credits

## CERTIFICATE IN PROFESSIONAL THERAPEUTIC MASSAGE

### SUGGESTED PROGRAM OF STUDIES

COURSES	CODE	COURSE NAME	PRE-REQUISITES:	CREDITS
<b>FIRST TERM 11 credits</b>				
SEMI	1105	College Success and Professional Seminar	----	3
MASS	1619	Anatomy and Physiology for Masseurs	----	4
MASS	1615	Swedish Massage Therapy	----	4
<b>SECOND TERM: 13CREDITS</b>				
MASS	1621	Structural Kinesiology	----	3
MASS	1622	Spa Technique for Massage Therapists	----	3
MASS	1620	Physiopathology for Massage Therapists	----	3
MASS	1213	Aromatherapy and Hydrotherapy	----	3
ETIC	2001	Ethics for Massage Therapist	----	1
<b>THIRD TERM: 13CREDITS</b>				
MASS	1625	Sports Massage	----	3
MASS	1624	Oriental Philosophies	----	4
ENGL	1101	Basic English I	----	3
MASS	1222	Special Populations	----	3
<b>FOURTH TERM: 13CREDITS</b>				
MASS	1626	Clinical Massage	----	3
MASS	2106	Professional Massage Seminar	----	3
ENTR	1001	Entrepreneurship	----	3
FIAD	1001	CPR / HIV / PRIM AUX	----	1
SPAN	1101	Basic Spanish I	----	3

**Grand total of Certificate in Professional Therapeutic Massage: 50 credits**

---- Courses without prerequisites

\* The SEMI 1105 course is equivalent to the SEMI 3008.

\* ^ Course with “Capstone” to enroll in the last term

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete your degree in the stipulated time. The student must be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student can enroll in them, in the term that they are offered.

### MINIMUM GRADING POLICY

Students enrolled in the Certificate in Professional Therapeutic Massage must obtain at least a grade of **C** to pass the following courses:

ENTR 1001	FIAD 1001	ETIC 2001	MASS 1624
MASS 1615	MASS 1619	MASS 1622	MASS 1626
MASS 1621	MASS 1213	MASS 2106	MASS 1222
MASS 1625	MASS 1620		

## PHARMACY TECHNICIAN CERTIFICATE

The Pharmacy Technician Certificate program has been designed with the purpose of developing professional competencies in the field of pharmacy to meet the needs of modern society in this area of health. Through the professional courses the student is prepared to know the composition and formation of the drugs to be prescribed by the doctor as part of the treatment for different medical conditions, as well as the recommended dosages for each patient. The student will know the laws related to the profession and through the practice courses will acquire the necessary experience and skills which will enable them to perform efficiently in the field of pharmacy. Its curricular structure consists of 68 credits, designed to be completed in one year and eight months.

The Pharmacy Technician will possess the preparation required to meet the requirements established by Law # 247 of September 3, 2004, as amended known as the Puerto Rico Pharmacy Law. This will allow you to obtain a certification as a Pharmacy Technician to legally practice your profession in Puerto Rico.

### **Additional program requirements for your internship:**

1. Orientation with the Academic Coordinator.
2. Identify the pharmacist and the internship center.
3. Compile all the documents requested by the Puerto Rico Board of Pharmacy.
4. Complete the application to begin your internship provided by the Puerto Rico Board of Pharmacy with the purpose of requesting the provisional Certificate to begin the internship. The Pharmacy Board will approve the request with the number of hours submitted. Columbia Central University (CCU) students will need to request a minimum of 36 - 40 contact hours per week.
5. Documents to be delivered to the Puerto Rico Board of Pharmacy:
  - a. Original criminal record certificate issued by the Puerto Rico Police (no more than thirty days from the date the application is filed)
  - b. Affidavit
  - c. Postal or bank money order in favor of the Secretary of the Treasury
  - d. Original negative certification of assumes (no more than thirty days from the date the application is filed)
  - e. Photo 2X2

- f. Birth certificate
  - g. Copy of social security card
  - h. Registration and registration of the preceptor
  - i. Two envelopes (pre-addressed) stamped
6. Authorization from the Pharmacy Examining Board to carry out the pharmacy internship.
  7. The authorization confirms the pharmacist as preceptor and the availability of the pharmacy where he will be interned.
  8. Record of internship hours: (1080 hours in total)
    - a. 540 hours per academic term: Pharmacy Technician Intern must perform at least 36 - 40 hours per week to complete their internship.
    - b. Two evaluations per term:
      - First evaluation (270 hours)
      - Second evaluation (540hours)

**Graduation requirement:**

1. Have achieved a minimum GPA of 2.50 in professional education courses.

**PHARMACY TECHNICIAN CERTIFICATE**

**STRUCTURE CURRICULAR**

**Prescribed: 68 credits**

COURSE	CODE	NAME OF COURSE	HOURS CONTACTS	CREDITS
SEMI	1105 **	College Success and Professional Seminar	45	3
PHAR	1618	Pharmaceutical Mathematics	90	5
PHAR	1619	Pharmacy and Marketing	60	4
PHAR	1620	Pharmaceutical Legislation	45	3
PHAR	1621 *	Pharmacognosy	60	4
PHAR	1622 *	Dosage	75	4
PHAR	1623 *	Dispatch Techniques	105	5
PHAR	1624	Pharmacotherapy I	90	5
PHAR	1625 *	Pharmacotherapy II	90	5
PHAR	2109 *	Internship I	540	14
PHAR	2110 *	Internship II	540	14
SEMI	2507 *	Integration Seminar to the Role of the Pharmacy Technician	30	2

**Total:** **1,770 hours**      **68 credits**

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 13 CREDITS</b>				
PHAR	1618	Pharmaceutical Mathematics	----	5
PHAR	1624	Pharmacotherapy I	----	5
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12 CREDITS</b>				
PHAR	1620	Pharmaceutical Legislation	----	3
PHAR	1621 *	Pharmacognosy	PHAR 1618	4
PHAR	1625 *	Pharmacotherapy II	PH AR 1624	5
<b>THIRD TERM: 15 CREDITS</b>				
PHAR	1619	Pharmacy and Marketing	----	4
PHAR	1622 *	Dosage	PHAR 1618	4
PHAR	1623 *	Dispatch Techniques	PHAR 1618 PHAR 1621 PHAR 1622 PHAR 1624 PHAR 1625	5
SEMI	2507 *	Integration Seminar to the Role of the Pharmacy Technician	PHAR 1618 PHAR 1619 PHAR 1620 PHAR 1621 PHAR 1622 PHAR 1623 PHAR 1624 PHAR 1625 SEMI 1105	2
<b>FOURTH TERM: 14 CREDITS</b>				
PHAR	2109 *	Confinement I	PHAR 1618 PHAR 1619 PHAR 1620 PHAR 1621 PHAR 1622 PHAR 1623 PHAR 1624 PHAR1625 SEMI 1105 SEMI 2507	14

## PHARMACY TECHNICIAN CERTIFICATE

### \*\* SUGGESTED PROGRAM OF STUDIES

COURSE	CODE	COURSE NAME	PRE-REQUISITES:	CREDITS
FIFTH TERM 14 CREDITS				
PHAR	*2110	Internship II	PHAR1618 1619 PHAR PHAR 1620 PHAR 1621 PHAR 1622 PHAR 1623 PHAR 1624 PHAR 1625 PHAR 2109 SEMI 1105 SEMI 2507	14

**Grand total of Certificate in Pharmacy Technician: 68 credits**

--- Courses without pre-requisites

\* Courses with pre-requisites

\*\* The SEMI 1105 course it is equivalent to SEMI 3008.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student must be aware of taking the courses that have prerequisites in an order that allows them to continue taking the other courses without problems.

### MINIMUM GRADING POLICY

Students enrolled in the Pharmacy Technician Certificate program must obtain a minimum grade of **C** to pass the following courses:

PHAR 1618	PHAR 1621	PHAR 1624	SEMI 2507
PHAR 1619	PHAR 1622	PHAR 1625	
PHAR 1620	PHAR 1623	SEMI 1105	

Students enrolled in the Certificate program in Pharmacy Technician must obtain a minimum grade of **B** to pass the following courses:

PHAR 2109 PHAR 2110

## CERTIFICATE OF MEDICAL SECRETARY WITH MEDICAL INSURANCE BILLING

This curriculum provides the student with the opportunity to prepare for short time in two careers within the same study program. Through the curriculum, you are offered the opportunity to work both in the secretarial field and in billing to medical plans. The Program has a duration of 12 months. The course has a total of 36 credits of which 56 credits are dedicated to academic courses and 5 credits to practice. Students will complete 232.50 hours of external study work to meet program requirements. At the end of the course, the student receives a Diploma of Medical Secretarial with Billing of Medical Plans.

The Secretarial Medical area has specialized courses in Basic Typing, Intermediate and Advanced Typing, Business Mathematics, Introduction to Computers, Document Management, Office Administration, Spanish and Business English. One of the characteristics that distinguishes the typing courses is the application of the Microsoft Word program, which is currently the first in use in the modern office.

In the area of Medical Plan Billing, the curriculum has specialized courses in Medical Terminology, Credit and Collection in Medical Plan Billing, Coding, Medical Record and Secretarial Medical Practice in medical offices, laboratories, and hospitals. The general education courses that complement this curriculum are Basic English and Spanish, and Human Relations.

### OBJECTIVES OF THE PROGRAM

1. To offer the student the opportunity to study the career of Medical Secretary with
2. Billing to Medical Plans.
3. Prepare students capable of managing medical offices.
4. Offer students new study alternatives in the Medical field Secretarial.
5. Develop students with the necessary knowledge in billing and collection for medical plans.
6. Give the student the opportunity to operate the computer equipment and obtain knowledge in Windows, Microsoft Word, Excel, Power Point programs.
7. Give the student the tools to display attitudes and personal qualities that help them succeed in their work such as: responsibility, good judgment, perseverance, loyalty, initiative, cooperation, courtesy, pride in their work and ability to maintain relationships harmonious interpersonal skills.

## PRACTICE REQUIREMENTS

The following original and current documents are required to take the practice component of the program:

1. Negative Criminal Record Certificate
2. Health Certificate
3. HIPAA Law Certificate
4. Hepatitis B\* Vaccines
5. Vaccines of Chickenpox \*
6. Influenza Vaccines \*
7. Negative Certification of Law 300-Law of Verification of Credentials and Criminal History of Providers to Children, People with Disabilities and Health Professionals \*

**\*Important Note:** Some practice centers may require documents additional. The student does not need to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.



**MEDICAL SECRETARY WITH MEDICAL INSURANCE BILLING  
CURRICULUM: JANUARY 2021**

**STRUCTURE CURRICULAR**

**Prescribed: 56 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
SPAN	1100	Basic Spanish	60	4
ENGL	1110	Basic English	45	3
MATH	1110	Mathematics Comercial	45	3
MEDT	1100	Medical Terminology	120	8
MEDS	1100	Basic Computerized Typing	90	3
MEDS	1110	Credit and Collection in Medical Plans I	60	4
MEDS	1120	Document Management	60	4
MEDS	1130	Intermediate and Advanced Typing	90	3
HUMR	1100	Human Relations	30	2
MEDS	1140	Basic Principles of Classification and Coding ICD-9- CM and ICD-10 CM / PCS and CPT	60	4
COMP	1100	Introduction to Computers	60	2
SPAN	1111	Business Spanish	30	2
ENGL	1220	Business English	30	2
MEDS	1150	Office Administration	30	2
MEDS	1160	Principles of Medical Record	30	2
MEDS	1170	Credit and Medical Insurance Billing II	90	3
MEDS	1250	Internship in Medical Secretary with Medical Insurance Billing	225	5

**Total:**

**1,155 hours**

**56 credits**

**MEDICAL SECRETARY WITH MEDICAL INSURANCE BILLING  
CURRICULUM: JANUARY 2021**

**SUGGESTED PROGRAM OF STUDIES**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUISITES:</b>	<b>CREDITS</b>
<b>FIRST TERM 21 credits</b>				
SPAN	1100	Spanish Basic	----	4
ENGL	1110	Basic English	----	3
MATH	1110	Mathematics Business	----	3
MEDT	1100	Medical Terminology	----	8
MEDS	1100	Basic Computer Typing	----	3
<b>SECOND TERM: 19 CREDITS</b>				
MEDS	1110	Credit and Collection in Medical Plans I	MEDT 1100	4
MEDS	1120	Document Management	----	4
MEDS	1130	Intermediate and Advanced Keyboarding	MEDS 1100	3
HUMR	1100	Human Relations	----	2
MEDS	1140	Basic Principles of Classification and Coding ICD-9-CM and ICD-10 CM / PCS and CPT	----	4
COMP	1100	Introduction to Computers	----	2
<b>THIRD TERM: 16 CREDITS</b>				
SPAN	1111	Business Spanish	SPAN 1100	2
ENGL	1220	Business English	ENGL 1110	2
MEDS	1150	Office Administration	----	2
MEDS	1160	Principles of Medical Records	----	2
MEDS	1170	Credit and Medical Insurance Billing II	MEDT1100, MEDS1110, MED S1140	3
MEDS	1250	Internship in Medical Secretary with Medical Insurance Billing	All courses	5

**Grand total of Certificate in Medical Secretarial with Medical Plan Billing:  
56 credits**

-Courses without pre-requisites

\* Courses with pre-requisites

\* ^ Capstone Course of the Component of General Education to enroll in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM GRADE POLICY

Students enrolled in Medical Secretarial with Medical Billing must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

SPAN 1100 ENGL 1110 MATH 111 MEDT1100 MEDS 1100 MEDS 1110

MEDS 1120 MEDS 1130 HUMR 1100 MEDS 1140 COMP 1100 SPAN 1111

ENGL 1220 MEDS 1150 MEDS 1160 MEDS 1170

The following courses must be approved with a grade of B or higher:

MEDS 1250

## PRESCHOOL TEACHER ASSISTANT CERTIFICATE

The Preschool Teacher Assistant Program is intended to train students to provide services in the day care of infants and toddlers. The developed curriculum provides the opportunity for the student to learn how to assist the preschool teacher in areas such as childcare, preschool curriculum, and activity design. The Program has a duration of 12 months. The curriculum consists of 63 credits. In addition, the curriculum has a Supervised Practice course (6 credits) that facilitates the application of the knowledge acquired in the theoretical courses to a real experience in a day care center. Students will complete 225 hours of external study work to fulfill the program requirements. Upon completion of 63 credits the student receives a Preschool Assistant diploma.

### GENERAL OBJECTIVES

1. To develop in students the competence required to use their personal, academic, and professional capacities to support the preschool teacher in creating childcare programs.
2. Prepare the student for the Preschool Teacher Assistant Program to offer childcare services.
3. Provide students with the knowledge, attitudes, and skills to develop their personality so that they can integrate into the world of work, maintain satisfactory interpersonal relationships and be a participant member of a professional team.

### PRACTICE REQUIREMENTS

The following original and current documents are required to take the practice component of the program:

1. Negative Criminal Record Certificate
2. Health Certificate
3. HIPAA Law Certificate \*
4. Cardiopulmonary Resuscitation (CPR) Certification
5. Negative Certification of Law 300-Law of Verification of Credentials and Criminal History of Suppliers to Children, People with Disabilities and Health Professionals.

**\*Important Note:** Some practice centers may require additional documents. The student does not need to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.

**PRESCHOOL TEACHER ASSISTANT  
CURRICULUM: JANUARY 2021  
CURRICULAR STRUCTURE**

**Prescribed: 63 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
HUMR	1110	Human Relations	45	3
SPAN	1100	Basic Spanish	60	4
COMP	1100	Introduction to Computers	60	2
EDUC	1110	Child Development	90	6
EDUC	1120	Discipline Management	45	3
EDUC	1130	Intervention in Crisis	60	4
EDUC	1140	Management and Supervision of Personnel	60	4
EDUC	1150	Basic Concepts of Health and Safety in Infants and Children	75	5
EDUC	1160	Children with Special Needs	75	5
EDUC	1170	Activity Design	75	4
ENGL	1130	English Applied to Preschool Teaching	30	2
MATH	1110	Business Mathematics	45	3
EDUC	1180	Service Program Development and Proposal Development	60	4
EDUC	1190	Infant and Preschool Curriculum	60	4
EDUC	1200	Integration of Art, Music, and Literature Experiences in Early Childhood	60	4
EDUC	1250	Supervised Practice	270	6

**Total:** **1,170 hours**      **63 credits**

**PRESCHOOL TEACHER ASSISTANT  
CURRICULUM: JANUARY 2021**

**SUGGESTED PROGRAM OF STUDY**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSES</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 22 CREDITS</b>				
HUMR	1110	Human Relations	----	3
SPAN	1100	Basic Spanish	----	4
COMP	1100	Introduction to Computers	----	2
EDUC	1110	Child Development	----	6
EDUC	1120	Discipline Management	----	3
EDUC	1130	Crisis Intervention	----	4
<b>SECOND TERM: 23 CREDITS</b>				
EDUC	1140	Personnel Management and Supervision	----	4
EDUC	1150	Basic Health and Safety Concepts in Infants and Children	EDUC 1110	5
EDUC	1160	Children with Special Needs	EDUC 1110	5
EDUC	1170	Activity Design	EDUC 1110	4
ENGL	1130	English Applied to Preschool Education	----	2
MATH	1110	Business Mathematics	----	3
<b>THIRD TERM: 23 CREDITS</b>				
EDUC	1180	Development of Service Programs and Proposal Development	EDUC 1170	4
EDUC	1190	Infant and Preschool Curriculum	EDUC 1170	4
EDUC	1200	Integration of Art, Music and Literature Experiences in Early Childhood	----	4
EDUC	1250	Practice Supervised	All courses	6

**Grand total of Certificate in Preschool Teacher Assistant: 63 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to enroll in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM RATING POLICY

Students enrolled in Preschool Teacher Assistant must earn a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

HURM 1110	SPAN 1100	COMP 1100	EDUC 1110	EDUC 1120	EDUC 1130
EDUC 1140	EDUC 1150	EDUC 1160	EDUC 1170	ENGL 1130	MATH 1110
EDUC 1180	EDUC 1190	EDUC 1200			

The following courses must be approved with a grade of B or higher: EDUC  
1250

## EMERGENCY MEDICAL TECHNICIAN CERTIFICATE

The Emergency Medical Technician program is an academic offering that provides the opportunity to develop a competent health-related professional who performs his/her duties with ethics, dignity, professionalism, and the standards of this discipline. The program trains students to acquire the necessary skills to challenge the exam offered by the Examining Board of Emergency Medical Technicians of Puerto Rico. To take this exam it is essential to submit a Negative Criminal Record Certificate. The Program lasts for 12 months. The program consists of 51 credits. In addition, the curriculum has a practice course (9 credits) that facilitates the application of the knowledge acquired in the theoretical courses to a real experience in a practice center. Students will complete 210 hours of outside study work to meet the program requirements. At the end of the 51 credits the student receives a diploma of Emergency Medical Technician.

### PROGRAM OBJECTIVES

1. Once the preparatory modules have been completed, the student will learn about the paramedic role, their responsibilities, and the legal ethical aspects of the profession. You will develop skills in teamwork and decision making.
2. You will learn the basic techniques of radiocommunication, telemetry, and biomedical information and how to obtain the patient's history.
3. Develop skills in patient evaluation and physical examination.
4. You will learn airway management assessment and develop basic and advanced airway management skills in trauma or medical emergencies.
5. Study the anatomy and physiology of the different components in the human body.
6. They will learn to recognize the different types of "shock" and their treatment.
7. Develop skills in venipuncture and administration of intravenous fluids.
8. Identify medications commonly used by Paramedics. They will learn to classify them, they will know their indications, the starting dose, the next dose, and their precautions.
9. Identify common pathophysiology of the following systems: respiratory, cardiovascular, nervous, endocrine, reproductive, and urinary.
10. Recognize emergencies in special situations such as obstetrics and gynecology, pediatrics, geriatrics, rescue, and violent patients.
11. Recognize and manage trauma; skeletal, thoracic, abdominal muscles, spinal, head, and neck.
12. Recognize, evaluate, and manage soft tissue injuries, burns, bleeding, and shock.



13. They will learn to integrate all the principles of evaluation to develop the correct plan in the treatment of the patient.
14. They will apply all the concepts and skills acquired in the clinical rotation by the Emergency Room and Ambulance Services.

### **PRACTICE AND VALID REQUIREMENTS**

To take the practice component of the program, the following original and current documents are required:

1. Negative Criminal Record Certificate (less than 6 months from its issuance)
2. Health Certificate (less than 6 months from its issuance)
3. 3 Hepatitis B vaccines (3 doses)
4. Certificate of HIPAA Law
5. Certification of Cardiopulmonary Resuscitation (CPR)
6. Sign Language (200 hours, Requirement to be a candidate for revalidation)
7. Negative certification of Law 300- Credential Verification Law and Criminal History of Providers to Children, People with Disabilities and Health Professionals
8. Influenza Vaccine
9. Varicella Vaccine
10. Blood Pathogens\* Certificate
11. AH1N1 Orientation Certificate \*.
12. 2X2 photo

**\* Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Criminal Record Certificate (less than 3 months from its issuance)
2. Health Certificate
3. Birth Certificate
4. Cardiopulmonary Resuscitation Certification (CPR)
5. Sign Language (200 hours, Requirement to be a candidate for a revalidation)

6. High School Credit Transcript.
7. Credit transcript, Diploma, Certification of the Medical Emergency Technician Certificate obtained at CCU (formerly EDIC College).
8. Application completed in all its parts, including the Affidavit with 2x2 photo and 2 letter-size envelopes with postage stamp.
9. Payment to the Secretary of the Treasury in the amount of \$75.00 dollars for the right to a revalidation examination by money order, ATH or credit card.

**EMERGENCY MEDICAL TECHNICIAN  
CURRICULUM: JANUARY 2021**

**CURRICULAR STRUCTURE**

**Prescribed: 51 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
EMER	1111	Role of the Medical Emergency Technician	30	2
ANAT	1110	Anatomy and Physiology	30	2
ANAT	1110L	Anatomy and Physiology: Laboratory	30	1
EMER	1120	Pharmacology and Pathophysiology	60	4
EMER	1120L	Pharmacology and Pathophysiology: Laboratory	30	1
EMER	1130	Airway Management and Ventilation	30	2
EMER	1130L	Airway Management and Ventilation	30	1
EMER	1140	Patient Evaluation	30	2
EMER	1140L	Patient Evaluation	30	1
EMER	1150	Shock and Fluids	30	2
EMER	1150L	Shock and Fluids: Laboratory	30	1
EMER	1160 *	Medicine	30	2
EMER	1160L *	Medicine: Laboratory	30	1
EMER	1170 *	Pediatric Emergencies	30	2
EMER	170L *	Pediatric Emergencies: Laboratory	30	1
EMER	1180 *	Gynecology and Obstetrics	30	2
EMER	1180L *	Gynecology and Obstetrics: Laboratory	30	1
EMER	1190 *	Cardiology	45	3
EMER	1190L *	Cardiology: Laboratory	60	2
EMER	1200 *	Trauma	45	3
EMER	1200L *	Trauma: Laboratory	60	2
EMER	1210 *	Basic Rescue	60	2
EMER	1220*	Sign Language	30	2
EMER	1250*	Practice	405	9

**Total: 1.245 hours 51credits**

# EMERGENCY MEDICAL TECHNICIAN

CURRICULUM: JANUARY 2021

## SUGGESTED PROGRAM OF STUDIES

COURSE	CODE	NAME OF COURSE	PRE-REQUISITES	CREDITS
<b>FIRST TERM: 19 CREDITS</b>				
EMER	1111	Role of the Emergency Medical Technician	----	2
ANAT	1110	Anatomy and Physiology	----	2
ANAT	1110L	Laboratory of Anatomy and Physiology	----	1
EMER	1120	Pharmacology and Pathophysiology	----	4
EMER	1120L	Pharmacology and Pathophysiology: Laboratory	----	1
EMER	1130	Management and Ventilation	----	2
EMER	1130L	Management and Ventilation: Laboratory	----	1
EMER	1140	Patient Evaluation	----	2
EMER	1140L	Patient Evaluation: Laboratory	----	1
EMER	1150	Shock and Fluid	----	2
EMER	1150L	Shock and Fluid: Laboratory	----	1
<b>SECOND TERM: 19 CREDITS</b>				
EMER	1160 *	Medicine	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L	2
EMER	1160L *	Medicine: Laboratory	ANAT 1110, ANAT 1110L, EMER 1120,	1

			EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L	
EMER	1170 *	Pediatric Emergencies	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L EMER 1150, EMER 1150L	2
EMER	1170L *	Pediatric Emergencies: Laboratory	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L EMER 1150, EMER 1150L	1
EMER	1180 *	Gynecology and Obstetrics	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L EMER 1150, EMER 1150L	2
EMER	1180L *	Gynecology and Obstetrics: Laboratory	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L	1

			EMER 1150, EMER 1150L	
EMER	1190 *	Cardiology	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L EMER 1150, EMER 1150L	3
EMER	1190L *	Cardiology: Laboratory	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L EMER 1150, EMER 1150L	2
EMER	1200 *	Trauma	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L	3
EMER	1200L *	Trauma: Laboratory	ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L , EMER 1130, EMER 1130L, EMER 1140, EMER 1140L	2

THIRD TERM: 13 CREDITS				
EMER	1210 *	Basic Rescue	All courses	2
EMER	1220 *	Sign Language	----	2
EMER	1250 *	Practice	All courses	9

### Grand total of Certificate in Emergency Medical Technician: 51 credits

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM RATING POLICY

Students enrolled in Emergency Medical Technician must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

EMER 1111   ANAT 1110   ANAT 1110L   EMER 1120   EMER 1120L   EMER 1130  
 EMER 1130L   EMER 1140   EMER 1140L   EMER 1150   EMER 1150L   EMER 1160  
 EMER 1160L   EMER 1170   EMER 1170L   EMER 1180   EMER 1180L   EMER 1190  
 EMER 1190L   EMER 1200   EMER 1200L   EMER 1210   EMER 1220

The following courses must be approved with a grade of B or higher:

EMER 1250

## CERTIFICATE OF PRACTICAL NURSING

The practical nurse offers nursing care to patients of all stages of growth and development in situations that require skills and judgment based on the knowledge of scientific principles and in which the patient's condition is stable. Uses the nursing process to provide client care and is prepared to provide direct client care under the supervision of the nurse practitioner.

The course has a duration of 12 months, a total of 56 credits of which 42 credits are from theory and laboratory courses and 14 from clinical phase. Students will complete 195 hours of outside study work to meet the program requirements. Upon completion of 56 credits, the student receives a Practical Nursing diploma.

Upon completion of the program, students will be prepared to take the Practical Nursing revalidation exams offered by the Puerto Rico Examining Board to grant the Practical Nurse license, since the content offered in the program is as required for the license.

### PROGRAM OBJECTIVES

The goal of the Practical Nursing program is to develop the necessary competencies and skills that will allow you to function efficiently in the health area as a highly qualified professional using new technologies.

1. Promote in the student the development and mastery of skills that will allow him to function efficiently in this area of health.
2. Motivate students to continue advanced studies in nursing.
3. Apply the scientific principles of nursing in patient care at its best level.
4. Develop leadership skills through participation in educational, civic, and sociocultural activities.
5. Encourage students to understand that their own abilities will allow them to develop efficiently as human beings and as providers of health services.
6. Develop skills in students to achieve the necessary skills in new technologies.
7. Provide students with the knowledge and attitudes necessary to compete in the working world.



## PRACTICE AND VALID REQUIREMENTS

To take the practice component of the program, the following original and current documents are required:

Negative Criminal Record Certificate

1. Health Certificate
2. Hepatitis B Vaccine
3. Varicella Vaccine
4. HIPAA Law Certificate
5. Cardiopulmonary Resuscitation (CPR) Certification
6. Negative Certification of Law 300-Verification Law Credentials and Criminal History of Providers to Children, People with Disabilities, and Health Professionals \*

\* **Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Certification of No Alimony Debt (ASUME)
4. Birth Certificate
5. Certification of Cardiopulmonary Resuscitation (CPR)
6. High School Credit Transcript.
7. Credit transcript, Diploma, or Certification of the Certificate in Practical Nursing obtained at CCU (formerly EDIC College).
8. Application completed in all its parts, including the Affidavit with 2x2 photo and 2 letter-size envelopes with postage stamp.
9. Payment to the SECRETARY OF THE TREASURY in the amount of \$15.00 dollars for the right to a revalidation exam by money order, ATH or credit card.

**PRACTICAL NURSING**  
**CURRICULUM: JANUARY 2021**  
**CURRICULUM STRUCTURE**

**Prescribed: 56 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>cREDITS</b>
NURS	1401	Structure and Function of the Human Body	60	4
NURS	1411	Fundamentals of Nursing	210	7
NURS	1421	Human Development	60	4
COMP	1110	Introduction to Computers		
NURS	1431	Basic Microbiology Concepts	30	2
NURS	1441	Mother and Newborn Care	90	6
NURS	1461	Venipuncture Skills in Nursing	60	1
NURS	1451	Nursing Care of the Adult and the Elderly	120	8
NURS	1471	Basic Principles of Electrocardiography	30	1
NURS	1481	Palliative Care and Management Geriatric Patient	30	2
NURS	1491	Principles of Mental Health	60	4
NURS	1501	Medicine Practice	90	2
NURS	1511	Surgery Practice	90	2
NURS	1521	Emergency Room Practice	90	2
NURS	1531	Pediatrics Practice	90	2
NURS	1541	Community Health Practice	90	2
NURS	1551	Mental Health Practice	90	2
NURS	1561	Mother and Newborn Care Practice	90	2
<b>Total:</b>			<b>1,410 hours</b>	<b>56 credits</b>

## PRACTICAL NURSING

CURRICULUM: JANUARY 2021

### SUGGESTED PROGRAM OF STUDIES

COURSE	CODE	NAME OF COURSE	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 18 CREDITS</b>				
NURS	1401	Structure and Functioning of the Human Body	-----	4
NURS	1411	Fundamentals of Nursing	-----	7
NURS	1421	Human Development	-----	4
COMP	1110	Introduction to Computers	-----	1
NURS	1431	Basic Microbiology Concepts	-----	2
<b>SECOND TERM: 24 CREDITS</b>				
NURS	1441	Mother and Newborn	NURS 1401, NURS 1411	6
NURS	1451	Nursing Care of the Adult and the Elderly (Surgical Physician)	NURS 1401, NURS 1411	8
NURS	1461	Venipuncture Skills in Nursing	-----	3
NURS	1471	Basic Principles of Electrocardiography	NURS 1401	1
NURS	1481	Palliative Care and Management Geriatric Patient	-----	2
NURS	1491	Principles of Mental Health	NURS 1401, NURS 1411	4

COURSE	CODE	NAME OF COURSE	PRE-REQUISITES	CREDITS
<b>THIRD TERM: 14 CREDITS</b>				
NURS	1501*	Medical Practice	All courses	2
NURS	1511*	Surgery Practice	All courses	2
NURS	1521 *	Emergency Room Practice	All courses	2
NURS	1531 *	Pediatric Practice	All courses	2
NURS	1541 *	Community Health Practice	All courses	2
NURS	1551 *	Mental Health Practice	All courses	2
NURS	1561 *	Mother and Newborn Child Care Practice	All courses	2

**Grand total of Certificate in Practical Nursing: 56 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

## MINIMUM RATING POLICY

Students enrolled in Laboratory Assistant with Electronic Processing must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

COMP 1110	NURS 1431	NURS 1401	NURS 1411	NURS 1421	NURS 1441
NURS 1451	NURS 1461	NURS 1471	NURS 1481	NURS 1491	

The following courses must be approved with a grade of B or higher:

NURS 1501	NURS 1511	NURS 1521	NURS 1531	NURS 1541	NURS 1551
NURS 1561					

## VETERINARY ASSISTANT CERTIFICATE

The Veterinary Assistant Program prepares and provides students with the skills required in the field of clinical veterinary medicine at the diploma level, in research and public and environmental health activities in the management of large and small animals. The veterinary assistant will have knowledge about the care of animals, their physiology, and diseases, as well as the prevention and management of animal health. In addition, you will have basic training in modern veterinary surgical nursing techniques, radiology, sonography, and dental and laboratory procedures.

The program lasts 12 months and contains a total of 55 credits of which 49 credits are dedicated to theoretical and laboratory courses and 6 credits to practice. Students will complete 225 hours of outside study work to meet the program requirements. At the end of the course the student receives a Veterinary Assistant diploma.

### PROGRAM OBJECTIVES

The Veterinary Assistant program is aimed at achieving the following objectives:

1. To ensure that the student knows the general aspects of the work carried out by the veterinarian and his/her role of assistance in the process.
2. Develop judgments and criteria that allow the student to integrate theoretical and practical knowledge acquired during their participation in the program.
3. Give the student the tools to exhibit attitudes and personal qualities that help them succeed in their work such as: responsibility, good judgment, perseverance, loyalty, initiative, cooperation, courtesy, pride in their work, and ability to maintain relationships harmonious interpersonal skills.

### PRACTICE REQUIREMENTS

To take the practice component of the program, the following original and current documents are required:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B\* Vaccines
4. Varicella Vaccines \*

5. Doping Test \*
6. Rabies Vaccine \*
7. 2x2 Photo
8. Resume

\* **Important Note:** Some practice centers may require additional documents. The student does not need to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.

**VETERINARY ASSISTANT**

**CURRICULUM: JANUARY 2021**

**CURRICULUM STRUCTURE**

**Prescribed: 55 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
VETR	1211	Introduction to Veterinary Medicine and Animal Biosafety	60	4
SPAN	1121	Effective Communication Skills in Spanish	45	3
VETR	1221	Basics of Science	60	4
MATH	1101	Mathematical concepts	45	3
VETR	1231	General Principles of Veterinary Operating Room	60	2
VETR	1241	Anatomy and Physiology of Animals	90	5
VETR	1261	Veterinary Microbiology	45	3
VETR	1271	Pathology, Toxicology, and Veterinary Pharmacology	60	4
VETR	1291	Principles of Veterinary Nursing	75	4
VETR	1311	Handling, Care, and, Diseases of Farm Animals	90	4
VETR	1321	Clinical Veterinary Procedures	90	3
VETR	1281	Principles of Veterinary Odontology	30	2
VETR	1301	Animal Nutrition	30	2
VETR	1331	Introduction to Veterinary Radiology and Sonography	90	4
PSCY	1100	Principles Social Community Psychology	30	2
VETR	1370	Veterinary Clinical Practice	270	6

**Total:**

**1.170 hours**

**55 credits**



**VETERINARY ASSISTANT  
CURRICULUM: JANUARY 2021**

**SUGGESTED PROGRAM OF STUDIES**

<b>COURSE</b>	<b>CODE</b>	<b>NAME COURSE</b>	<b>PRE- REQUIREMENTS</b>	<b>CREDIT</b>
<b>FIRST TERM: 21 CREDITS</b>				
VETR	1211	Introduction to Veterinary Medicine and Animal Biosecurity	----	4
SPAN	1121	Effective Communication Skills in Spanish	----	3
VETR	1221	Basic Science Concepts	----	4
MATH	1101	Mathematical Concepts	----	3
VETR	1231	General Principles of the Veterinary Operating Room	----	2
VETR	1241	Animal Anatomy and Physiology	-----	5
<b>SECOND TERM: 18 CREDITS</b>				
VETR	1261	Veterinary Microbiology	VETR 1211, VETR 1221	3
VETR	1271	Pathology, Toxicology, and Veterinary Pharmacology	VETR 1211, VETR 1221, VETR 1241	4
VETR	1291	Principles of Veterinary Nursing	VETR 1211, VETR 1221, VETR 1231, VETR 1241, MATH 1101	4
VETR	1311	Management, Care, and Diseases of Farm Animal	VETR 1211, VETR 1221, VETR 1241, MATH 1101	4
VETR	1321	Clinical Veterinary Procedures	VETR 1211, VETR 1221, VETR 1231, VETR 1241, MATH 1101	3

COURSE	CODE	NAME OF COURSE	PRE-REQUISITES	CREDITS
<b>THIRD TERM: 16 CREDITS</b>				
VETR	1281	Principles of Veterinary Dentistry	VETR 1211, VETR 1221, VETR 1231, VETR 1241	2
VETR	1301	Animal Nutrition	VETR 1211, VETR 1221, VETR 1241, MATH 1101	2
VETR	1331	Introduction to Veterinary Radiology and Sonography	VETR 1211, VETR 1231, VETR 1241, MATH 1101	4
PSCY	1100	Principles of Community Social Psychology	SPAN 1121, MATH 1101, VETR 1211	2
VETR	1370	Veterinary Clinical Practice	All courses except PSCY 1100	6

**Grand total of Certificate in Veterinary Assistant: 55 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM RATING POLICY

Students enrolled in Veterinary Assistant must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

VETR 1211	SPAN 1121	VETR 1221	MATH 1101	VETR 1231	VETR 1241
VETR 1261	VETR 1271	VETR 1291	VETR 1311	VETR 1321	VETR 1281
VETR 1301	VETR 1331	PSCY 1100			

The following courses must be approved with a grade of B or higher: VETR 1370

## VETERINARY ASSISTANT WITH PET GROOMING CERTIFICATE \*

\* Only offered at the Yauco Campus

The Veterinary Assistant Program with Pet Grooming prepares and provides students with the required competencies in the field of clinical veterinary medicine at the diploma level, in research, public and environmental health activities, and grooming and conditioning (Pet Grooming) of animals. The veterinary assistant will have knowledge about the care of animals, their physiology, and diseases, as well as the prevention and management of animal health. In addition, you will have basic training in modern veterinary surgical nursing techniques, radiology, sonography, and dental and laboratory procedures.

With the aim of immediately integrating into the labor market, working as a Veterinary Assistant under the supervision of a licensed veterinarian, and in the case of a pet groomer, with the alternative of self-employment. The course lasts 16 months and contains a total of 46 credits of which 40 credits are dedicated to theoretical and laboratory courses and 6 credits to practice. Students will complete 270 hours of outside study work to meet the program requirements. At the end of the course the student receives a diploma of Veterinary Assistant with Pet Grooming.

### PROGRAM OBJECTIVES

1. Knowledge and consideration of the requirement of professional attitudes, soft skills, effective interpersonal relationships, and responsibility based on the ethics of the profession.
2. Develop judgments and criteria that allow the student to integrate theoretical and practical knowledge acquired during their participation in the course.
3. To ensure that the student knows the general aspects of the work carried out by the veterinarian and his/her role of assistance in the process.
4. Understand, interpret, and manage the elements of animal health and their interrelation with the environment.
5. The student will recognize the general aspects of the health and maintenance of a pet, and the importance of grooming to achieve this.
6. The student will develop the ability to transform and integrate their theoretical and practical knowledge, so that they can work as a hairdresser in any establishment or veterinary clinic

where pet grooming services are offered and/or possibly mobile and home services are offered for cats and dogs groomer.

7. Master the handling and application of techniques for holding and knocking down animals.
8. To know exploration techniques and primary diagnosis in different species.
9. The student will be able to take care of sick animals and follow treatments and instructions given by the veterinarian, aware of their duties and limitations.
10. The student will be trained in the correct use of medications and administration by different routes (oral and parenteral).
11. Acquire a basic handling of simple surgical techniques, of daily use in animal production facilities.
12. The student should be able to take biological samples for subsequent laboratory analysis as referred by the veterinarian.
13. The student will be trained to resolve emergency situations until the arrival of the veterinarian.
14. Administer, dispatch, and explain the necessary drugs prescribed by the veterinarian to patients.
15. Perform analysis of specimens in the laboratory, assist in necropsy procedures, anesthesia, taking X-rays, and ultrasound images as referred by the veterinarian or technologist in charge.
16. Enabling knowledge to administer and perform assessment / monitoring techniques, therapy, prophylaxis, lodging, nutrition, and dentistry, as well as grooming and conditioning of the animal, optimizing its best state of health.
17. Skill development to manage patients effectively and safely.
18. Knowledge and openness to various species and their safe and effective care not only of traditional pets, but also of reptiles, amphibians, hamsters, snakes, among others.
19. Sufficient knowledge of the structure and functions of healthy animals, their upbringing, reproduction, and general hygiene, as well as their diet.

## **PRACTICE REQUIREMENTS**

It is required to take the practice component of the program, the following current and original documents:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines (3 doses) \*\*

4. Varicella Vaccines \*
5. Doping Test \*
6. Rabies Vaccine \*
7. 2x2 Photo
8. Resume

\* Important Note: Some practice centers may require additional documents. The student does not need to revalidate to practice the profession.

**VETERINARY ASSISTANT WITH PET GROOMING  
CURRICULUM: SEPTEMBER 2020 (only in the Yauco Campus)  
CURRICULUM STRUCTURE**

**Prescribed: 71 credits**

<b>COURSE</b>	<b>CODE</b>	<b>NAME OF COURSE</b>	<b>HOURS CONTACT</b>	<b>CREDITS</b>
VETR	1211	Introduction to Veterinary Medicine and Animal Biosafety	60	4
SPAN	1121	Effective Spanish Communication Skills	45	3
VETR	1221	Basic Science Concepts	60	4
MATH	1101	Mathematical Concepts	45	3
VETR	1231	General Principles of Veterinary Operating Room	60	2
VETR	1241	Animal Anatomy and Physiology	90	5
VETR	1261	Veterinary Microbiology	45	3
VETR	1271	Pathology, Toxicology, and Veterinary Pharmacology	60	4
VETR	1291	Principles of Veterinary Nursing	75	4
VETR	1311	Handling, Care, and Diseases of Farm Animals	90	4
VETR	1321	Veterinary Clinical Procedures	90	3
VETR	1281	Principles of Veterinary Dentistry	30	2
VETR	1301	Animal Nutrition	30	2
VETR	1331	Introduction to Radiology and Veterinary Sonography	90	4
PSCY	1100	Principles of Community Social Psychology	30	2
GROM	1211	Introduction to Pet Grooming	30	2
GROM	1241	Pre-Grooming Techniques	75	3
GROM	1261	Basic Grooming	75	3
GROM	1271	Business Basic and Marketing	30	2
GROM	1281	Patterns and Styles Trim	75	3
GROM	1301	Advanced Techniques Grooming	75	3
GROM	1361	Practice Grooming	135	3
VETR	1361	Practice Veterinary Clinic	135	3

**Total:**

**1,530 hours**

**71 credits**

**VETERINARY ASSISTANT WITH PET GROOMING CURRICULUM:  
SEPTEMBER 2020 (only in the Yauco Campus)**

**SUGGESTED PROGRAM OF STUDIES**

COURSE	CODE	NAME OF COURSE	PRE-REQUISITES	CREDITS
<b>FIRST TERM: 21 CREDITS</b>				
VETR	1211	Introduction to Veterinary Medicine and Animal Biosecurity	----	4
SPAN	1121	Effective Spanish Communication Skills	----	3
VETR	1221	Basic Science Concepts	----	4
MATH	1101	Mathematical Concepts	----	3
VETR	1231	General Principles of the Operating Room Veterinary	----	2
VETR	1241	Anatomy and Physiology of Animals	-----	5
<b>SECOND TERM: 18 CREDITS</b>				
VETR	1261	Veterinary Microbiology	VETR 1211, VETR 1221	3
VETR	1301	Animal Nutrition	VETR 1211, VETR 1221, VETR 1241, MATH1101	2
VETR	1291	Principles of Veterinary Nursing	VETR 1211, VETR 1221, VETR 1231, VETR 1241, MATH 1101	4
VETR	1311	Management, Care and Diseases of Farm Animals	VETR 1211, VETR 1221, VETR 1241, MATH 1101	4
VETR	1321	Clinical Procedures Veterinary	VETR 1211, VETR 1221, VETR 1231, VETR 1241, MATH 1101	3
PSCY	1100	Principles of Community Social Psychology	SPAN 1121, MATH 1101, VETR 1211	2



COURSE	CODE	NAME COURSE	PRE-REQUISITES	CREDITS
<b>THIRD TERM 18 CREDITS</b>				
VETR	1271	Pathology, Toxicology and Pharmacology Veterinary	VETR 1211, VETR 1221, VETR 1241	4
VETR	1281	Principles of Dentistry Veterinary	VETR 1211, VETR 1221, VETR 1231, VETR 1241	2
VETR	1331	Introduction to Radiology and sonography Veterinary	VETR 1211, VETR 1231, VETR 1241, MATH 1101	4
GROM	1211	Introduction to Pet Grooming	----	2
GROM	1241	Pre-Grooming Techniques	----	3
GROM	1261	Basic Grooming	-----	3
<b>FOURTH TERM: 14 CREDITS</b>				
GROM	1271	Basic Business and Marketing	-----	2
GROM	1281	Trimming Patterns and Styles	GROM 1211, GROM 1221, GROM 1241 GROM 1261	3
GROM	1301	Advanced Grooming Techniques	GROM 1211, GROM 1221, GROM 1241 GROM 1261	3
GROM	1361	Grooming Practice	All courses	3
VETR	1361	Veterinary Clinical Practice	All courses except PSCY 1100	3

**Grand total of Certificate in Veterinary Assistant with Pet Grooming: 71 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM RATING POLICY

Students enrolled in Veterinary Assistant with Pt Grooming must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

VETR 1211	SPAN 1121	VETR 1221	MATH 1101	VETR 1231	VETR 1241
VETR 1261	VETR 1271	VETR 1291	VETR 1311	VETR 1321	VETR 1281
VETR 1301	VETR 1331	PSCY 1100	GROM 1211	GROM 1241	GROM 1261
GROM 1271	GROM 1281	GROM 1301			

The following courses must be approved with a grade of B or

higher: VETR 1361    GROM 1361

## LABORATORY ASSISTANT CERTIFICATE WITH ELECTRONIC PROCESSING

The Laboratory Assistant with Electronic Processing program is designed to train students with basic science concepts, customer service, and laboratory procedures. The Program has been developed to provide students the opportunity to learn how to assist medical technologists and laboratory directors in areas such as equipment cleaning and disinfection, culture media preparation, sample labeling, and customer service. through face-to-face courses. The program lasts eight months and consists of 38 credits. In addition, the curriculum includes a Clinical Practice course (4 credits) that facilitates the application of the knowledge acquired in the theory courses to a real experience in a laboratory. Students will complete 150 hours of outside work to complete the program requirements. Upon completion of the 38 credits, the student receives a diploma as a Laboratory Assistant with Electronic Processing.

### PROGRAM OBJECTIVES

To develop in the student professional attitudes, soft skills and specific competencies required for them to exhibit the necessary qualities to perform in a responsible and ethical manner as a Laboratory Assistant with Electronic Processing in accordance with the provisions of Regulation # 120 of the Puerto Health Department Rich.

1. Train the student with the necessary skills, competencies, and attitudes so that they can transfer the technical and practical knowledge acquired during their participation in the program to their professional life.
2. Prepare the student in the knowledge and skills related to data entry, communication, customer service, and handling of patient information in clinical laboratories.
3. To ensure that the student knows the general aspects of the operation of a laboratory and its role of assistance in the processes authorized by law.

### PRACTICE REQUIREMENTS

To take the practice component of the program, the following original and current documents are required:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccines (3 doses) \*
4. Varicella Vaccines (2 doses)
5. Doping Test \*
6. Nose and Throat Culture \*
7. HIPAA Law Certificate
8. Negative Certification of Law 300-Law on Verification of Credentials and Criminal History of Suppliers to Children, People with Disabilities and Health Professionals \*

\* **Important Note:** Some practice centers may require additional documents. The student does not need to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.

**LABORATORY ASSISTANT WITH ELECTRONIC PROCESSING**

**CURRICULUM: SEPTEMBER 2020 (Yauco) JANUARY 2021 (new units)**

**CURRICULUM STRUCTURE**

**Prescribed: 38 credits**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
LABS	1111	Introduction to the Clinical Laboratory - Laws, Regulations, and Role of the Assistant in Equipment Management	120	7
LABS	1121	General Science Compendium	90	5
SPAN	1151	Basic Skills of Effective Communication and Customer Service	60	4
MEDT	1111	Medical Terminology	30	2
MICR	1111	Basic Concepts of Microbiology	60	3
LABS	1131	General Data Entry and Billing Processes for Laboratory Services	60	3
LABS	1141	Laboratory Sample Management	90	5
LABS	1151	Special Procedures	90	5
LABS	1251	Supervised Practice	180	4

**Total:**

**780 hours**

**38 credits**

**LABORATORY ASSISTANT WITH ELECTRONIC PROCESSING  
CURRICULUM: SEPTEMBER 2020 (Yauco) JANUARY 2021 (new units)  
SUGGESTED STUDY PROGRAM**

COURSE	CODE	NAME OF THE COURSE	PRE-REQUISITES	CREDITS
<b>FIRST TERM: 21 CREDITS</b>				
LABS	1111	Introduction to the Clinical Laboratory - Laws, Regulations, and Role of the Assistant in Equipment Management	----	7
LABS	1121	General Science Compendium	----	5
SPAN	1151	Basic Skills of Effective Communication and Customer Service	----	4
MEDT	1111	Medical Terminology	----	2
MICR	1111	Basic Concepts of Microbiology	----	3
<b>SECOND TERM: 17 CREDITS</b>				
LABS	1131	General Data Entry and Billing Processes for Laboratory Services	MEDT 1111	3
LABS	1141	Laboratory Sample Management	LABS 1111	5
LABS	1151	Special Procedures	LABS 1111	5

**Grand total of Certificate in Laboratory Assistant with Electronic Processing: 38 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

#### MINIMUM RATING POLICY

Students enrolled in Laboratory Assistant with Electronic Processing must obtain a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

LABS 1111    LABS 1121    SPAN 1151    MEDT 1111    MICR 1111    LABS 1131  
LABS 1141    LABS 1151

The following courses must be approved with a grade of B or higher: LABS 1251

## PROFESSIONAL PET GROOMER CERTIFICATE

The Professional Pet Groomer program has been designed to train people who love animals and want a short career and prepare them for pet care, health prevention and grooming. This program prepares professionals in the field of animal hygiene, health, and beauty, focusing on graduates being able to work sensitively and ethically. The show also has a creative style component.

The program is offered through face-to-face courses. Graduates will be able to work in veterinary centers, dog and/or feline beauty salons, agro centers and in their own physical or mobile businesses. The curriculum consists of 33 credits. The curriculum includes an External Supervised Clinical Practice course (5 credits) that facilitates the application of the knowledge acquired in theory courses to a real experience in a facility that offers grooming services to pets. Students will complete 150 hours of outside work to complete the program requirements. Once the student completes the 33 credits, they receive the diploma as a Professional Pet Groomer.

### PROGRAM OBJECTIVES

The Professional Pet Groomer program is aimed at achieving the following objectives:

1. The student will recognize the general aspects of the health and maintenance of a pet, and the importance of grooming to achieve this.
2. The student will develop the ability to transform and integrate their knowledge, both theoretical and practical, so that they can practice as a groomer in any establishment or veterinary clinic where pet grooming services are offered and / or possibly offer mobile and home grooming services. of cats and dogs.
3. The student will correctly handle the technological tools to promote their services.
4. Students will exhibit the necessary skills, attitudes, and qualities to help them be successful in their work.
5. Students will develop responsibility and pride for the work they do.
6. 6. They will develop a commitment to stay at the forefront of knowledge related to aesthetics and animal health.



7. Students will develop empathy for animals and offer humane treatment.
8. Students will acquire knowledge to establish and manage small businesses in Puerto Rico.

### **PRACTICE REQUIREMENTS**

To take the practice component of the program, the following original and current documents are required:

1. Negative Criminal Record Certificate
2. Health Certificate
3. Hepatitis B Vaccine (3 doses) \*
4. Rabies Vaccine \*

\* **Important Note:** Some practice centers may require additional documents. The student does not need to revalidate to practice the profession.

General information: The Institution reserves the right to modify this study program at any time in agreement with the corresponding department.

## PROFESSIONAL PET GROOMER

CURRICULUM: JANUARY 2021

### CURRICULUM STRUCTURE

**Prescribed: 33 credits**

COURSE	CODE	COURSE NAME	HOURS CONTACT	CREDITS
GROM	1211	Introduction to Pet Grooming	30	2
GROM	1220	Anatomy and Animal Husbandry	45	3
GROM	1230	Health, Welfare, and Emergency Management	45	3
GROM	1241	Pre-Grooming Techniques	75	3
GROM	1250	Principles of Behavior	75	3
GROM	1261	Basic Grooming	75	3
GROM	1271	Basic Business and Marketing	30	2
GROM *	1281	Trimming Patterns and Styles	75	3
GROM	1290	Creative Grooming and Asian Functions	75	3
GROM *	1301	Advanced Grooming Techniques	75	3
GROM *	1350	Grooming Practice	225	5

**Total:**

**825 hours**

**33 credits**

**PROFESSIONAL PET GROOMER  
CURRICULUM: JANUARY 2021**

**SUGGESTED PROGRAM OF STUDIES**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE- REQUIREMENTS</b>	<b>CREDITS</b>
<b>FIRST TERM: 19 CREDITS</b>				
GROM	1211	Introduction to Pet Grooming	----	2
GROM	1220	Anatomy and Animal Husbandry	----	3
GROM	1230	Health, Welfare, and Emergency Management	----	3
GROM	1241	Pre-Grooming Techniques	----	3
GROM	1250	Principles of Behavior	----	3
GROM	1261	Basic Grooming	-----	3
GROM	1271	Basic Business and Marketing	-----	2
<b>SECOND TERM: 14CREDITS</b>				
GROM*	1281	Standards and Trim Styles	GROM 1211, GROM 1241 GROM 1261	3
GROM	1290	Creative Grooming and Asian Features	GROM 1211, GROM 1241 GROM 1261	3
GROM *	1301	Advanced Grooming Techniques	GROM 1211, GROM 1241 GROM 1261	3
GROM *	1350	Grooming Practice	All courses	5

**Grand total of Certificate in Professional Pet Groomer: 33 credits**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Capstone Course of the General Education Component to be enrolled in the last term.

\* ^ \* Capstone Professional Education Course

\*\* The student does not necessarily have to follow the order of the suggested courses, but the order helps the student to complete their degree in the stipulated time. The student should be aware of taking the courses that have requirements in an order that allows them to continue taking the other courses without problems. The courses without requirements do not have a specific order. The student can enroll in them, in the semester they are offered.

### MINIMUM RATING POLICY

Students enrolled in Pet Groomer Professional must earn a minimum grade of C (70% or higher) to pass all courses in the program.

The following courses must be approved with a grade of C or higher:

GROM 1211	GROM 1220	GROM 1230	GROM 1241	GROM 1250	GROM 1261
GROM 1271	GROM 1281	GROM 1290	GROM 1301		

The following courses must be approved with a grade of B or higher:

GROM 1350

# SCHOOL OF APPLIED ARTS

## ASSOCIATE DEGREE IN AUDIO \*

The purpose of the Associate Degree in Audio program is to develop trained professionals to integrate and excel in the local and international sound industry. The program aims to prepare future audio professionals to elaborate, create and develop sound proposals for multimedia. The audio professional of this program will have the required preparation to record, synchronize, produce, mix, master, restore, set film to music, make live audio, among others.

### Additional program requirement:

1. Orientation with the Academic Coordinator

### Graduation requirements:

1. Have achieved an average of 2.50 in professional courses.
2. Have achieved a 2.00 GPA.

\* Only available in the Caguas Campus.

## CURRICULUM STRUCTURE

### GENERAL EDUCATION COURSES

Prescribed: 15 credits

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105 **	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3

Sub - total:

255 hours

15 credits

## PROFESSIONAL EDUCATION COURSES

**Prescribed: 45 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
AUDIO	1401	Sound Appreciation	60	3
AUDIO	1402	Music Industry	60	3
AUDIO	1403	Audio Recording	60	3
AUDIO	1404	Audio and Multimedia	60	3
AUDIO	1501	Recording and Synchronization in MIDI	60	3
AUDIO	1502	Audio Production	60	3
AUDIO	1503	Audio for Radio and Television	60	3
AUDIO	1504	Live Audio	60	3
AUDIO	1604	Production with DAW	60	3
AUDIO	1605	Mix with DAW	60	3
AUDIO	1606	Pre-Mastering with DAW	60	3
AUDIO	2101	Acoustics	60	3
AUDIO	2102	Sound for Cinema	60	3
AUDIO	2103 *	Audio Restoration	60	3
AUDIO	2104 * ^	Audio Seminar	120	3

**Sub - total:**

**960 hours**

**45 credits**

**ASSOCIATE DEGREE IN AUDIO (Only offered at the Caguas Campus)**  
**SUGGESTED PROGRAM OF STUDIES \*\***

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 12 CREDITS</b>				
AUDIO	1401	Sound Appreciation	----	3
AUDIO	1402	Music Industry	----	3
AUDIO	1403	Audio Recording	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12CREDIT</b>				
AUDIO	1501	Recording and Synchronization in MIDI	----	3
AUDIO	1502	Audio Production	----	3
AUDIO	1503	Audio for Radio and Television	----	3
AUDIO	1504	Live Audio	----	3
<b>THIRD TERM: 12CREDITS</b>				
AUDIO	1604	Production with DAW	----	3
AUDIO	1605	Mixing with DAW	----	3
AUDIO	1606	Pre-Mastering with DAW	----	3
AUDIO	2101	Acoustics	----	3
<b>FOURTH TERM: 12CREDITS</b>				
AUDIO	1404	Audio and Multimedia	----	3
AUDIO	2102	Sound for Cinema	----	3
ENGL	1101	Basic English I	----	3
SPAN	1101	Basic Spanish I	----	3



COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIFTH TERM: 12CREDITS</b>				
AUDIO	2103 *	Audio Restoration	AUDIO 1401 AUDIO 1402 AUDIO 1403 AUDIO 1404 AUDIO 1501 AUDIO 1502 AUDIO 1503 AUDIO 1504 AUDIO 1604 AUDIO 1605 AUDIO 1606	3
AUDIO	2104 * ^	Audio Seminar	AUDIO 1401 AUDIO 1402 AUDIO 1403 AUDIO 1404 AUDIO 1501 AUDIO 1502 AUDIO 1503 AUDIO 1504 AUDIO 1604 AUDIO 1605 AUDIO 1606	3
ENGL	1102 *	Basic English II	ENGL 1101	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3

**Grand total of Associate Degree in Audio: 60 credits and 1,215 hours**

\* ^ Courses with pre-requirements and “Capstone” course to enroll in the last term.

\*\* The SEMI 1105 course is equivalent to the SEMI 3008.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems.

## MINIMUM RATING POLICY

Students enrolled in the Associate Degree in Audio must obtain a minimum grade of **C** to pass the following courses:

AUDIO 1401	AUDIO 1502	AUDIO 1606	SEMI 1105	AUDIO 1402
AUDIO 1503	AUDIO 2101	AUDIO 1403	AUDIO 1504	AUDIO 2102
AUDIO 1404	AUDIO 1604	AUDIO 2103	AUDIO 1501	AUDIO 1605
AUDIO 2104				

## ASSOCIATE DEGREE IN GRAPHIC DESIGN

The purpose of the Associate Degree program in Graphic Design is to develop skilled graphic designers to integrate and excel in the production of graphic content. The program aims to prepare future graphic designers to elaborate, create, and develop graphic content for multimedia.

The graphic designer of this program will possess the required preparation to illustrate, edit video, edit graphics, design logos, design advertising, photograph, design web, animate, create advanced three-dimensional designs, among others.

### Additional requirement of the program:

1. Orientation with the Academic Coordinator

### Graduation Requirements:

1. Have achieved a 2.50 GPA in professional courses.
2. Have achieved an average of 2.00 in general courses.

### CURRICULUM STRUCTURE GENERAL EDUCATION COURSES

Prescribed: 18 credits

COURSES	COD E	COURSE NAME	CONTACT HOURS	CREDITS
ART	2009	Art History	45	3
ENGL	1101	Basic English I	60	3
ENGL	1102 *	Basic English II	45	3
SEMI	1105 **	College Success and Professional Seminar	45	3
SPAN	1101	Basic Spanish I	60	3
SPAN	1102 *	Basic Spanish II	45	3

Sub - total:

300 hours

18 credits

**GENERAL EDUCATION ELECTIVES**  
(3 credits to choose)

**Electives: 3 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
COMU	3010	Effective Communication	45	3
HURE	1104	Human Relations	45	3
PSYC	2014	Psychology	45	3

**Sub - total:**

**45 hours**

**3 credits**

**RELATED COURSES**

**Prescribed: 3 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENTR	1024	Business Development	45	3

**Sub - total:**

**45 hours**

**3 credits**

**PROFESSIONAL EDUCATION COURSES**

**Prescribed: 36 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
GRAD	1402	Typography in Design	60	3
GRAD	1403	Publishing Assembly	60	3
GRAD	1404	Digital Animation	60	3
GRAD	1501	Illustration Techniques	60	3
GRAD	1502	Graphics and Video Editing	60	3
GRAD	1503	Logo Design	60	3
GRAD	1504	Advertising Design	60	3
GRAD	1601	Digital Image Editing	60	3
GRAD	1602	Digital Photography	60	3
GRAD	1603	Web Design	60	3
GRAD	1604	Three-Dimensional Design	60	3
GRAD	2001 *	Creative Portfolio	90	3

Sub - total:

750 hours

36 credit

**ASSOCIATE DEGREE IN GRAPHIC DESIGN  
SUGGESTED PROGRAM OF STUDY \*\***

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 12 CREDITS</b>				
ART	2009	Art History	----	3
GRAD	1402	Typography in Design	----	3
GRAD	1403	Publishing Assembly	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12 CREDITS</b>				
GRAD	1501	Illustration Techniques	----	3
GRAD	1502	Graphics and Video Editing	----	3
GRAD	1503	Logo Design	----	3
GRAD	1504	Advertising Design	----	3
<b>THIRD TERM: 12 CREDITS</b>				
GRAD	1601	Image Editing Digital	----	3
GRAD	1602	Digital Photography	----	3
GRAD	1603	Web Design	----	3
GRAD	1604	Three-Dimensional Design	----	3
<b>FOURTH TERM: 12 CREDITS</b>				
ELECTIVE		Free Elective	----	3
ENGL	1101	Basic English I	----	3
ENTR	1024	Business Development	----	3
SPAN	1101	Basic Spanish I	----	3
<b>FIFTH TERM: 12 CREDITS</b>				
ENGL	1102 *	Basic English II	ENGL 1101	3
GRAD	1404	Digital Animation	----	3

GRAD	2001 * ^	Creative Portfolio	ART 2009 GRAD 1402 GRAD 1403 GRAD 1501 GRAD 1502 GRAD 1503 GRAD 1504 GRAD 1601 GRAD 1602 GRAD 1603 GRAD 1604	3
SPAN	1102 *	Basic Spanish II	SPAN 1101	3

**Grand total of Associate Degree in Graphic Design: 60 credits and 1,140 hours**

-Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Courses with pre-requirements and “Capstone” course to be enrolled in the last term

\*\* The SEMI course 1105 is equivalent to SEMI 3008.

\*\* The student does not necessarily have to follow the order of suggested courses, but the order helps to complete their degree in the stipulated time. The student should be aware of taking the courses that have pre-requirements in an order that allows them to continue taking the other courses without problems.

### MINIMUM RATING POLICY

Students enrolled in the Associate Degree in Graphic Design must obtain, at a minimum, a grade of C to pass the following courses:

ART 2009	GRAD 1501	GRAD 1602
ENTR 1024	GRAD 1502	GRAD 1603
GRAD 1402	GRAD 1503	GRAD 1604
GRAD 1403	GRAD 1504	GRAD 2001
GRAD 1404	GRAD 1601	SEMI 1105

## AUDIO TECHNICIAN CERTIFICATE\*

The program provides the student with the ability to conduct different areas in an ethical and versatile way, both at the level of technical design and sensitivity towards the creative process, and to know the continuous transformation within sound in its different stages of sound production. It includes study and practice in laboratories creating new sound concepts. The certificate consists of 13 courses of 3 credits each, for a total of 39 credits. The degree can be completed in one year by following the suggested curriculum.

### Additional program requirement:

1. Orientation with the Academic Coordinator

### Graduation requirements:

1. Have achieved an average of 2.50 in professional courses.
2. Have achieved a 2.00 GPA.

### CERTIFICATE IN AUDIO TECHNICIAN (Only offered in the Caguas Campus)

#### CURRICULUM STRUCTURE

Prescribed: 39 credits

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
SEMI	1105**	College Success and Professional Seminar	45	3
AUDIO	1401	Sound Appreciation	60	3
AUDIO	1402	Music Industry	60	3
AUDIO	1403	Audio Recording	60	3
AUDIO	1404	Audio and Multimedia	60	3
AUDIO	1501	Recording and Synchronization in MIDI	60	3
AUDIO	1502	Audio Production	60	3
AUDIO	1503	Audio for Radio and Television	60	3
AUDIO	1504	Live Audio	60	3
AUDIO	1604	Production with DAW	60	3
AUDIO	1605	Mixing with DAW	60	3
AUDIO	1606	Pre-Mastering with DAW	60	3
AUDIO	2104**^	Audio Seminar	120	3

Total:

825 hours

39 credits

**IN AUDIO TECHNICIAN CERTIFICATE  
SUGGESTED PROGRAM OF STUDIES \*\***

COURSES	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
AUDIO	1401	Sound Appreciation	----	3
AUDIO	1402	Music Industry	----	3
AUDIO	1403	Audio Recording	----	3
AUDIO	1404	Audio and Multimedia	----	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12CREDIT</b>				
AUDIO	1501	Recording and Synchronization in MIDI	----	3
AUDIO	1502	Audio Production	----	3
AUDIO	1503	Audio for Radio and Television	----	3
AUDIO	1504	Live Audio	----	3
<b>THIRD TERM: 12CREDIT</b>				
AUDIO	1604	DAW Production	----	3
AUDIO	1605	DAW Mix	----	3
AUDIO	1606	DAW Pre-Mastering	----	3
AUDIO	2104 * ^	Audio Seminar	AUDIO 1401 AUDIO 1402 AUDIO 1403 AUDIO 1404 AUDIO 1501 AUDIO 1502 AUDIO 1503 AUDIO 1504 AUDIO 1604 AUDIO 1605 AUDIO 1606	3



## **Grand total of Certificate in Audio Technician: 39 credits**

--Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Courses with pre-requirements and “Capstone” course to enroll in the last term

\*\* The SEMI 1105 course is equivalent to the SEMI 3008.

\*\* The student does not have to necessarily follow the suggested course order, but the order helps you complete your degree in the stipulated time. The student should be aware of taking the courses that have PRE-REQUIREMENTS in an order that allows them to continue taking the other courses without problems.

### **MINIMUM RATING POLICY**

Students enrolled in the Certificate in Audio Technician \* must obtain a minimum grade of C to pass the following courses:

AUDIO 1401	AUDIO 1502	AUDIO 1606
AUDIO 1402	AUDIO 1503	AUDIO 2104
AUDIO 1403	AUDIO 1504	SEMI 1105
AUDIO 1404	AUDIO 1604	
AUDIO 1501	AUDIO 1605	

## CERTIFICATE IN GRAPHIC DESIGN

The Certificate program in Graphic Design provides the student with the ability to develop critical thinking and creativity in an original way by carrying out visual communication projects. It includes study and practice in laboratories creating new graphic concepts. The certificate consists of 13 courses of 3 credits each, for a total of 39 credits.

### Additional program requirement:

1. Orientation with the Academic Coordinator

### Graduation requirements:

1. Have achieved an average of 2.50 in professional courses.
2. Have achieved a 2.00 GPA.

### CERTIFICATE IN GRAPHIC DESIGN CURRICULUM STRUCTURE

Prescribed: 39 credits

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ART	2009	Art History	45	3
SEMI	1105*	College Success and Professional Seminar	45	3
GRAD	1402	Typography in Design	60	3
GRAD	1403	Publishing Assembly	60	3
GRAD	1404	Digital Animation	60	3
GRAD	1501	Illustration Techniques	60	3
GRAD	1502	Graphic Edition and Video	60	3
GRAD	1503	Design	60	3
GRAD	1504	Advertising Design	60	3
GRAD	1601	Digital Image Editing	60	3
GRAD	1602	Digital Photography	60	3
GRAD	1603	Web Design	60	3
GRAD	1604	Three-Dimensional Design	60	3

Sub - Total:

750 hours

39 credits

### CERTIFICATE IN GRAPHIC DESIGN SUGGESTED STUDY PROGRAM \*\*

COURSE	CODE	NAME OF COURSE	PRE-REQUISITES:	CREDITS
<b>FIRST TERM 15 credits</b>				
ART	2009	History of Art	----	3
GRAD	1402	Typography in Design	----	3
GRAD	1403	Mounting Publications	----	3
GRAD	1404	Digital Animation	- - - -	3
SEMI	1105	College Success and Professional Seminar	----	3
<b>SECOND TERM: 12 CREDITS</b>				
GRAD	1501	Illustration Techniques	----	3
GRAD	1502	Graphics and Video Editing	----	3
GRAD	1503	Logo Design	- - - -	3
GRAD	1504	Advertising Design	----	3
<b>THIRD TERM: 12 CREDITS</b>				
GRAD	1601	Digital Image Editing	----	3
GRAD	1602	Digital Photography	----	3
GRAD	1603	Web Design	----	3
GRAD	1604	Design Three-dimensional	----	3

### **Grand total of Certificate in Graphic Design: 39 credits**

--Courses without pre-requirements

\* Courses with pre-requirements

\* ^ Courses with pre-requirements and “Capstone” course to enroll in the last term

\*\* The SEMI 1105 course is equivalent to the SEMI 3008.

\*\* The student does not have to necessarily follow the suggested course order, but the order helps you complete your degree in the stipulated time. The student should be aware of taking the courses that have PRE-REQUIREMENTS in an order that allows them to continue taking the other courses without problems.

### **MINIMUM RATING POLICY**

Students enrolled in the Certificate in Graphic Design must obtain at least a grade of C to pass the following courses:

GRAD 1402	GRAD 1502	GRAD 1602
GRAD 1403	GRAD 1503	GRAD 1603
GRAD 1404	GRAD 1504	GRAD 1604
GRAD 1501	GRAD 1601	SEMI 1105

## COURSE DESCRIPTIONS

## COURSE DESCRIPTIONS

The course descriptions contained in this catalog and/or any other institutional publication refers exclusively to a general schematic establishment of the content of each course. The description, therefore, does not constitute a total and complete definition of the programmatic content of each course.

### **ACCO 1201 INTRODUCTION TO ACCOUNTING I      4 CREDITS 60 HOURS**

Introduction to generally accepted principles in accounting practice. Analysis and study of the accounting equation. Familiarization with the real accounts, nominal accounts, and the movement of accounts. Study and systematic practice of the different phases of the accounting cycle, accounting system and periodic reports for a commercial company, cash control, types, and methods of inventories. The student's knowledge will be determined through practical exercises and exams.

### **ACCO 1202 INTRODUCTION TO ACCOUNTING II      4 CREDITS                  60 HOURS**

*Pre-requirement: ACCO 1201*

Review and emphasis on the most important areas previously studied in accounting I. The topics to be covered will be types of businesses and their structure, formation, division of profits and liquidation of a company. We will analyze the organization and operation of a corporation, its content and information, and long-term obligations and investments. Additionally, we will study stock investments, basic concepts of managerial accounting and the student's knowledge will be determined through practical exercises and exams.

### **ACCO 2200 ADMINISTRATIVE ACCOUNTING                  3 CREDITS                  60 HOURS**

The purpose of this course is to introduce the student to the basic principles of accounting, focused on analysis for decision making based on internal accounting information. Topics based on the accounting equation, the accounting cycle, financial statements, cash management and its internal control and evaluation methods are discussed. Student knowledge is determined through practical exercises, case studies, oral presentations, research, and exams.

### **ACCO 2201 BASIC ACCOUNTING                                  3 CREDITS                  45 HOURS**

The course introduces, in a theoretical and practical way, the basic principles about the function, systems and procedures of business accounting. We will apply definitions of concepts, examples, analysis and demonstrations. Financial statements, internal controls, petty cash management, bank reconciliation and payroll preparation will be presented. The student will check the knowledge acquired through practical exercises, case studies, problem solving and reflective diaries.

**ACCO 4001 MANAGERIAL ACCOUNTING****3 CREDITS****45 HOURS***Pre-requirement: ACCO 2200*

The purpose of this course is to take the student through the ABC (Activity-Based Costing) method, Cost-Volume analysis, systems, cost behavior, budget, standard cost, and performance measures. Additionally, it emphasizes the use and analysis of economic and accounting information. Student knowledge is determined through practical exercises, case studies, oral presentations, research, and exams.

**ACCO 5104 MANAGEMENT ACCOUNTING\*****3 CREDITS****45 HOURS**

Emphasizes in the synthesis and optimal application of accounting in administrative processes. The manager needs to have control of the business to obtain, effectively and efficiently, its objectives. The analytical tools that accounting provides are important to this process. The course provides the student with the skills of analysis, synthesis, and evaluation necessary for making managerial decisions, based on data and using or recommending the different courses of action. Knowledge is measured through tests, case analyzes, and practice exercises. \*This course is also offered in a non-face-to-face mode.

**ANAT 1110 ANATOMY AND PHYSIOLOGY****2 CREDITS****30 HOURS**

This course presents Human Anatomy and Physiology. Describes the medical terms used to relate the organs and processes of the body. Describe the body's systems, organs, and functions. Explain the relationship between one system and another to carry out the vital functions of the human body. Explain the development in life expectancy by age. This course has 7.5 additional hours of outside work. The student will carry out a special assignment on a topic related to a topic in the course.

**ANAT 1110L ANATOMY AND PHYSIOLOGY:  
LABORATORY****1 CREDIT****30 HOURS**

This course uses laboratory experience to reinforce the description of the human body and its systems. It also provides a practical understanding of the function of these systems. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**ANAT 2030 SECTIONAL ANATOMY****3 CREDITS****60 HOURS***Pre-requirement: BIOL 1601, BIOL 1602*

This course provides the student of diagnostic imaging sciences with the tools to learn and understand the relationship of anatomical structures in three dimensions. Helps the student to review the anatomy of radiological interest in radiographic studies. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**ANAT 2040 ANATOMY AND PHYSIOLOGY OF THE HEART 2 CREDITS 30 HOURS**

*Pre-requirement: BIOL 1602*

This course will train the student to recognize the anatomical structures and their functioning in the human heart. The student will have to master the terminology related to cardiac structures and functioning. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**ART 2009 ART HISTORY \* 3 CREDITS 45 HOURS**

This course is an introduction to the study of the arts and its various branches: architecture, sculpture, painting, music, literature, theater, and film. The origin and relevant historical development of the arts in the East and the West are emphasized. The influence of foreign artistic movements in Puerto Rico is also studied. The methodology of the course includes lectures, a section of comprehension readings, practical applications, discussion of works, work in pairs, critical reactions to exhibitions, reports and presentations. \* This course is offered face-to-face and not face-to-face.

**AUDIO 1401 SOUND APPRECIATION 3 CREDITS 60 HOURS**

This course provides the theoretical, analytical, and practical concepts of the importance of music in our social environment, using methods that develop auditory perception. Through musical examples, the different concepts of structure and form are presented, as well as the means used within musical performance, voices, and instruments. The different periods in the history of universal music are pointed out through the exposition of its fundamental elements, with the hearing of the most representative themes of its repertoires. The teaching and learning process will be carried out through lectures, readings, analyzes, study assignments, reports, workshops, demonstrations, listening exercises and assessment techniques. Requires laboratory use. This course is offered face-to-face and not face-to-face.

**AUDIO 1402 MUSIC INDUSTRY 3 CREDITS 60 HOURS**

This Music Industry course provides the student with knowledge about the essential concepts for professional performance within the Music Industry. It provides students with a broad base of knowledge and general skills in the music marketplace and develops with great emphasis the skills and attributes necessary to function in the business and cultural management sectors of the music industry. It provides techniques, methodologies, and skills related to the legal, economic, artistic, and ethical issues facing a professional audio engineer today. The subject is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, evaluation of individual and group projects, and appraisal techniques. Requires laboratory use. This course is offered face-to-face and not face-to-face.

**AUDIO 1403 AUDIO RECORDING****3 CREDITS****60 HOURS**

This course is designed to educate students in modern sound recording techniques. The student will learn the theoretical and practical foundations in the elaboration of audio recordings, acoustic designs and operation of analog and digital consoles and will interact with the different processes and tools commonly used within the audio industry. The course is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, individual and group project evaluation, and appraisal techniques. Requires laboratory use.

**AUDIO 1404 AUDIO AND MULTIMEDIA****3 CREDITS****60 HOURS**

The course is oriented towards the integration of high-quality audio in multimedia applications, incorporating technical elements of sound recording and post-production. The theme of the course aims to provide a broad vision of sound applications in different media in a creative environment. The teaching and learning process will be carried out through lectures, readings, analyzes, study assignments, reports, workshops, demonstrations, intensive digital recording, processing, and editing practices, and assessment techniques. Requires laboratory use.

**AUDIO 1501 RECORDING AND SYNCHRONIZATION  
IN MIDI****3 CREDITS****60 HOURS**

The course provides the concepts and techniques necessary to work the MIDI protocol from the capture of the original source to the final composition. It also focuses on learning MIDI sequencing and editing tools, score editing, and intensive use of virtual instruments for music production. This subject is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, intensive practice in digital recording, processing, and editing, and assessment techniques. Requires laboratory use.

**AUDIO 1502 AUDIO PRODUCTION****3 CREDITS****60 HOURS**

This course exposes the various factors that are considered within the recording studio. Aspects such as the analysis of different musical styles, artistic revolution, psychology in the studio and the relationship with musicians will be dealt with, and, above all, an overview of the international record market will be offered. Creative audio production practices are carried out, with the aim of meeting the needs of students, improving their ability to use technology, and developing production concepts. The course is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, intensive practice in digital recording, processing, and editing, listening exercises, and assessment techniques. Requires laboratory use.



**AUDIO 1503 AUDIO FOR RADIO AND TELEVISION 3 CREDITS****60 HOURS**

This course is oriented in the theoretical and practical development of skills in the use of audio equipment and tools for the design, writing and production of messages to be broadcast for radio and television. The development of the conceptualization-visualization of images, continuity, sound effects in relation to radio and television media is studied. The course will familiarize students with these fundamental principles and processes, as well as allow them to know and make proper use of the necessary tools for the development of production techniques. The teaching and learning process will be carried out through lectures, readings, analyzes, study assignments, reports, workshops, demonstrations, intensive digital recording, processing, and editing practices, and assessment techniques. Requires laboratory use.

**AUDIO 1504 LIVE AUDIO****3 CREDITS****60 HOURS**

This course aims for the student to acquire the technical, theoretical, and practical knowledge necessary for the sound of live shows. This knowledge ranges from the people involved in the event, to its realization, through everything related to the planning, assembly, and adjustment of the system, in accordance with the required technical specifications and, of course, in the appropriate conditions of quality and safety. The course is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, intensive practice in digital recording, processing, and editing, and assessment techniques. Requires laboratory use.

**AUDIO 1604 PRODUCTION WITH DAW****3 CREDITS****60 HOURS**

This course presents an approach to DAW (Digital Audio Workstation) systems in which all the necessary knowledge to tackle composition and sequencing, recording, editing, and mixing of audio is covered. Pro Tools MP, LE, and HD system setup, command and window structure, main tools, and session settings will be introduced. The course will focus on the main audio recording, editing and mixing functions, focusing on turn, on learning MIDI sequencing and editing tools, score editing and the intensive use of virtual instruments as musical instrumentation for the composer. The course is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, intensive practice in digital recording, processing, and editing, and assessment techniques. Requires laboratory use.

**AUDIO 1605 MIXING WITH DAW****3 CREDITS****60 HOURS**

The DAW Mixing course provides the student with mixing techniques for use in phonographic productions. It provides students with a solid theoretical-practical base and knowledge about the technologies, methods, and processes of mixing with Pro Tools and Nuendo that will allow them to incorporate themselves naturally into the professional environment. The teaching and learning process will be carried out through lectures, readings, analyzes, study assignments, reports, workshops, demonstrations, intensive practices for the realization of musical mixes, listening exercises and assessment techniques. Requires laboratory use.

**AUDIO 1606 PRE MASTERIZATION WITH DAW      3 CREDITS      60 HOURS**

This course offers students' knowledge based on the generalities of audio pre-mastering, and on the specific characteristics that occur in this process. In the Pre-Mastering course, a series of steps are complemented by which the final touches are given to a project, depending on the type of work, its purpose and scope. At the same time, it shows how to raise the sound quality through processes such as equalization, compression, limitation, stereo image, signal maximization, and having good work and listening criteria. The subject is offered through lectures, readings, analysis, study assignments, reports, workshops, demonstrations, intensive practices for conducting musical pre-mastering, listening exercises and assessment techniques. Requires laboratory use.

**AUDIO 2101 ACOUSTICS      3 CREDITS      60 HOURS**

The Acoustics course exposes students to the fundamentals of the laws that govern the behavior of sound within a given space. The focus is to present, the central themes that refer to general acoustics and musical acoustics. It is based on the analysis of the concepts, the use of basic mathematical tools, the understanding of situations to design the appropriate acoustic treatment for each specification, solve problems caused by poor design, selection of the appropriate materials and the correct measurement of the acoustic quality of a room. Requires laboratory use.

**AUDIO 2102 SOUND FOR CINEMA      3 CREDITS      60 HOURS**

This sound for film course exposes students to each of the creative and technical processes of sound production in film. It is intended to specialize the student in the theoretical and practical domain with examples and real exercises in the environment of capturing (microphones), recording (recording), editing, post-production and mixing of sound for cinema, analyzing the process and sound perception as part of the component of cinematographic language. Requires laboratory use.

**AUDIO 2103 AUDIO RESTORATION      3 CREDITS      60 HOURS**

*Pre-requirements: AUDIO 1401, AUDIO 1402, AUDIO 1403, AUDIO 1404, AUDIO 1501, AUDIO 1502, AUDIO 1503, AUDIO 1504, AUDIO 1604, AUDIO 1605, AUDIO 1606*

This Audio Restoration course offers the student an in-depth understanding of topics related to audio preservation and restoration, such as locating, identifying, and removing unwanted audio fragments from a sound recording without affecting the material to be preserved. Concepts and processes are analyzed using tools and techniques to help renew the audio quality of a recording, interspersed with the act of listen to the discourse and its components, their mutual relationship, and their eventual functioning. Requires laboratory use.

**AUDIO 2104 AUDIO SEMINAR****3 CREDITS****120 HOURS**

*Pre-requirements: AUDIO 1401, AUDIO 1402, AUDIO 1403, AUDIO 1404, AUDIO 1501, AUDIO 1502, AUDIO 1503, AUDIO 1504, AUDIO 1604, AUDIO 1605, AUDIO 1606*

Due to the growing development of audiovisual technology and its impact on the media, there is a demand for professionals specialized in areas as specific as sound. This course aims to help satisfy this demand, offering a training module according to the real needs of both the industry and the public, and that contributes to creating highly qualified sound professionals in their different media. This course will be enrolled in the student's last term of studies since it is the "Capstone" course. Requires laboratory.

**BIOL 1009 GENERAL BIOLOGY****3 CREDITS****45 HOURS**

The course allows the student to learn and develop a basic knowledge about the study of the characteristics of living beings and the functioning of their general organism. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**BIOL 1601 HUMAN ANATOMY AND PHYSIOLOGY I 3 CREDITS 60 HOURS**

Introduction to the study of cell morphology and physiology. The topics of the human body as a whole and composition at the cellular and tissue level are discussed. The student evaluates the histology, anatomy and physiology of the integumentary, skeletal, articular, muscular, cardiovascular, lymphatic and respiratory systems. Oral and written presentations will be made, as well as practical exercises in the laboratory related to the course. Requires use of the science lab. This course is offered face-to-face and not face-to-face.

**BIOL 1602 HUMAN ANATOMY AND PHYSIOLOGY II 3 CREDITS 60 HOURS**

*Pre-requirement: BIOL 1601*

It is the continuation of the histological, anatomical, and physiological study of the nervous, endocrine, digestive, urinary, hydro electrolytic, acid/base and reproductive systems. Emphasis on the interrelation of all systems, on the coordination and normal functioning of the body. Oral and written presentations will be made, as well as practical exercises in the laboratory related to the course. Requires the use of the science lab. This course is offered face-to-face and not face-to-face.

**BIOL 1603 MICROBIOLOGY****4 CREDITS****75 HOURS**

Presents the study of microorganisms and their relationship with humans and their environment. The basic principles of asepsis, sanitation, disinfection, sterilization, immunology, and transmission of infectious diseases. Areas of medical microbiology are included, presented systematically in bacteriology, virology, mycology, immunology, serology, diagnostic

evaluation, clinical data, and epidemiology on infectious diseases. Oral and written presentations will be made, as well as practical exercises in the laboratory related to the course. Requires use of science lab. This course is offered face-to-face and not face-to-face.

**CARD 2060 SPECIAL EQUIPMENT MANAGEMENT      2 CREDITS      45 HOURS**

The purpose of this course is for the student to know the equipment of the cardiovascular laboratory and biomedical equipment for carrying out cardiovascular tests. This is critical to the performance of your role. In this way, you will be able to obtain useful information for the diagnostic conclusion after each study carried out. In addition, it provides guidance on the equipment available in the different work areas. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CARD 2150 INTRODUCTION TO CARDIAC      3 CREDITS      45 HOURS  
AND VASCULAR SONOGRAPHY**

It introduces the student to the profession of cardiac and vascular sonography. It includes the historical development of the profession, emphasizes the role of the Sonographer and the terminology associated with the characteristics of the image. It introduces the basic principles of ultrasound, tracking methods, image documentation, report preparation, equipment cares and quality control, and laws related to the profession. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CARD 2160 ELECTROCARDIOGRAPHY      3 CREDITS      60 HOURS  
AND BASIC HOLTER**

*Pre-requirement: CARD 2150, SONO 2200, MEDT 2000*

The purpose of this course is for the student to know the equipment of the cardiovascular laboratory and biomedical equipment for carrying out cardiovascular tests. This is critical to the performance of your role. In this way, you will be able to obtain useful information for the diagnostic conclusion after each study carried out. In addition, it provides guidance on the equipment available in the different work areas. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CARD 2170 LOWER EXTREMITIES VASCULAR      4 CREDITS      90 HOURS  
SONOGRAPHY AND CLINICAL APPLICATIONS**

*Pre-requirement: CARD 2150, SONO 2200*

The course provides the student with anatomical, physiological, and pathological knowledge of both the arterial and venous systems of the lower extremities. It will provide teaching on the management of different equipment, study protocols, patient management, and interpretation of encounters in such a way that the student can face the different facets of vascular sonographers within a real work environment. As part of the course, in addition to the hours of

theory, the student will have dedicated hours of laboratory where they will be able to acquire the necessary skills to carry out the different protocols. The course has 180 hours of external work where the student will carry out the activities assigned in the External Work Component.

**CARD 2180 BASIC ECOCARDIOGRAPHY 4 CREDITS 90 HOURS**

*Pre-requirement: BIOL 2040, MEDT 2000, CARD 2150, SONO 2200*

The purpose of this course on echocardiography and cardiac Doppler is for the student to learn to use this modality of clinical ultrasound for cardiac evaluation. The student will identify normal anatomy, analyze views, and identify structures for evaluation. This will be offered in a theoretical phase simultaneous to the laboratory. This course has an additional 180 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CARD 2210 SONOGRAPHIC EVALUATION OF CARDIAC PATHOLOGIES 4 CREDITS 90 HOURS**

*Pre-requirement: BIOL 2040, MEDT 2000, CARD 2150, SONO 2200*

This course provides the necessary knowledge for the proper recognition and evaluation of cardiac pathologies using Echocardiography. Laboratories will be carried out to provide techniques and improve skills for the quantitative evaluation in a normal and pathological echocardiogram, as well as the evaluation of clinical cases. This course has an additional 180 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CARD 2190 UPPER EXTREMITIES VASCULAR SONOGRAPHY AND CLINICAL APPLICATIONS 4 CREDITS 90 HOURS**

*Pre-requirement: CARD 2150, SONO 2200*

The course provides the student with anatomical, physiological, and pathological knowledge of both the arterial and venous systems of the upper extremities. It will provide teaching on the management of different equipment, study protocols, patient management, and interpretation of encounters in such a way that the student can face the different facets of vascular sonographers within a real work environment.

As part of the course, in addition to the hours of theory, the student will have dedicated hours of laboratory where they will be able to acquire the necessary skills to carry out the different protocols. The course has 180 hours of external work where the student will carry out the activities assigned in the External Work Component.

**CARD 2300 CLINICAL PRACTICE I 5 CREDITS 225 HOURS**

*Pre-requirement: CARD 2280*

In this phase of practice, the student is involved with the patient in medical consulting, dispensary and / or hospital with the proper skills in the practice of their profession. In this phase, it will rotate in the areas where the electrocardiograms (EKG), treadmill test (TMT), holter

test, telemetry and echocardiography, vascular sonography of upper and lower extremities, both arterial and venous, are performed, applying the various skills learned in its theoretical phase and Laboratory practice with the proper supervision of a professional in charge.

**CARD 2220 VASCULAR BRAIN SONOGRAPHY 4 CREDITS 90 HOURS  
AND CLINICAL APPLICATION**

*Pre-requirement: CARD 2150, MEDT 2000, PHSC 2040*

The course provides the student with anatomical, physiological, and pathological knowledge of both the extracranial and intracranial cerebrovascular systems. Throughout the course, teaching will be provided on the management of different equipment, study protocols, patient management and interpretation of encounters that help the student to face the different facets of vascular sonographers within a real work environment. As part of the course, in addition to the hours of theory, the student will have dedicated hours of laboratory where they will be able to acquire the necessary skills to carry out the different protocols. The course has 180 hours of external work where the student will carry out the activities assigned in the External Work Component.

**CARD 2240 PHARMACOLOGY AND CARDIAC 2 CREDITS 30 HOURS  
PROCEDURES**

*Pre-requirement: CARD 2150, SONO 2200*

This course on Pharmacology and Cardiac Procedures has the purpose that the student learns the different drugs and procedures in Cardiology and their interaction and / or dependence on the Ultrasonic study carried out. The student will recognize the use of different drugs in addition to identifying and learning about other diagnostic methods that complement the cardiovascular study. This will be offered in a theoretical phase. This course has 60 additional hours of external work. The student will carry out the activities assigned in the External Work Component.

**CARD 2250 ABDOMINAL DOPPLER 3 CREDITS 90 HOURS**

*Pre-requirement: CARD 2150, SONO 2200*

The course provides the student with anatomical, physiological, and pathological knowledge of both the arterial and abdominal venous systems. It will provide teaching on the management of different equipment, study protocols, patient management, and interpretation of encounters in such a way that the student can face the different facets of vascular sonographers within a real work environment. As part of the course, in addition to the hours of theory, the student will have dedicated hours of laboratory where they will be able to acquire the necessary skills to carry out the different protocols. The course has 180 hours of external work where the student will carry out the activities assigned in the External Work Component.

**CARD 2350 CLINICAL PRACTICE II 5 CREDITS 225 HOURS**

*Pre-requirement: ALL COURSES*

In this phase of practice, the student is involved with the patient in medical consulting, dispensary and / or hospital with the proper skills in the practice of their profession. In this phase, they will rotate in the areas where the electrocardiograms (EKG), treadmill test (TMT),

holter test, telemetry and echocardiography, cerebrovascular sonography and Abdominal Doppler are performed, applying the various skills learned in their theoretical phase and laboratory practice with due supervision of a professional in charge.

**CARD 2270 PRE-REVALID SEMINAR**

**2 CREDITS**

**30 HOURS**

*Pre-requirement: CARD 2060, CARD 2150, CARD 2160, CARD 2180, CARD 2190, CARD 2210, CARD 2220, CARD 2300, CARD 2240, CARD 2070*

This course provides the student with the opportunity to review the concepts acquired in their formal academic preparation as a medical sonographer. It will discuss Ultrasound Physics and Instrumentation, including the topics of Clinical Safety, Physical Principles, Ultrasound Transducers, Pulsed Instrumentation, Doppler Instrumentation, Hemodynamics, Quality Assurance, Artifacts, Protocols and New Technologies. In addition, the anatomy, physiology, laboratory tests and benign and malignant pathologies of the organs included in cardiac and vascular sonographic studies will be discussed. Finally, comprehensive patient care will be included in a diagnostic sonography unit. These topics will be discussed according to the outline of the Examining Board of Diagnostic and Treatment Imaging Technologists. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CHEM 3501 FUNDAMENTALS OF INORGANIC  
CHEMISTRY \***

**3 CREDITS**

**60 HOURS**

The course comprises a study of the composition, classification, interaction, and nomenclature of matter in chemical terms. The periodic table of elements and measurement and security systems are examined with them. An understanding of chemistry and the importance of its application in the health field is developed in the student. This course is offered face-to-face and not face-to-face. Requires the use of the science lab. \* This course is also offered in a non-face-to-face mode.

**CHEM 3502 FUNDAMENTALS OF ORGANIC  
CHEMISTRY \***

**3 CREDITS**

**60 HOURS**

*Pre-requirement: CHEM 3501*

This course provides the student with the opportunity to acquire fundamental and necessary knowledge about the nomenclature, chemical and physical properties of organic compounds. Compounds that contain carbon in their structure are studied and provide the components that make up living organisms. Applications of this knowledge will be made to the practice of nursing, such as the areas of medicine, biochemistry, and nutrition. This course is offered in person and not in person. Requires the use of the science lab. \* This course is also offered in a non-face-to-face mode.

**CISE 1000    FUNDAMENTALS OF CYBER SECURITY 3 CREDITS                      45 HOURS**

The course prepares students to acquire the essential knowledge and skills that a security-oriented technology professional should have today. The course discusses the fundamentals of security, attacks, and defense on a cybernetic plane from a war game approach. The student will be trained to perform analysis and strategies of attacks and defenses using the fundamental concepts in cyber security, vulnerabilities, threats, controls, tools to be able to carry out attacks and defenses in a preventive and proactive way.

**CISE 1002    SECURITY IN SYSTEMS                                      3 CREDITS                      60 HOURS  
                    AND MOBILE COMMUNICATIONS**

*Pre-requisite: COMP 1205*

This course introduces the student to security and forensic techniques of mobile devices. The student will learn concepts to be able to use and guide users in the proper use and management of mobile technologies. This will be achieved by studying the networks, the differences between the different devices and their services. Learning about security will be based on the study of good practices. Students will be evaluated through assignments, tests, and presentations. Requires laboratory use.

**CISE 1003    CYBER ATTACK TECHNIQUES AND                      5 CREDITS                      105 HOURS  
                    CYBER DEFENCE SYSTEMS**

*Pre-requisite: CISE 1000*

The intention of this course is to train the student in matters of security and defense of the information systems of the organization. The student will learn the technique of "ethical hacking" following the good practices of the industry, thus knowing the responsibility that it entails. The teaching-learning process of this course will be based on the study of techniques, tools and motivations used by blackhat hackers. Students will be assessed through assignments, tests, presentations, and classroom practices. These concepts will be supported by laboratory practices that will lead the student to be a professional trained in the security of both offensive and defensive information systems. Requires laboratory use.

**CISE 2000    CERTIFICATION REVIEW                                      3 CREDITS                      60 HOURS  
                    SECURITY +**

*Pre-requirement: COMP 2428*

The purpose of the course is for the student to develop the skills and abilities necessary to apply and put into practice the technical knowledge of security concepts in today's security environment. Students will gain in-depth knowledge of security systems, access control, network infrastructure, assessments and audits, cryptography, and organizational security across all vendor products. Requires laboratory use.



**CISE 2002      AUDIT****3 CREDITS****45 HOURS***Pre-requisite: CISE 1000*

The purpose of the course is for the student to develop the skills and abilities necessary to apply and put into practice the technical knowledge of security concepts in the current security environment. Students will gain in-depth knowledge of security systems, access control, network infrastructure, assessments and audits, cryptography, and organizational security across all vendor products. Requires laboratory use.

**CISE 2003      CERTIFICATION REVIEW  
                         ETHICAL HACKER****3 CREDITS****45 HOURS***Pre-requirement: CISE 2000*

The purpose of the course is for the student to develop the skills of a Hacker to use their knowledge of computer science and security to perform tests on networks and infrastructure. The student must find different types of vulnerabilities and report them so that the company can take the relevant data protection measures. Requires laboratory use.

**CISE 2004      SUPERVISED PROJECT****4 CREDITS****75 HOURS***Pre-requirement: CISE 1000, CISE 1002, CISE 1003, CISE 2000, CISE 2002, CISE 2003 (last period)*

Information security system analysis, research, and implementation project. It will apply knowledge of prevention, mitigation, restoration, and improvement of information security systems. Progress will be measured through monthly and final Project reports. Requires laboratory use. This course must be approved with a minimum grade of B.

**COMP 1100    INTRODUCTION TO COMPUTERS****2 CREDITS****60 HOURS**

Through this course the student will learn the basic functions of the computer, the alphabetic keyboard, to make a letter, a table, a resume using the Microsoft Word Program. In addition, you will learn how to present in PowerPoint. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**COMP 1110    INTRODUCTION TO COMPUTERS****1 CREDIT****30 HOURS**

Introduces the student to the world of computers, its composition, flexibility, and application of the same. Through this course the student will learn the basic functions of the computer, the alphabetic and numeric keyboard, and basic functions of the computer. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**COMP 1205 INTRODUCTION TO  
COMPUTERS**

**3 CREDITS**

**60 HOURS \***

This course exposes the student to the world of computers. A brief history of computers, applications, advantages, and the composition of a computerized system is presented. It offers knowledge about the electronic equipment used to process data, its interrelation with the computer and how it communicates using the current operating system and application programs to create presentations, electronic sheets, publications, and documents. He has practice in the basic handling of the Internet and E-mail. Lectures, demonstrations, practical and application exercises, among others, will be used to teach the course. Requires laboratory use. \* This course is offered face-to-face and not face-to-face.

**COMP 1401 COMPUTER APPLICATION  
PROGRAMS**

**3 CREDITS**

**60 HOURS**

*Pre-requirement: COMP 1205*

This course prepares the participant through lectures, demonstrations and practice in the interpretation, analysis, and search for solutions to real problems applying current commercial application programs. It focuses on the management and mastery of the spreadsheet computerized and word processors up to an intermediate level of complexity. It prepares the student to aspire to this level, which will allow them to challenge the Microsoft Office Specialist (MOS) certification exam. This must be managed by the student. Lectures, demonstrations, practical and application exercises, among others, will be used to teach the course. Requires laboratory use.

**COMP 1402 DATA BASE STRUCTURES**

**3 CREDITS**

**60 HOURS**

*Pre-requirement: COMP 1205*

The course provides the basic concepts of analysis, planning, design, and creation of relational database applications. The techniques of designing and preparing reports, input forms, queries, menus and routines for process automation are discussed. Emphasis is placed on exposing general knowledge for the development of functional systems for solving computer problems for companies. Lectures, demonstrations, practical and application exercises, among others, will be used to teach the course. Requires laboratory use.

**COMP 1408 VISUAL BASIC. NET PROGRAMMING**

**3 CREDITS**

**60 HOURS**

*Pre-requirement: COMP 1205*

The course emphasizes structured object-directed programming techniques. Develop application programs using modular programming with Visual Basic Net. You will handle the functions, codes, and controls that the language has. You will create projects with more than one window and menus, as well as the concepts of treatment and access controls in the database. Lectures, demonstrations, practical and application exercises, among others, will be used to teach the course. Requires laboratory use.

**COMP 1412 OPERATING SYSTEMS  
OPERATING SYSTEMS**

**3 CREDITS**

**60 HOURS**

*Pre-requirement: COMP 1205*

This course provides knowledge and skills to configure, manage and install Microsoft Windows Operating Systems in residential or corporate environments at the domain level. Prepare to challenge the MTA exam "Windows Operation System Fundamentals". It includes the creation and deployment of images, configurations of: *hardware and software* in the network, also backup copies and the restoration of system information. Knowledge will be measured through short tests, labs, practical exercises, and exams. Requires laboratory use.

**COMP 1503 DESIGN AND ASSEMBLY  
OF PERSONAL COMPUTERS**

**3 CREDITS**

**60 HOURS**

In this course, the student is introduced to personal computers and their physical components. You will design and assemble a computer. Recognize and evaluate features and prices of the parts that make it up. Students will be assessed through tests, labs, and a special project. Requires laboratory use.

**COMP 1504 FOUNDATIONS OF  
OPERATING SYSTEMS**

**3 CREDITS**

**60 HOURS**

*Pre-requirement: COMP 1205*

This course provides knowledge and skills to configure, administer, and install operating systems. This course offers the fundamentals for operating system certifications. Images, "hardware" and "software" configurations of the network will be created and deployed. Backup copies will be made, and system information will be restored. It offers exercises in the installation and configuration of operating systems. Knowledge will be measured with short tests, labs, and exams. Requires laboratory use.

**COMP 1514 COMPONENTS OF THE  
PERSONAL COMPUTERS**

**3 CREDITS**

**60 HOURS**

The course is intended to introduce the personal computer and its physical components. The course describes the operation of each of the physical components of the computer, its function, the types of connectors, the way to interconnect them and the required tools. Knowledge will be determined through quizzes, assignments, and quizzes. Requires laboratory use.

**COMP 1701 COMPUTER KEYBOARD**

**3 CREDITS**

**60 HOURS**

The purpose of this course is the development of basic and professional techniques, in addition to basic skills (speed, accuracy and collation) in the use of the alpha-numeric keyboard of the computer. The student is introduced to surfing the Internet, using e-mail and computer function keys, in addition to developing good work habits. The evaluation is through tests of execution, theory, Supplementary Independent Component, and rubrics. Requires use of the laboratory and the Internet.

**COMP 1702 DOCUMENT PRODUCTION I****3 CREDITS****60 HOURS***Pre-requirement: COMP 1701*

This course continues with the development of basic, professional techniques, and in addition to basic skills (speed, accuracy, and collation). Through visual presentations and demonstrations, the student will be introduced to the rules and formats of business documents (letters with envelopes, memos, simple tables, and complex reports), using a word processing program. The Internet is used in the search for information. The student will be evaluated with theoretical exams, performance tests, Supplementary Independent Component, and rubrics. Requires use of the laboratory and the Internet.

**COMP 1703 DOCUMENT PRODUCTION II****3 CREDITS****60 HOURS***Pre-requirement: COMP 1702*

This course will lead the student to acquire advanced knowledge and develop effective criteria for the preparation, collation, and evaluation of complex document formats, using the advanced commands of the word processor program and the Internet. Some teaching methods are Visual presentations and demonstration method. The evaluation includes performance tests, portfolio and rubrics based on acceptability. Basic skills (speed, accuracy, and matching) and good work habits continue to be developed. Lectures, demonstrations, practical and application exercises, among others, will be used to teach the course. Requires use of the Internet laboratory.

**COMP 2301 DEVELOPMENT PROJECT AND  
SYSTEM IMPLEMENTATION****3 CREDITS****60 HOURS***Pre-requirements: COMP 2408, COMP 2412, COMP 2413*

In this course the student must carry out a project for the implementation of commercial information systems in all its phases. These include documentation, testing, review, as well as all the techniques for the design and programming of a commercial information system. The student will integrate and apply knowledge and skills previously acquired in previous courses. Strategies such as lecture, practice, demonstrations, interviews, among others, are used to teach the course. Lectures, demonstrations, practical and application exercises, among others, will be used to teach the course. Requires laboratory use.

**COMP 2407 IMPLEMENTATION OF  
COMPUTER SECURITY****3 CREDITS****60 HOURS***Pre-requisite: COMP 1205*

This course focuses on offering the necessary mechanisms for security in local information systems or in network environments. It covers the origin, evolution, and protection mechanisms against viruses, worms, and Trojans. Security matters will be learned regarding cryptography, intrusion detection, "spyware", "ad-ware" and unwanted advertising. Emphasis is placed on file recovery methods and safeguarding important information using the current operating system and commercial tools. Demonstrations, lectures, and practical exercises are used to teach the course. Requires laboratory use.

**COMP 2408 DEVELOPMENT OF  
DATABASES AND SQL**

**3 CREDITS**

**60 HOURS**

*Pre-requisite: COMP 1205*

The course provides the student through lectures, demonstrations, practical and application exercises, the techniques of complete database development and emphasizes database programming with macros. Emphasis is placed on further development of functional database planning and design skills. The basics of the Structured Query Language (SQL) database query programming language are used as a relational file manager. SQL language is handled thoroughly. Requires laboratory use.

**COMP 2412 OPERATING SYSTEMS AND  
COMMUNICATIONS NETWORK**

**3 CREDITS**

**60 HOURS**

*Pre-requisite: COMP 1412*

The course focuses on the study of the characteristics of the different operating systems for personal computers and their application. Basic concepts about computer communication networks and the integration of this system to other work systems are covered. The student will be exposed to various strategies to acquire the knowledge and skills required in the course. These will include lectures, demonstrations, special papers, and application and practice exercises. Requires laboratory use.

**COMP 2413 INTEGRATED SYSTEMS**

**3 CREDITS**

**60 HOURS**

*Pre-requirements: COMP 1401, COMP 1402, COMP 2414*

The course provides the knowledge so that the student can develop and apply previously acquired skills to achieve the integration of computer systems. Through it, the different commercial situations that arise in companies will be used so that the student provides solutions according to the given situation using tools such as word processors, spreadsheets, databases, publications, web pages and emails. These will include lectures, demonstrations, special papers, and application and practice exercises. Requires laboratory use.

**COMP 2414 DESIGN AND CREATION OF  
WEB PORTALS**

**3 CREDITS**

**60 HOURS**

*Pre-requisite: COMP 1205*

Throughout the course, the appropriate techniques are presented for the implementation of strategies for the design, creation and administration of WEB portals using structured application programs for their development. Emphasis is placed on the publication and maintenance of dynamic WEB pages once created. It does not require previous knowledge of HTML programming. Lecture strategies, demonstration and practical exercises are used to teach the course. Requires laboratory use.

**COMP 2418 NETWORK FUNDAMENTALS****4 CREDITS****75 HOURS***Pre-requirement: COMP 1504*

The basic concepts about the different types of communication networks and the integration of these to other work systems, whether by wired or wireless systems, will be studied. The different types of servers will also be studied to establish an effective and functional system. Knowledge will be determined through tests, lab work, assignments, and quizzes. Requires laboratory use

**COMP 2422 SERVER ADMINISTRATION****3 CREDITS****60 HOURS***Pre-requirement: COMP 2423*

This course provides the knowledge and skills to manage accounts and resources in a Microsoft Server environment. The student will learn to manage accounts and resources. These tasks include managing users, computers, and group accounts, managing access to network resources, managing printers, managing the organizational unit in a network based on the Active Directory service ("Active Directory"), and the application of group policies to manage users and computers. This is the second course to challenge the Microsoft Certified Solutions Associate, MCSA ("Microsoft Certified Solutions Associate") certification. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

**COMP 2423 INSTALLATION AND CONFIGURATION  
OF SERVERS****3 CREDITS****60 HOURS***Pre-requirements: COMP 1504, COMP 2418*

This course provides the knowledge and skills to implement, manage, and maintain a Microsoft Windows server infrastructure. These tasks include the implementation of routes, the implementation, administration, and maintenance of the Dynamic Host Configuration Protocol (DHCP), the domain name system DNS ("Domain Name System"), and the service that manages the names associated with computers on a network ("Windows Internet Name Service - WINS"), Internet Protocol (IP) security, Internet Protocol (IPSec) security traffic, and security certificates.

In addition to implementing a network access infrastructure by configuring remote access client connections and managing and controlling network access. This is the second course in the requirement template to challenge the Microsoft Certified Solutions Associate, MCSA ("Microsoft Certified Solutions Associate") exam. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

**COMP 2424 SERVER IMPLEMENTATION****3 CREDITS****60 HOURS***Pre-requirement: COMP 3421*

This course provides the knowledge and skills to implement, manage, and maintain security in a Microsoft Windows server network infrastructure. In addition, it will be a vehicle for students to expand their knowledge in information security and develop the bases and skills to implement

data security systems in a Microsoft Windows network. It will focus on planning the skills necessary to enable decision making in the network security implementation process. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

# COMP 2425 SUPPORT TECHNICIAN FOR DESKTOP I

**3 CREDITS**

## 60 HOURS

*Pre-requirement: COMP 2515*

This course will provide students with the skills necessary to support users using Microsoft Windows in a corporate environment. They will gain experience using applications that are included with the operating system, such as productivity applications used in a corporate environment and Microsoft Office applications. The knowledge acquired throughout the class will help to train a system support technician who can solve operating system problems by phone, email, connecting to the system remotely, or visiting the user. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

COMP 2426 OPEN CODE OPERATING SYSTEMS

**4 CREDITS**

## 75 HOURS

*Pre-requirement: COMP 1504*

Through the course, the student acquires the skills to manage and configure Servers with the Linux operating system. The various tools that allow familiarization with applications at the Web Server (Apache), FTP, Telnet and Networks (TCP / IP) level are introduced. The course covers areas of administration, security and optimizing the operating system, the installation and compilation of new tools, hardware configuration and becoming familiar with the TCP / IP protocol. The course will be evaluated based on the progress of small projects by topic and a series of written evaluations. Requires laboratory use.

**COMP 2427 SUPPORT TECHNICIAN  
FOR DESKTOP II**

**3 CREDITS**

## 60 HOURS

*Pre-requirement: COMP 2425*

This course is aimed at developing the skills necessary to support large computing environments and media using Windows. These responsibilities include setting the strategic direction for the customer's computers, supporting infrastructure, applications, planning, and strategy management to ensure that each PC can meet the customer's needs. The student will learn the process of designing a standard image with customer-specific configurations to aid in the automated deployment of images over the network. This deployment includes not only Windows, but also software packages such as Microsoft Office. In addition, the student will develop the necessary skills to identify and solve customer implementation and configuration problems. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

<b>COMP 2428</b>	<b>REVIEW FOR COMP TIA CERTIFICATION NETWORK + TEST</b>	<b>3 CREDIT</b>	<b>60 HOURS</b>
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*Pre-requirements: COMP 2418*

Prepares the student to challenge the NETWORK + certification exam (N10-005). Topics covering the interconnection between operating systems, network implementations, network support, installation, and diagnostics ("troubleshooting"), among others, are covered. Upon completion of this course the student will be trained with the necessary skills to install, configure, and solve basic problems in the network in terms of physical devices. They are provided with simulated tests where they demonstrate their mastery of the subject in a regulated time. Knowledge will be measured through simulators, laboratory work and exams. Requires laboratory use.

<b>COMP 2515</b>	<b>DIAGNOSIS AND REPAIR OF ELECTRONIC DEVICES</b>	<b>6 CREDITS</b>	<b>120 HOURS</b>
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*Pre-requirements: COMP 1205, COMP 1514*

This course discusses the different problems at the "hardware" or "software" level in personal computers, mobile devices, and video game consoles. The student will diagnose and identify their origin and will select the correct tools to solve them. The student will be trained to repair and update personal computers, mobile devices, and video game consoles and in the use of flow charts for problem solving. Knowledge will be measured through short tests, assignments, special oral and written work, labs, portfolio, and practical work. Requires laboratory use.

<b>COMP 2516</b>	<b>TEST REVIEW FOR COMPTIA ACERTIFICATION+</b>	<b>4 CREDIT</b>	<b>75 HOURS</b>
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*Pre-requirements: COMP 1205, COMP 1503, COMP 1504, COMP 1514, COMP 2515, COMP 2517, ENGL 1101, ENGL 1102*

This course prepares the student to challenge the CompTIA A + certification exam. Students will review essential skills and information necessary to install, upgrade, repair, configure, troubleshoot, optimize, and perform preventive maintenance of hardware and operating systems of personal computers (PCs) and electronic devices. Knowledge will be measured through short tests, assignments, oral presentations, labs, and exams. Requires laboratory use.

<b>COMP 2517</b>	<b>PRINTERS</b>	<b>1 CREDIT</b>	<b>15 HOURS</b>
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*Pre-requirement: COMP 1205*

This course discusses the principles of using, installing, configuring, optimizing, and upgrading next-generation printers. The tools, the basic procedures, and techniques for diagnosing their failures. Knowledge will be measured through short tests, labs, and exams.



**COMP 3421 SERVER CONFIGURATION****3 CREDITS****60 HOURS***Pre-requirement: COMP 2422*

This class is designed to provide the student with the necessary skills for the administration of a server infrastructure for a business organization. The student will learn to manage the infrastructure, web, applications, usage scripts and files that are written to perform tasks on a regular basis. Knowledge will be measured through short tests, lab exercises, and exams. Requires laboratory use.

**COMP 3423 ADVANCED IMPLEMENTATION OF  
SERVERS INFRASTRUCTURE****3 CREDITS****60 HOURS***Pre-requisite: COMP 2424*

Advanced IT topics in corporate environments are covered. Emphasizing surveillance, virtualization, and high availability. You must have a thorough understanding of a basic server infrastructure. You will be able to manage and maintain a server infrastructure, implement high availability business infrastructures and server virtualization. You will probably be able to choose suitable solutions in specific scenarios or from a set of technologies for that scenario. You will then be able to determine the optimal option for your implementation. Knowledge will be measured through virtual scenarios, case analysis, practice exercises. Requires laboratory use.

**COMP 3424 FUNDAMENTALS OF WIRELESS  
ANALYSIS, WEB, AND FORENSIC****3 CREDITS****60 HOURS***Pre-requirements: COMP 2422, COMP 2424*

This course organizes and summarizes the relevant connection today between internet attacks and existing vulnerabilities in any wireless network. The student will achieve, with basic principles, have a solid understanding of wireless and web insecurities along with the latest tools and techniques used for their exploitation. Mitigation techniques and safe implementation of the technologies discussed will be explored. In addition, basic principles of forensic analysis are explored through the capture and correct analysis of evidence and the legal connotations associated with this practice. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

**COMP 3501 SCRIPTING LANGUAGES****3 CREDITS****60 HOURS***Pre-requisite: COMP 1504*

The course aims to enrich philosophical knowledge in oriented objects, using scripting languages. Areas of interest will cover network, database, and numerical analysis methods using scripting languages. They will develop strategic techniques to implement and automate methods of collecting information in different computer science scenarios. The course will be evaluated based on the progress of small projects by topic and a series of written evaluations. Requires laboratory use.

**COMP 4001    "ETHICAL HACKING" IN THE                      4 CREDITS                      75 HOURS**  
**NETWORK ENVIRONMENT**

*Pre-requirements: COMP 2422, COMP 2423, COMP 2424*

This course will explore the various means available to an intruder to access computer resources. The methodology for investigating weaknesses in the network is shown and finding and mitigating them before they are exploited by an attacker. Through practical exercises, the processes of information gathering, exploration, enumeration, attacks, post-exploitation, erasure of footprints, social engineering, and others are explored. Knowledge will be measured through short tests, labs, and exams. Requires laboratory use.

**COMP 4426    SUPERVISED PROJECT                      4 CREDITS                      75 HOURS**

*Pre-requirements: COMP 2422, COMP 2423, COMP 2424, (last period) COMP 2516*

Network systems implementation project and associated security in all its phases, such as: documentation, testing, review; as well as all the techniques, design, and implementation. Knowledge will be measured through monthly reports and the Final Project. Requires laboratory use. This course must be approved with a minimum grade of B.

**COMU 3010    EFFECTIVE COMMUNICATION \*                      3 CREDITS                      45 HOURS**

The purpose of the course is for the student to develop oral and written communication skills, the processes, and resources to achieve effective communication. The importance of interpersonal relationships and the impact of the mass media will be highlighted. The teaching and learning process will be carried out through the different techniques of presentations, oral reports, readings alluding to the objectives of the course, the use of technological and organizational innovations. \* This course is offered face-to-face and not face-to-face.

**COPR 3011    CONTEMPORARY PROBLEMS \*                      3 CREDITS                      45 HOURS**

The course presents and analyzes the current problems that affect the world and Puerto Rican society. Recent world social, political, economic, and cultural situations are discussed, linking them with Puerto Rico. Individual and group activities are provided that stimulate critical thinking skills and attitudes, analysis, and reflection of current important issues in a behavior of personal and social commitment. This course will be enrolled in the student's last term of studies since it is the "Capstone" course. \* This course is offered face-to-face and not face-to-face.

**ECON 1204    ECONOMY PRINCIPLES                      3 CREDITS                      45 HOURS**

The purpose of this course is for the student to acquire knowledge about current economic problems that influence daily life. The course includes the study of concepts such as: the curve of production possibilities, supply and demand, national income, opportunity cost and the study of markets. Student knowledge is determined through examinations, case studies, oral presentations, and written reports. \* This course is offered face-to-face and not face-to-face.

**ECON 2012    PUERTO RICAN ECONOMY\*                      3 CREDITS                      45 HOURS**

The main purpose of the course is for the student to analyze the economic development of Puerto Rico from the pre-Columbian stage until today. The various sources of production are studied and how they were determined by aspects of government economic policy in each historical stage. The effect of the economy on the way of life of the Puerto Rican people is also analyzed with an emphasis on the present. The course is developed through the conceptualization, search and practical application of economic models, lectures, analysis of readings, data and graphs, critical reactions, and audiovisual presentations. \* This course is offered face-to-face and not face-to-face.

**ECON 5102    MANAGERIAL ECONOMY\*                      3 CREDITS                      45 HOURS**

It proposes broad approaches based on traditional economics, combined with business perspectives. The course exposes the student to the micro and macro-economic application for management decisions. Students who master this material will be better prepared for middle and senior leadership positions in companies. Knowledge is measured through oral presentations, case analyzes, essays, and exams. \*This course is also offered in a non-face-to-face mode.

**EDUC 1130    INTERVENTION IN CRISIS                      4 CREDITS                      60 HOURS**

The Crisis Intervention course provides students with the necessary knowledge about what a crisis is, developmental crises, and circumstantial crises. In addition, the course allows the development of skills to be able to recognize and intervene in crisis situations within the context of day care centers and workplaces. The course will present an intervention model and a series of situations where it will be applied. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EDUC 1140    ADMINISTRATION AND STAFF                      4 CREDITS                      60 HOURS  
                    SUPERVISION**

This course provides the student with basic knowledge about the principles and processes that serve as the foundation of contemporary management and administration. In addition, the basic functions of the administrator are studied such as: planning, organization, direction, and control. The discussion of the decision-making process as an essential element of the manager's work will be a central topic in this course. In addition, the course will give special emphasis to the process of supervision of personnel in a service agency. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EDUC 1110    CHILD DEVELOPMENT                      6 CREDITS                      90 HOURS**

This course provides the student with the basic knowledge of the development of the child between the ages of newborn to five (5) years of age. Emphasis will be placed on how heredity and environment interact and how they affect human development. The course will enable the student to understand the physical, sensory, intellectual, and social development of children of these ages. This course has an additional 22.50 hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EDUC 1120</b>	<b>DISCIPLINE MANAGEMENT</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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The course Management of Discipline in children provides the student with a broad vision of discipline as a learning and socialization process of children. The student will be trained to develop knowledge and skills in managing children's behavior through strategies leading to self-discipline. This course has an additional 11.25 hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EDUC 1150</b>	<b>BASIC HEALTH CONCEPTS AND SAFETY IN INFANTS AND CHILDREN</b>	<b>7 CREDITS</b>	<b>75 HOURS</b>
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*Pre-requisite: EDUC 1110*

This course provides the student with knowledge about microorganisms, different infections, eating habits, safety in infants and preschoolers and prepares them to understand and know the aspects required to protect and supervise minors in the setting of childcare centers. This course has an additional 18.75 hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EDUC 1160</b>	<b>CHILDREN WITH SPECIAL NEEDS</b>	<b>5 CREDITS</b>	<b>75 HOURS</b>
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*Pre-requirement: EDUC 1110*

This course provides the student with knowledge, skills and attitudes that allow him to understand the child with special needs in the context of the Puerto Rican social reality. The course provides an understanding of the behavior of these children and strategies to promote their adaptation and integration into the childcare center. In addition, it develops in the student an attitude of acceptance towards diversity. This course has an additional 18.75 hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EDUC 1170</b>	<b>ACTIVITY DESIGN</b>	<b>4 CREDITS</b>	<b>75 HOURS</b>
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*Pre-requirement: EDUC 1110*

This course provides the student with the essential knowledge for the design of childcare activities. The course emphasizes the process of planning learning experiences based on the characteristics and needs of the child. It presents a holistic vision of the development of the child, therefore considering the social, emotional, cognitive, and physical aspects of the learning process. This course has an additional 18.75 hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EDUC 1180</b>	<b>DEVELOPMENT OF PROGRAMS OF SERVICES AND DEVELOPMENT OF PROPOSALS</b>	<b>4 CREDITS</b>	<b>60 HOURS</b>
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*Pre-requirement: EDUC 1170*

This course provides the student with the knowledge, attitudes, and skills necessary to develop proposals framed in the Puerto Rican institutional environment. In addition, it provides basic knowledge about social policy and licensing requirements for establishing a childcare center. The

course will have special emphasis on the development of proposals aimed at creating childcare service programs. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EDUC 1190    KIDS AND PRESCHOOL CURRICULUM                      4 CREDITS                      60 HOURS**

*Pre-requirement: EDUC 1170*

This course offers the student the essential knowledge to know the infantile, maternal, and preschool curricula. The course emphasizes philosophical foundations, the role of the educator, parental involvement, and the role of the environment in early childhood development centers. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EDUC 1200    INTEGRATION OF ART EXPERIENCES, 4 CREDITS                      60 HOURS  
MUSIC, AND LITERATURE IN EARLY  
CHILDHOOD**

This course will help students assess, plan, and implement the arts, literature, and music in an integrated preschool curriculum. This course helps the student to evaluate, plan, and implement art, literature, and music in an integrated preschool curriculum. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EDUC 1250    SUPERVISED PRACTICE                      6 CREDITS                      270 HOURS**

*Pre-requirements: All previous courses*

The course is designed to offer the student the opportunity to serve as a preschool teacher's aide in preschool childcare and development centers. The student will be able to put into practice the knowledge acquired in the classroom. In addition, you will be able to develop and apply the skills and attitudes necessary for a preschool teacher aide.

**EDUC 6140    ASSESSMENT TECHNIQUES                      3 CREDITS                      45 HOURS**

The course aims to train the student in the assessment, analysis, preparation, and application of evaluation techniques that promote the effective teaching and learning process. In the development of the course, the student will select and develop assessment instruments that are aligned with the objectives established in the different courses. This course is offered in face-to-face and distance mode.

**EDUC 6145    ANDRAGOGY                      3 CREDITS                      45 HOURS**

The purpose of this course is to discuss the roots of andragogy, teaching theories, and adult learning. In addition, the domain of the learning process is discussed according to different theorists. Also, advances in adult learning, new perspectives in andragogy, technology and

neuroscience are analyzed. The evaluation of learning is determined through exams, oral presentations, written works, and bibliographic records. This course is offered in face-to-face and distance mode.

**EDUC 6147    ASSESSMENT TECHNIQUES                      3 CREDITS                      45 HOURS**

The course aims to integrate the student into the assessment principles that are often used in the teaching and learning process. The assessment is the process by which information is collected on the performance of students during the teaching and learning process to improve the level of learning of these and the effectiveness of the teaching work of the student educator. It has the purpose of improving the educational quality within the learning process of the students. The student will make presentations where the different appraisal techniques will be applied. This course is offered in face-to-face and distance mode.

**EMER 1111    MEDICAL EMERGENCY TECHNICIAN    2 CREDITS                      30 HOURS  
                    ROLE**

This course includes the role of the Paramedic, the origin of the profession and related ethical principles. The course also includes the wellness of the Paramedic and their place in the EMS chain of events. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EMER 1180    GYNECOLOGY AND OBSTETRICS                      2 CREDITS                      30 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L, EMER 1150, EMER 1150L*

This course is designed for the paramedic student to recognize and attend gynecological and obstetric emergencies. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EMER 1180L    GYNECOLOGY AND                      1 CREDIT                      30 HOURS  
                    OBSTETRICS: LABORATORY**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L, EMER 1150, EMER 1150L*

This laboratory is designed for the paramedic student to recognize and attend gynecological and obstetric emergencies. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EMER 1170    PEDIATRIC EMERGENCIES                      2 CREDITS                      30 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L, EMER 1150, EMER 1150L*

This course prepares the paramedic student for the evaluation and treatment of pediatric patients taking into consideration the different stages of growth and development. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EMER 1170L PEDIATRIC EMERGENCIES: LABORATORY</b>	<b>1 CREDIT</b>	<b>30 HOURS</b>
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*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L, EMER 1150, EMER 1150L*

This laboratory experience prepares the paramedical student for the evaluation and treatment of the pediatric patient, taking into consideration the different stages of their growth and development. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EMER 1130 AIRWAY AND VENTILATION MANAGEMENT</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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This course provides the paramedic student with basic and advanced knowledge of airway management. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EMER 1130L AIRWAY AND VENTILATION MANAGEMENT: LABORATORY</b>	<b>1 CREDIT</b>	<b>30 HOURS</b>
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This laboratory provides the paramedic student with basic and advanced knowledge of airway management. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a study topic.

<b>EMER 1140 PATIENT ASSESSMENT</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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This course will provide the student with the necessary knowledge to carry out a correct interview, know and put into practice therapeutic communication, EMS communication and documentation and how to obtain the patient's history. It will carry out patient evaluation in the different emergency scenarios. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EMER 1140L PATIENT ASSESSMENT: LABORATORY</b>	<b>1 CREDIT</b>	<b>30 HOURS</b>
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This laboratory experience will provide the student with the practical knowledge to perform a comprehensive evaluation of medical patients and trauma patients. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>EMER 1210 BASIC RESCUE</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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*Pre-requirements: All previous courses*

This course is designed to prepare the paramedic student for the operational phase of their work, including ambulance and rescue operations. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EMER 1120 PHARMACOLOGY AND  
PATHOPHYSIOLOGY**

**4 CREDITS**

**60 HOURS**

This course describes how the human body works in the face of illness or injury. In addition, it offers the paramedic student preparatory knowledge for drug treatment and its different ways of administration. The student will also learn parenteral techniques. This course has an additional 15 hours of outside work. The student will carry out a special work on a topic related to the course.

**EMER 1120L PHARMACOLOGY AND  
PATHOPHYSIOLOGY: LABORATORY**

**1 CREDIT**

**30 HOURS**

This laboratory offers the paramedic student with the experience of acquiring knowledge in drug therapies, as well as the different routes for their administration. The student will practice parenteral administration techniques. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EMER 1200 TRAUMA**

**3 CREDITS**

**45 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L*

This course is designed to provide the student with the basic and advanced knowledge to evaluate and treat the trauma patient. This course has an additional 11.5 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**EMER 1200L TRAUMA: LABORATORY**

**2 CREDITS**

**60 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L,*

The experience of this laboratory is designed to provide the student with the advanced knowledge to effectively evaluate and provide treatment to the injured patient. This course has an additional 15 hours of outside work. The student will carry out a special assignment on a topic related to a topic in the course.

**EMER 1160 MEDICINE**

**2 CREDITS**

**30 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L,*

This course is designed to equip the paramedic with the knowledge necessary to rigorously evaluate and treat the most common medical emergencies of the human body. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.



**EMER 1160L MEDICINE: LABORATORY****1 CREDIT****30 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L*

This laboratory is designed to equip the paramedic with the necessary knowledge to rigorously evaluate and treat the most common medical emergencies of the human body. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**EMER 1190 CARDIOLOGY****3 CREDITS****45 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L, EMER 1150, EMER 1150L*

This course is designed to prepare the paramedic to evaluate and treat the most common cardiac medical emergencies. This course has an additional 11.25 hours of outside work. The student will carry out a special work on a topic related to a topic of the course.

**EMER 1190L CARDIOLOGY: LABORATORY****2 CREDITS****60 HOURS**

*Pre-requirements: ANAT 1110, ANAT 1110L, EMER 1120, EMER 1120L, EMER 1130, EMER 1130L, EMER 1140, EMER 1140L, EMER 1150, EMER 1150L*

This laboratory is designed to prepare the paramedic to evaluate and treat the most common cardiac medical emergencies. This course has an additional 15 hours of outside work. The student will carry out a special assignment on a topic related to a topic in the course.

**EMER 1220 SIGN LANGUAGE****2 CREDITS****30 HOURS**

The course is designed for the study of basic sign language with an approach directed at the interaction of the health professional with the audio-impaired individual. This course exposes the learner to the study of the basic elements of the history of sign language, the laws for deaf people developed in Puerto Rico and knowledge of vocabulary and phrases commonly used for interaction with a patient. The aspect of effective and functional communication through sign language is emphasized. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to a topic of the course.

**EMER 1250 PRACTICE****9 CREDITS****405 HOURS**

*Pre-requirements: All previous courses*

This course offers the student the opportunity to put into practice the material discussed in the classroom within the real setting in the Emergency Room and the Emergency Medical System.

<b>ENGL 1101</b>	<b>BASIC ENGLISH I</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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The purpose of this course is to improve the language skills of listening and speaking of the learner. Listening focuses on superficial understanding and specific details, while speaking emphasizes the skills necessary for daily communication. In addition, students will increase their vocabulary and study basic grammatical structures. It includes listening activities, oral presentations, class discussions, lectures, and short readings.

<b>ENGL 1102</b>	<b>BASIC ENGLISH II</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requirement: ENGL 1101*

This course is designed to develop students' skills in reading, writing, and critical thinking. Students will expand their vocabulary, increase their ability to analyze text, gain knowledge of basic grammatical structures, and improve their writing skills. Students will also continue to develop their listening and speaking skills. It includes selected short readings, class discussions, lectures, and writing paragraphs. This course is offered face-to-face and not face-to-face.

<b>ENGL 1110</b>	<b>BASIC ENGLISH</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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This one-term Basic English course is designed to facilitate the learning of the English language and to strengthen basic language skills and vocabulary of non-native speakers. The mastery of the language skills presented in this course will improve the student's listening, speaking, reading, and writing skills. This will prepare them to meet the challenges they will face in the business world. This course has 11.25 additional outside class clock hours. The student will do a paper about a topic related to the course.

<b>ENGL 1130</b>	<b>ENGLISH APPLIED TO PRE-SCHOOL TEACHING</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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This course is designed for pre-school teacher assistant students in a pre-school listening, speaking, reading, and writing course. It focuses on the listening, speaking, reading, and writing skills needed for teaching Basic English to pre-school children. This course has 7.50 of additional hours of outside work. The student will perform the assigned activities in the component external work.

<b>ENGL 1220</b>	<b>BUSINESS ENGLISH</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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*Pre-requisite: ENGL 1110*

This course is designed to provide the student with the writing principles, reference tools and appropriate exercises that will enable them to write business communications letters in a simple and familiar language. This course has 7.5 additional outside class clock hours. The student will do a paper about a topic related to the course.

**ENGL 2206    BUSINESS WRITING IN ENGLISH                    3 CREDITS                    45 HOURS**  
*Pre-requirement: ENGL 1102*

This course develops in students the ability to correctly write documents used in commercial areas. The different styles of documents and commercial forms are studied. The course will be based on written assignments, exams, and short tests.

**ENGL 3001    CONVERSATIONAL ENGLISH                    3 CREDITS                    45 HOURS**  
**AND COMPOSITION**

The purpose of the course is to develop oral and written communication skills, as well as the processes and resources to achieve effective communication using vocabulary, grammar, critical thinking, listening, speaking and pronunciation skills. Emphasizes the importance of communication and the impact on the mass media. The teaching and learning process is carried out through different techniques of presentations, oral reports, readings related to the objectives of the course, the use of technology and organizational innovations. The course is offered face-to-face and not face-to-face.

**ENGL 3002    CONVERSATIONAL ENGLISH                    3 CREDITS                    45 HOURS**  
**FOR MANAGERS**

The Conversational English course for managers focuses on the general principles of business administration curriculum and essential communication skills in English. The course is offered using a theoretical-functional approach, in which there is a functional purpose and intention of communication. Students will be exposed and participate in dialogues, panels, and presentations. The course will be based on participation, presentations, and short tests.

**ENTR 1001    ENTREPRENEURSHIP    3 CREDITS                    45 HOURS**

They will learn negotiation techniques, calculated risk analysis, business opportunities, marketing identification and permissiveness. Design and maintenance of optimal client service and emphasizes the responsibilities of the Therapist in legal and professional aspects and on client confidentiality.

**ENTR 1024    BUSINESS DEVELOPMENT    3 CREDITS                    45 HOURS**

They will learn negotiation techniques, calculated risk analysis, business opportunities, marketing identification and permissiveness. Design and maintenance of optimal customer service. Emphasizes the responsibilities of the professional in legal and professional aspects and on client confidentiality. The course will be based on exams, homework, and written assignments.

**ETIC 2001     ETHICS FOR MASSAGE THERAPISTS     1 CREDIT     15 HOURS**

Emphasize the professional and legal responsibility of the therapist towards the intimacy, confidentiality, physical, emotional, and mental integrity of the clients. In addition, local laws applicable to the health profession and guidance on how to maintain client records are studied.

**FIAD 1001     CPR/ HIV FIRST AID     1 CREDIT     30 HOURS**

This course covers basic CPR, HIV, and OSHA. Through lectures and simulated practices, the student will learn about the cardiovascular and respiratory system, how to clear external airways obstructed with objects, about automatic external defibrillation, prevention and management of infectious diseases and OSHA safety rules. The student will be evaluated through exams, portfolio, simulated practices, and attendance. Requires the use of the laboratory.

**FINA 4002     CORPORATE FINANCE     3 CREDITS     45 HOURS**

*Pre-requirement: ACCO 2200*

The purpose of this course is to study the importance of finance and its interrelationship between economic aspects, government, and competition. It reviews the basic financial statements, and they are analyzed with tools such as: "ratio analysis", "common size analysis", "fund statement analysis" and others. Emphasis is placed on the importance of proper control and management of working capital ("working capital management") and the different sources of short and long-term financing. Student knowledge is determined through case studies, reports, and exams.

**FINA 5105     MANAGERIAL FINANCE \*     3 CREDITS     45 HOURS**

It presents the principles and applied concepts of corporate finance such as maximization, financial risk, portfolio theory, capital structure, cost of capital, among others. It introduces the student to the current techniques of financial analysis of the company. It emphasizes in the synthesis of means of financing, dividends, and the global valuation of a company. Knowledge is measured through tests, case analyzes, and practice exercises.

\*This course is also offered in a non-face-to-face mode.

**GRAD 1402     TYPOGRAPHY IN DESIGN     3 CREDITS     60 HOURS**

The Typography in Graphic Design course aims for students to recognize the most important typographers and their contributions to graphic design. The development of the printing press and the first forms of writing are studied. It emphasizes the correct use of titles and text blocks, in addition, the techniques to develop an original typography are identified. Requires laboratory use. This course is offered face-to-face and not face-to-face.

**GRAD 1403 PUBLICATION ASSEMBLY 3 CREDITS 60 HOURS**

Post montage exposes the correct ways to arrange graphic elements within a page. Different ways of presenting advertising are explained. The "Adobe In Design" program is studied to create magazine articles, books and pamphlets. Discuss the techniques of creating a booklet, as well as designing a book and magazine cover. Requires laboratory use.

**GRAD 1404 DIGITAL ANIMATION 3 CREDITS 60 HOURS**

The animation course introduces students to the creation of animated designs using the drawing tools required to create them. Different computer programs such as "are recognized *Flash*" and "*After Effects*". Drawing and character creation tools are identified. He teaches the creation of animations for the web and for television. Requires laboratory use.

**GRAD 1501 ILLUSTRATION TECHNIQUES 3 CREDITS 60 HOURS**

The course studies the methods for creating digital illustrations using the "*Adobe Illustrator*" program. All the tools included in the program to make illustrations, logos, icons, signage, and 3D graphics are studied. Requires laboratory use

**GRAD 1502 GRAPHICS AND VIDEO EDITION 3 CREDITS 60 HOURS**

In this course, techniques and concepts in video editing are studied. Video graphics creation and editing through hands-on projects using the "Adobe Premiere" program is emphasized. Requires laboratory use.

**GRAD 1503 LOGO DESIGN 3 CREDITS 60 HOURS**

This course focuses on the criteria for creating an effective logo through the study of corporate identity and ways to convey ideas using typography and color. Students will create a corporate identity by going through all stages; from concept to implementation. Requires laboratory use.

**GRAD 1504 ADVERTISING DESIGN 3 CREDITS 60 HOURS**

This course is an introduction to advertising design through an approach to the roles of advertisers, advertising agencies and the use of different media. The theory-practice and the structure of the profession related to the creative process are studied, emphasizing the development and execution of the visual image, the generation of ideas, concepts, and teamwork. Requires laboratory use. This course is offered face-to-face and not face-to-face.

**GRAD 1601 DIGITAL IMAGE EDITION 3 CREDITS 60 HOURS**

In this course the techniques for editing digital images using the "Adobe Photoshop" program are studied. The creation of photomontages and color correction are emphasized, preparing images for advertising. Requires laboratory use.

**GRAD 1602 DIGITAL PHOTOGRAPHY****3 CREDITS****60 HOURS**

The Digital Photography course is a guide through the creative process behind the art of image capture. The basic concepts and principles of photography are studied using practical and theoretical methods. The student will carry out photographic projects and create a professional portfolio. Requires laboratory use.

**GRAD 1603 WEB DESIGN****3 CREDITS****60 HOURS**

In this course, all the stages that make up the creation of a website will be studied, from the meeting with the client to the publication of the site and its maintenance. It will work with the techniques used in the current market, including the development of pages with dynamic content, always considering accessibility and aesthetics. Requires laboratory use.

**GRAD 1604 THREE-DIMENSIONAL DESIGN****3 CREDITS****60 HOURS**

The three-dimensional design course is an introduction to techniques for creating three-dimensional settings and characters using computerized tools. It works on "Maya" program for the realization of creative projects in third dimension. Requires laboratory use.

**GRAD 2001 CREATIVE PORTFOLIO****3 CREDITS****90 HOURS**

*Pre-requirements: ART 2009, GRAD 1402, GRAD 1403, GRAD 1501, GRAD 1502, GRAD 1503, GRAD 1504, GRAD 1601, GRAD 1602, GRAD 1603, GRAD 1604*

This course prepares the student for the job search, creating a professional portfolio where the achievements achieved during the associate degree in graphic design will be evidenced. The various methods for creating a creative portfolio will be emphasized, considering print and digital formats. This course will be enrolled in the last term of studies since it is the "Capstone" course. Requires laboratory use.

**GROM 1211 INTRODUCTION TO PET GROOMING****2 CREDITS****30 HOURS**

This course exposes the essential responsibilities and tasks that a professional groomer performs in the day-to-day life of the profession, industry regulations, and important data on animal handling. The different ways of practicing the profession, compensation methods used in the industry, and job valuation methods will also be presented. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1220 ANATOMY AND ZOOTECHNY****3 CREDITS****45 HOURS**

This course allows the student to know the body of dogs and cats in general, emphasizing the systems: Bone, Muscular, and Integumentary. The aim of this course is to integrate the knowledge of the systems, with the practice of grooming and how the patterns of each breed link a

relationship between the anatomy of the pet and its zootechnics. This course has an additional 11.25 hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1230 HEALTH, WELLNESS, AND EMERGENCY MANAGEMENT                      3 CREDIT            45 HOURS**

This course links three important parts of the life of a pet, which every animal health and aesthetic professional should know: Health, Welfare and Emergency Management. The course prepares students to foster a preventive approach to pets' lives, which promotes their general health, and helps students to prepare an emergency management plan. This course has an additional 11.25 hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1241 PRE-GROOMING TECHNIQUES                      3 CREDITS            75 HOURS**

This course integrates theory with practice. It is aimed at all the procedures that are done as a means of preparing the pet for basic or complete grooming. It will present both in theory and in practice the importance of regular grooming of the pet and the effect it has on the appearance of the pet's coat, skin, and general health. This course has an additional 18.75 hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1250 PRINCIPLES OF CONDUCT                      3 CREDITS            75 HOURS**

This course provides students with a second alternative to generate income and self-employment. The Canine Training Principles course presents techniques for training dogs in their early stages of life, modifying behaviors and reducing levels of aggressiveness in some cases. This course consists of theory and practice, field visits. You also have an additional 18.75 hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1261 BASIC GROOMING                      3 CREDITS            75 HOURS**

This theoretical and practical course begins with the application of the knowledge acquired in past courses, and the integration of new skills. The focus will be on the proper use and maintenance of tools and equipment. At the end of the course, students will be able to do their first grooming jobs. This course has an additional 18.25 hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1271 BASIC BUSINESS AND MARKETING                      2 CREDITS            30 HOURS**

This course will offer the student the necessary knowledge for the procedure of establishing a business in Puerto Rico or managing an existing one. It will present effective techniques to promote sales and good customer service, how to develop a business plan, among other topics of interest to a future manager or entrepreneur. The course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1281 CUTTING PATTERNS AND STYLES                      3 CREDITS                      75 HOURS**

*Pre-requirement: GROM 1211, GROM 1241, GROM 1261*

This course will offer the student the necessary knowledge for the procedure of establishing a business in Puerto Rico or managing an existing one. It will present effective techniques to promote sales and good customer service, how to develop a business plan, among other topics of interest to a future manager or entrepreneur. The course has 18.75 hours additional outside work. The student will carry out a special work on a topic related to the course.

**GROM 1290 CREATIVE GROOMING AND ASIAN MERGERS                      3 CREDITS                      75 HOURS**

*Pre-requirement: GROM 1211, GROM 1241, GROM 1261*

This course will offer the student the necessary knowledge for the procedure of establishing a business in Puerto Rico or managing an existing one. It will present effective techniques to promote sales and good customer service, how to develop a business plan, among other topics of interest to a future manager or entrepreneur. The course has 18.75 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1301 ADVANCED GROOMING TECHNIQUES                      3 CREDITS                      75 HOURS**

*Pre-requirement: GROM 1211, GROM 1241, GROM 1261*

This course is designed to apply prior knowledge and provide the student with an advanced level of grooming techniques. The course presents techniques used in dogs that participate in competitions, and techniques to work dogs and cats in critical condition. Corrective grooming and application of the specifications of each breed in commercial grooming will also be a priority in the class. This course has an additional 18.75 hours of outside work. The student will carry out a special work on a topic related to the course.

**GROM 1350 GROOMING PRACTICE                      5 CREDITS                      225 HOURS**

*Pre-requirement: All previous courses*

This course allows the student to practice in a real setting, applying the knowledge acquired in all the courses of the program. Each practice center will have a professional groomer, who will supervise each action carried out by the student, to ensure that their knowledge is applied correctly. The student will work as a groomer, in veterinary clinics, canine and feline beauty salons, or agro-centers. The tasks that the student will perform may include general grooming, animal styling, and customer service. This course has no additional hours of outside work.

**GROM 1361 GROOMING PRACTICE                      3 CREDITS                      135 HOURS**

*Pre-requirement: All previous courses*

This course allows the student to practice in a real setting, applying the knowledge acquired in all the courses of the program. Each practice center will have a professional groomer, who will supervise each action carried out by the student, to ensure that their knowledge is applied



correctly. The student will work as a groomer, in veterinary clinics, canine and feline beauty salons, or agro-centers. The tasks that the student will perform may include general grooming, animal styling, and customer service. This course has no additional hours of outside work.

**HIST 3004    HISTORY OF PUERTO RICO \*                      3 CREDITS                      45 HOURS**

The course intends for the student to analyze the socio-historical process of Puerto Rico from pre-Columbian times to the present. In addition, a historical-graphic recount is made in which the facts and the political-economic relations that have been decisive in the process of cultural development of the country under different sovereignties are identified. The course is offered through lectures, socialized discussion, analysis of newspaper and magazine articles, Socratic dialogues, oral reports, and audiovisual presentations. \* This course is offered face-to-face and not face-to-face.

**HUMA 3005    WORLD HISTORY I                                      3 CREDITS                      45 HOURS**

The main objective of the course is to ensure that the student understands the evolution of the human being from its origins to the historical period of the Middle Ages. In addition, to study and analyze the great struggles for the power of man, their different forms and structures of government, religious beliefs, manifestations in the arts and sciences, as well as those cultural changes. The course is designed for the student to develop their critical analysis skills through lectures, cooperative work, reflections, investigations, and reading comprehension. \* This course is also offered in a non-face-to-face mode.

**HUMA 3006    UNIVERSAL HISTORY II \*                              3 CREDITS                      45 HOURS**

The course is related to the study of those historical events and factors that gave way to two eras: the Modern Age and the Contemporary. Attention is given to relevant historical movements such as the great intellectual, economic, political, scientific, religious, and sociocultural revolutions. The course ends, with the analysis of the events of greatest magnitude and global impact in the XXI century. Lecture, reading comprehension, critical thinking skills, data and graph analysis, Socratic dialogue, monographic work, and audiovisual presentations are used. \* This course is offered face-to-face and not face-to-face.

**HUBE 5101    ORGANIZATIONAL BEHAVIOR\*                              3 CREDITS                      45 HOURS**

Covers the study and application of behaviors in organizations. Topics such as the theories and practices of organizations, the psychology of the individual, their nature and the advantages of teamwork, and changes, among others, are analyzed. Theories about human behavior and those related to organizations can also be applied. Knowledge is measured through oral presentations, essays, case analysis, and research. ‡This course is also offered in a non-face-to-face mode.

**HUMR 1100 HUMAN RELATIONS****2 CREDITS****30 HOURS**

The human relations course aims to offer the student of the Secretarial Doctor program relevant information on the theoretical and practical aspects of interpersonal relationships in their role as a professional. Organizational processes and the impact of human relationships on them will be analyzed. The course also provides the opportunity for the student to examine their professional self in the context of work. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**HUMR 1110 HUMAN RELATIONS****3 CREDITS****45 HOURS**

The Human Relations course aims to offer the student of the Preschool Teacher Assistant program relevant information about the theoretical and practical aspects of interpersonal relationships in their role as a professional. Organizational processes and the impact of human relationships on them will be analyzed. The course also provides the opportunity for the student to examine their professional self in the context of work. This course has additional 11.25 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**HURE 1104 HUMAN RELATIONS****3 CREDITS****45 HOURS**

The course is aimed at self-assessment, development and understanding of human interactions today on a personal and professional level. It includes theoretical and practical aspects of sociology, social psychology, and organizational behavior. The analysis of the topics will be based on the skills of critical thinking and effective communication. Community activities that will support group will be encouraged during the course work learning. Interpersonal relationships should encourage discussion to develop leadership.

**HURE 6131 HUMAN RESOURCE MANAGEMENT****3 CREDITS****45 HOURS**

It offers the student the methodology and principles of Human Resources Administration to manage the diversity that exists in the business world, the development of techniques to manage the benefits and incentives of human resources, as well as promotion, retention, development, and replacement. of the staff. Creativity is also handled in decision-making with an emphasis on human dimensions. Knowledge is measured through oral presentations, essays, case analysis, and research.

**HURE 6144 RESEARCH METHODS I****3 CREDITS****45 HOURS**

*Pre-requirements: QUME 5103, 12 credits and specialty*

Describes the different research techniques where the student, through the supervision of the instructor, will choose a topic for a research project, prepare an outline and finally a research proposal. The student will carry out his research under the supervision of the instructor submitting a written proposal at the end.

**HURE 6145 INVESTIGATION METHODS II****3 CREDITS****45 HOURS***Pre-requirements: HURE 6144*

This course serves two main purposes to discriminate and implement the different research techniques empowered in Research I and in Quantitative Methods. The student will implement the methodology, analyze, and conclude their research, based on the findings. You will conduct your research under the supervision of the instructor, deliver a final written report, and give an oral presentation of the research.

**HURE 6151 COLLECTIVE BARGAINING****3 CREDITS****45 HOURS**

Designed to provide the student with managerial and technical skills on labor-management relations and collective bargaining in the public and private sectors. The concepts, methods and processes of the union movement in Puerto Rico and the United States are analyzed, its governance and representation elections. The processes of negotiation and administration of collective agreements are analyzed, emphasizing the discussion of the applicable labor legislation. Knowledge is measured through oral presentations, essays, case analysis, and research.

**HURE 6152 LABOR LEGISLATION****3 CREDITS****45 HOURS**

In this course, topics related to state and federal labor legislation applicable to Puerto Rico are discussed, such as: the Constitution of Puerto Rico as the fundamental basis of worker rights; Employment Protection, Employment Contract, Social Security, Labor Insurance, Health and Safety at Work, Labor-Employer Relations and Public Employment Legislation. Knowledge is measured through oral presentations, essays, case analysis, and research.

**HURE 6153 SUPERVISION AND LEADERSHIP****3 CREDITS****45 HOURS**

The course provides the student with the techniques and knowledge necessary to perform effectively in supervisory positions, highlighting the managerial functions of planning, organization, direction, and control of personnel. Topics such as the criteria in the selection of personnel, training, education and approaches that help in the selection of these are discussed. They will know how to establish, implement, and measure performance standards results.

They will review business policies and apply effective communication between employees, supervisors, and executives. In addition, the course presents ~~on~~ aspects of decision-making, delegation of authority, participatory management, organizational support and backing. They will internalize the importance of the development and implementation of improvement, evaluation, and feedback programs. Knowledge is measured through oral presentations, essays, case analysis, and research.

<b>HURE 6154</b>	<b>COMPENSATION SYSTEM AND BENEFITS</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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Study employee motivation theories and their applicability to compensation and benefits management. The role of motivation in the value of compensation is analyzed. It analyzes how human behavior and motivation influence the design of reward systems and the regulatory framework for wages and salaries. Knowledge is measured through oral presentations, essays, case analysis, and research.

<b>INFO 1704</b>	<b>DATA PROCESSING IN SPREADSHEETS</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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The course has been designed for the student to learn through visual presentations, practical exercises, and analysis of mathematical cases to use spreadsheets to create formulas for basic and logical operations, graphs, use of functions and apply page and text formats. It is evaluated through execution exercises, word problems, rubrics, and theoretical exams. It requires the application of the spreadsheet, laboratory, and Internet.

<b>INFO 1705</b>	<b>PRESENTATIONS AND ELECTRONIC PUBLICATIONS</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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This course develops in students the skills of handling presentation programs, publications, and electronic agenda. The discussion of concepts, functions, and execution exercises facilitate the creation of professional documents in a given time. Assessments allow the student to use their creativity and meet established design criteria. It is evaluated through execution exercises, rubrics, and theoretical exams. Requires lab, presentation apps, ezines, and Internet and lab.

<b>INFO 2701</b>	<b>INTEGRATION OF THE OFFICE SYSTEMS</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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*Pre-requirements: COMP 1702, INFO 1704, INFO 1705*

The course allows you to integrate advanced programs from word processing, spreadsheet, presentation, publishing, database, email, and Internet applications. These documents are connected by means of links between the different applications, and in addition, a WEB page is designed. The demonstrations used allow the student to improve time management on assigned tasks. The student will analyze which application to use according to the project. It is evaluated through execution exercises. Requires lab and word processing, spreadsheet, presentation, publishing, database, and Internet applications.

<b>KEBO 1205</b>	<b>KEYBOARDING</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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This course includes the development of basic and professional techniques, as well as basic skills (speed, accuracy, and collation) in the use of the numeric and alphabetic keyboard of the computer touch and draft editing. Letter, memo, tab, table, and report formats are also added

. The methods to be used are visual presentations, demonstration method and direct dictation. To demonstrate what has been learned, the following are used: performance tests, portfolio, rubrics, and document acceptability criteria. Requires use of the lab and word processing application.

**LABS 1111    INTRODUCTION TO LABORATORY    7 CREDITS    120 HOURS**  
**CLINICAL LAWS, REGULATIONS, AND THE ROLE OF THE**  
**ASSISTANT IN EQUIPMENT MANAGEMENT**

This course provides the student with an introduction to the functions and roles assumed by a laboratory assistant and the different scenarios in which they can perform. The course includes the development of the profession, an approach to different types of laboratory and a broad emphasis on the laws, regulations and regulations that govern the profession. Regulation # 120 of the Department of Health in Puerto Rico, sections of CLIA, aspects of Environmental Quality and laws such as OSHA and HIPAA are discussed. In addition, the student will learn what procedures he can carry out from his role as a laboratory assistant, as well as the characteristics, functions, uses and correct way of handling the equipment with which he will be working in laboratory settings. This course has an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**LABS 1121    GENERAL COMPENDIUM OF SCIENCES 5 CREDITS    90 HOURS**

This course allows the student to study and learn basic and general knowledge about biology, chemistry, and physics. Biology allows the study of the characteristics of living beings and their organism in general. Chemistry allows the theoretical and practical study of the basic principles, properties, structure and behavior of matter and its application in the processes of daily living. Physics presents an approach to the principles related to mechanics, energy, work, and heat. This course has an additional 22.5 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**LABS 1131    GENERAL PROCESSES OF DATA    3 CREDITS    60 HOURS**  
**ENTRY AND LABORATORY SERVICES BILLING**

*Pre-requisite: MEDT 1111*

This course prepares the student with the basic techniques and skills to carry out the data entry, information management and billing process for clinical laboratory services. This course has an additional 15 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**LABS 1141    LABORATORY SAMPLE MANAGEMENT 5 CREDITS    90 HOURS**

*Pre-requirement: LABS 1111*

This course prepares the student with the necessary knowledge to carry out assistance processes in the pre-analytical phase of the samples. Sample preparation, transport and storage of specimens are part of the pre-analytical process and is part essential to ensure quality results. The student will learn the specific procedures to assist in the handling of each type of sample. This

course has an additional 22.5 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**LABS 1151 SPECIAL PROCEDURES**

**5 CREDITS**

**90 HOURS**

*Pre-requirement: LABS 1111*

This course prepares the student with the necessary knowledge to perform special procedures authorized in Regulation # 120 of the Secretary of Health of Puerto Rico. The course covers topics related to the preparation of culture media and emulsifications. This course has an additional 22.5 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**LABS 1251 CLINICAL PRACTICE**

**4 CREDITS**

**180 HOURS**

*Pre-requirement: All program courses*

This allows the student to consolidate the theoretical knowledge and practical skills acquired during their participation in the program. The student will apply the knowledge of data entry, management of laboratory information systems and special procedures in accordance with Regulation # 120 of the Secretary of Health of Puerto Rico in a real laboratory setting, under the supervision of a licensed medical technologist.

**LAW 1009 LAWS AND ETHICS**

**1 CREDIT**

**15 HOURS**

Emphasize the professional and legal responsibility of the therapist towards the intimacy, confidentiality, physical, emotional, and mental integrity of the clients. In addition, local laws applicable to the health profession and guidance on how to maintain client records are studied.

**MAHE 6138 HEALTH SYSTEM ORGANIZATION  
MANAGEMENT**

**3 CREDITS**

**45 HOURS**

Provides an opportunity to understand organizations dedicated to health services through outpatient care centers, health organizations and other types of organizations related to health services. Emphasis is placed on issues such as organizational design and structure with approaches to the new trends that exist in health services organizations. Knowledge is measured through oral presentations, essays, case analysis, and research.

**MAHE 6139 LEGAL ASPECTS AND REGULATIONS  
IN HEALTH SYSTEMS MANAGEMENT**

**3 CREDITS**

**45 HOURS**

Provides the opportunity to understand and interact with the social, legal, and regulatory factors of health care institutions. Inherent topics will review HIPAA law, laws applicable to patient care, ethical and corporate compliance, among others. Special attention will be paid to the common legal and regulatory aspects to which the administrators are exposed. Knowledge is measured through oral presentations, essays, and case analysis.

**MAHE 6140 PLANNING, ASSESSMENT, AND  
CONTROL OF HEALTH SYSTEMS**

**3 CREDITS**

**45 HOURS**

*Pre-requirements: MAHE 6139*

Presents the processes and techniques for strategic planning. The budget and the implementation of the strategies are evaluated. The course provides the student with tools for budget planning and evaluation of health organizations, techniques to implement the models, and the decision-making process. The relationship between planning, budget and environments outside the organization is analyzed. The importance of teamwork and its implications in the strategic planning process is recognized. Knowledge is measured through research, written work, case analysis, and oral presentations.

**MAHE 6141 ACCOUNTING IN HEALTH SYSTEMS 3 CREDITS**

**45 HOURS**

Health systems focused accounting seeks to structure the information in the health care system that is needed to hold health care providers formally accountable for the cost and quality of the products and services they offer. It is intended to analyze and assess the implications of financing systems, organizational structures and technologies on the quality and cost of health care. Knowledge is measured through essays, research, and presentations.

**MAHE 6144 RESEARCH METHODS I**

**3 CREDITS**

**45 HOURS**

*Pre-requirements: QUME 5103, 12 specialty credits*

It describes the different research techniques where the student, through the supervision of the instructor, will choose a topic for a research project, prepare an outline and finally, a research proposal. The student will carry out his research under the supervision of the instructor, submitting a written proposal at the end.

**MAHE 6145 RESEARCH METHODS II**

**3 CREDITS**

**45 HOURS**

*Pre-requirements: MAHE 6144*

This course serves two main purposes: discriminate and implement the different research techniques empowered in Research I and in Quantitative Methods. The student will implement the methodology, analyze, and conclude their research, based on the findings. You will conduct your research under the supervision of the instructor, deliver a final written report, and give an oral presentation of the research.

**MAHE 6157 INFORMATION SYSTEMS  
IN HEALTH SERVICES**

**3 CREDITS**

**45 HOURS**

This course describes the increasing participation of governments to stimulate and direct the development of information technologies in health organizations. A discussion of information management for the purpose of improving the quality of personal health care and public health

<b>MANA 1207</b>	<b>MANAGEMENT PRINCIPLES</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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<b>MANA 2020</b>	<b>CLAIMS PRACTICE OF CIVIL LIABILITY</b>	<b>3 CREDIT</b>	<b>45 HOURS</b>
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**MANA 2303 LEGAL ASPECTS AND ETHICS 3 CREDITS 45 HOURS**

<b>MANA 2403 HUMAN RESOURCES MANAGEMENT 3 CREDITS</b>	<b>45 HOURS</b>
<i>Pre-requirement: MANA 1207</i>	

<b>MANA 2413</b>	<b>INTEGRATED SYSTEMS MANAGEMENT 3 CREDITS</b>	<b>45 HOURS</b>
<i>Pre-requirement: COMP 1205</i>		

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commercial situations are analyzed and the technological alternatives for them will be discussed. Student knowledge is determined through readings, case studies, reports, and tests. Requires laboratory use.

**MANA 3002 EFFECTIVE SUPERVISION**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: MANA 1207*

The purpose of this course is to impart the knowledge and skills necessary for effective supervision that creates an optimal work environment. Topics covered are the role of the supervisor, productivity, decision-making, leadership, performance, and conflict management. Student knowledge is determined through situation analysis, case studies, articles, oral reports, written reports, interviews, and research papers.

\* This course is offered face-to-face and not face-to-face.

**MANA 3401 CREATIVE AND INNOVATIVE  
MANAGEMENT**

**3CREDITS**

**45HOURS**

*Pre-requirement: MANA 1207*

The purpose of this course is to study the various components of individual creativity, the characteristics of creative groups, and the various ways to enhance creativity in the company. The key factors to develop, manage and sustain creativity and innovation in organizations are analyzed. Creative thinking and problem solving within the company are promoted in a theoretical and practical way. Student knowledge is determined through research papers, case studies, exams, oral reports, and written reports.

**MANA 4000 EFFECTIVE COMMUNICATION  
FOR MANAGERS**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: MANA 1207*

The purpose of this course is to present the skills, processes, and resources to achieve effective and efficient managerial communication. The course analyzes the communication process, listening, interpersonal communication skills, group communication, professional communication, intercultural communication, communication technology, and how to organize and conduct an interview. Student knowledge is determined through cases, practical activities, projects, oral reports, and written reports.

**MANA 4004 OPERATIONS MANAGEMENT**

**3 CREDITS**

**45 HOURS**

*Pre-requirements: MANA 1207, STAT 3103*

The purpose of this course is to introduce the student to the different techniques for analyzing situations that occur in the company. The different techniques of making production forecasts such as: GANTT graphs, analysis of a PERT network, profitability analysis and online programming are worked on. The student's knowledge is determined through case studies, real situations and their analysis, research work, exams, and written reports.

\* This course is offered face-to-face and not face-to-face.

**MANA 4005 CUSTOMER SERVICE****3 CREDITS****45 HOURS***Pre-requirements: MARK 1301*

The purpose of this course is to identify the client's needs in both products and services. The course discusses strategies to generate satisfied customers. Advertising strategies, promotional tools, target markets, market segments and their niches are evaluated. Various strategies are integrated and related to meet customer needs. Student knowledge is determined through oral, written, and group or individual reports.

**MANA 4006 STRATEGIC PLANNING****3 CREDITS****45 HOURS***Pre-requirements: MANA 1207, MATH 1206*

The purpose of this course is to identify areas of opportunity in the company and appropriate them through a strategic plan. The environment, both internal and external, in which the organization operates, develops, and grows is studied. It studies the formulation of long-term strategies, the strategic implementation and the evaluation and control processes. Student knowledge is determined through case analysis, with a final evaluation of a complete strategic plan.

**MANA 4009 ADVANCED MANAGEMENT****3 CREDITS****45 HOURS***Pre-requirements: MANA 1207, MANA 4006, MARK 1301*

The purpose of this course is to analyze the distinctive characteristics in the changes of management strategies in companies and competitive markets directed towards globalization and Internet technology. Emphasis is given to electronic commerce, applications, as well as the synthesis, evaluation, and formulation of strategies to be used in the organization and current market environments. Student knowledge is determined through case analysis, oral reports, written reports, research papers, and exams.

**MANA 4011 ORGANIZATIONAL BEHAVIOR****3 CREDITS****45 HOURS***Pre-requirement: MANA 1207*

The purpose of this course is to acquire the knowledge and skills to work with individual and group behavior generated in organizational settings. Emphasis is placed on the development of qualities and competencies to handle situations related to the workplace, such as stress, aggression, motivation, values, communication, teamwork, conflict management, change and decision making. Student knowledge is determined through readings, films, comparative analysis, oral reports, written reports, and tests.

**MANA 4012 NEGOTIATION AND MEDIATION AT WORK 3 CREDIT 45 HOURS**

*Pre-requirements: MANA 1207, MANA 2303*

The purpose of this course is to train the student through the study and analysis of negotiation and mediation strategies to manage conflicts in the organizational environment. The course discusses alternative methods to resolve disputes, including mediation, negotiation, and conciliation techniques. Likewise, the topics of communication, the management of emotions and the ethical aspects for the resolution of conflicts are discussed. Student knowledge is determined through situation analysis, case analysis, oral reports, written reports, and exams.

**MANA 4013 MANAGEMENT RESEARCH 3 CREDITS 45 HOURS**

*Pre-requirements: MANA 1207, MATH 1206, STAT 3103*

Management research is a crucial element in organizations. The purpose of this course is to educate people for information search, synthesis and decision making. It introduces the student to the techniques of investigation, analysis of situations and decision making. The student's knowledge is determined using different techniques of investigation and evaluation of situations, case studies, research papers, exams, and written reports.

**MANA 4014 SEMINAR AND MANAGEMENT INTERNSHIP 3 CREDITS 105 HOURS**

*Pre-requirements: MANA 1207, MANA 4004, MATH 1206, STAT 3103*

The purpose of this course is to expose the student to the execution of tasks related to the profession. The course consists of 90 hours of supervised internship, as well as a 15-hour contact seminar where planning, organization, direction, and control are discussed. The result of this experience will be summarized in a portfolio that the student will carry out during the Internship.  
\* This course is offered face-to-face and not face-to-face.

**MANA 5107 BUSINESS ETHICS AND POLICY FORMULATION\* 3 CREDITS 45 HOURS**

It presents controversial issues in law and ethics within the business environment. Cases related to individual and corporate responsibility in business are analyzed. Real life examples related to ethical dilemmas, poor ethical selection and sound ethical decisions are studied. In addition, the obligation of the companies towards the community where they conduct their business and towards the management society is covered. Knowledge is measured through discussion questions, written work, case analysis and oral presentations (audit of the code of ethics). \*This course is also offered in a non-face-to-face mode.

**MANA 5108 BUSINESS STRATEGIES\*****3 CREDITS****45 HOURS***Pre-requirements: ACCO 5104, ECON 5102, FINA 5105, MARK 5106*

Students participate in the study of the factors to be considered in the formulation and selection of strategies, in the short and long term, that allow organizations to position themselves in the market to compete successfully, satisfy their customers and achieve good business performance. . Among the topics discussed are the development of a strategic plan, its vision, mission, performance objectives, creation of the strategy and performance evaluation to make the necessary adjustments. Knowledge is measured through research, written work, case analysis, and an oral presentation (strategic audit). \*This course is also offered in a non-face-to-face mode.

**MANA 6132 DECISION MAKING TECHNIQUES****3 CREDITS****45 HOURS**

This course explores the study of quantitative methods for decision making, the application of mathematical and statistical models in the analysis of problems related to the economic and administrative sciences. The student learns identify problems, solve them through various quantitative techniques and translate the results into strategies that in turn respond benefit to the organization. Knowledge is measured through tests, written assignments, simulations, and case analysis.

**MANA 6133 PROJECT PLANNING \*****3 CREDITS****45 HOURS**

It explores and provides the tools for the implementation of the project management methodology in work environments. It aims to provide basic knowledge for project management, handling support functions such as effective time management, forecasting project success, and complementing it with planning, scheduling, and control functions. Cultural, multi-functional and integration aspects are presented for work teams. Knowledge is measured through case analysis, oral presentations, essays, research papers, and exams. \*This course is also offered in a non-face-to-face mode.

**MANA 6141 GLOBAL BUSINESS OPERATION \*****3 CREDITS****45 HOURS**

This course examines the fundamentals of international business operations. The course begins to discuss the global environment (Ex, the role of government, trade regulations, and the four main determinants of national competitive strategies) and the reasons for an organization to become global, including the two main pathways that they occur in international business. Presentation of a broad vision of the international component of organizations and the problems in the development of international business. Analyze and apply management theories and practices in the international arena. Knowledge is measured through research, written work, case analysis, and presentations. \*This course is also offered in a non-face-to-face mode.

<b>MANA 6142</b>	<b>LEGAL ASPECTS AND MANAGEMENT REGULATIONS*</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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The course is related to the legal and regulatory aspects of Management in companies. Basic concepts of law applicable to management, legal ethical aspects, different methods to resolve disputes between clients, suppliers and employees are discussed. Legal matters pertinent to Management are discussed individually, such as contracts, labor rights, damages, constitutional rights, among others. This course will allow students to understand and acquire different legal concepts that regulate management. Knowledge is measured through research, written work, case analysis, and oral presentations. \*This course is also offered in a non-face-to-face mode.

<b>MANA 6144</b>	<b>RESEARCH METHODS I *</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*PRE-REQUIREMENTS: QUME 5103, 12 specialty credits*

It describes the different research techniques where the student, through the supervision of the instructor, will choose a topic for a research project, prepare an outline and finally, a research proposal. The student will carry out his research under the supervision of the instructor, submitting a written proposal at the end. \*This course is also offered in a non-face-to-face mode.

<b>MANA 6145</b>	<b>RESEARCH METHODS II*</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requirements: MANA 6144*

This course serves two main purposes: to discriminate and implement the different research techniques empowered in Research I and in Quantitative Methods. The student will implement the methodology, analyze, and conclude their research, based on the findings. You will conduct your research under the supervision of the instructor, deliver a final written report, and give an oral presentation of the research. \*This course is also offered in a non-face-to-face mode.

<b>MANA 6159</b>	<b>OPERATION MANAGEMENT &amp; LOGISTICS</b>	<b>3 CREDIT</b>	<b>45 HOURS</b>
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Compelling case study examples are integrated, providing students with a clear view of how good supply chain management offers a competitive advantage. On the other hand, students also learn the dangers of supply chain mismanagement, and its implications on the overall performance of an organization. Students are instructed in key supply chain performance factors, including facilities, inventory, transportation, information, sourcing, and pricing. Knowledge is measured through case analysis, presentations, and research. \*This course is also offered in a non-face-to-face mode.

<b>MARK 1301</b>	<b>MARKETING PRINCIPLES</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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The purpose of this course is to expose the student to Marketing processes. Topics such as the market mix, the positioning of products in the market, their cycle of life, its pricing, marketing channels and its promotion. The target market, market segment, and niches are also discussed. The student's knowledge is determined through case studies, research papers, the application of the 4Ps and how to position a product or service through written and oral work.

**MARK 5106    MARKETING MANAGEMENT \*****3 CREDITS****45 HOURS**

Study the theoretical and practical foundations of the managerial skills of marketing managers. It aims to develop in the student a strategic vision, emphasizing the correct decision-making process aimed at achieving the organization's goals. It trains the marketing manager so that he can identify and evaluate the needs of the company, face the problems, and take advantage of the opportunities offered by the market. Knowledge is measured through oral presentations, market research, case analysis, and discussion questions. \*This course is also offered in a non-face-to-face mode.

**MASS 1213    AROMATHERAPY AND HYDROTHERAPY****3 CREDITS****75 HOURS**

This course deals with the study of aromatherapy and hydrotherapy. The use of essential oils and base oils with their benefits, indications, contraindications, extraction methods, synergies, water temperatures and their forms of use will be discussed. The student will be evaluated through exams, portfolio, assignments, and written work. Requires laboratory use.

**MASS 1214    REFLECTION THERAPY****2 CREDITS****45 HOURS**

This course deals with the study of the reflex zones in the human body and its practice within the field of therapeutic massage. The history, indications, contraindications, basic massage techniques, as well as zonal reflex maps will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1218    HEMOLYMPHATIC DRAINAGE****3 CREDITS****75 HOURS**

This course deals with the study of the lymphatic system and its impact on the health of the individual through body work. This course will discuss the history, the five movements of the lymph, the structures that make up the lymphatic, blood, and circulatory system, as well as the corresponding maneuvers in this therapy. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1219    KINESIOLOGY****2 CREDITS****45 HOURS**

This course introduces the knowledge related to Kinesiology. It focuses on the physics of movement and its clinical application. It focuses on palpation, origin, and muscle insertion to identify movement patterns that may be causing pain and discomfort. Presents principles and techniques for determining the cause of certain health problems by observing health, posture, walking, and general body movements. Requires laboratory use.

**MASS 1220 SPA TECHNIQUES****2 CREDITS****45 HOURS**

This course deals with the main activities and facial and body treatments most used in the SPA industry. Topics such as skin, SPA, facial and body protocols, as well as the history and role of the therapist will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1221 CRANIOSACRAL THERAPY****2 CREDITS****45 HOURS**

This course deals with the study and application of techniques on the craniosacral system. The operation and irregularities of the system will be discussed. In turn, the history, benefits, influence of this technique in children and the craniosacral system will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1222 SPECIAL POPULATIONS****3 CREDITS****75 HOURS**

This course deals with the influence of massage and alternative therapies to treat the different stages of human life and how to treat physical, mental, and emotional conditions in each of these stages. Topics such as pregnancy, childhood, aging, disabilities, amputation, and mental illness, among others, will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1223 SPORTS MASSAGE****3 CREDITS****60 HOURS**

This course deals with sport and the influence of massage on it. Topics such as history, pre-competition massage, during competition, post-competition, maintenance, and rehabilitation will be discussed. In turn, the RICE technique, functional bandages will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1224 ENERGY THERAPIES****3 CREDITS****75 HOURS**

This course deals with the study of body energy and its relationship between the body, mind, and emotions and how to work them through polarity therapy. Topics such as the aura, chakras, meridians, history, benefits, indications, contraindications, currents, touches, the three principles and the five elements according to Ayurvedic medicine will be discussed. The student will be evaluated with theoretical and practical exams, assignments, portfolio, and presentations. Requires laboratory use.

**MASS 1615 SWEDISH MASSAGE THERAPY****4 CREDITS****90 HOURS**

This course deals with the most used massage discipline in the world. Topics such as the history of massage, general anatomy, physiology, the universal and basic techniques of massage will be discussed. Swedish massage, laws, and ethics. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1616 DEEP TISSUE MESSAGES****4 CREDITS****90 HOURS**

This course deals with Japanese Shiatsu therapy and trigger point therapy or also known as "Trigger points". In this course topics such as the history of both therapies, indications, contraindications, TCM meridians, shiatsu regions and trigger points in the body will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires use of laboratory.

**MASS 1617 ORIENTAL THERAPY****4 CREDITS****90 HOURS**

This course deals with the AMMA technique and Oriental Clinical Therapy. In this course topics such as Yin-Yang, the five elements, history, benefits, indications and contraindications of both therapies and their techniques will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MASS 1619 ANATOMY AND PHYSIOLOGY  
FOR MASSEURS****4 CREDITS****60 HOURS**

This course is introductory to Anatomy and Physiology, with an emphasis on body systems, organization, and function of organs. Special attention will be given to the muscular system, integumentary, circulatory, skeletal, lymphatic, endocrine, nervous, and respiratory systems. To incorporate the professional massage therapist within the health field.

**MASS 1620 PATHOPHYSIOLOGY FOR MASSAGE  
THERAPISTS****3 CREDITS****45 HOURS**

This course is introductory to the physiological processes of the most common and recurrent alterations of the human being during its development. Students will analyze the different pathological processes and risk factors that cause disease. The different manifestations of diseases and the possible treatment methods used for each pathology will be discussed. In addition to the most common medical terminology used in the profession of therapeutic massage.

**MASS 1621 STRUCTURAL KINESIOLOGY****3 CREDITS****75 HOURS**

This course deals with the study of movement and how it relates to emotions and the body. Topics such as the history of kinesiology, the muscular, skeletal, articular, and nervous systems as structures related to movement will be discussed. In turn, the use of evaluative and therapeutic techniques such as muscle tests will be used. The student will be evaluated through tests, assignments, portfolio, and written work. Requires laboratory use.



<b>MASS 1622</b>	<b>SPA TECHNIQUES FOR MASSAGE THERAPIST</b>	<b>3 CREDITS</b>	<b>75 HOURS</b>
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This course deals with the main activities and facial and body treatments most used in the SPA industry, in addition to the inclusion of lymphatic drainage therapy and its impact on the health of the individual through body work. The history, the five movements of the lymph, the structures that make up the lymphatic, blood and circulatory system will be discussed. It will also work with SPA protocols, facial and body protocols, as well as the history and role of the therapist in the SPA environment. The student will be evaluated through exams, assignments, portfolio, short tests, and written assignments. Requires laboratory use.

<b>MASS 1623</b>	<b>ORIENTAL MESSAGES</b>	<b>3 CREDITS</b>	<b>75 HOURS</b>
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This course deals with the AMMA technique and Oriental Clinical Therapy. In this course topics such as Yin-Yang, the five elements, history, benefits, indications and contraindications of both therapies and their techniques will be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

<b>MASS 1624</b>	<b>EASTERN PHILOSOPHIES</b>	<b>4 CREDITS</b>	<b>90 HOURS</b>
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This course deals with the AMMA technique, Oriental Clinical Therapy and Reflexotherapy. This course will discuss topics such as Yin-Yang, the five elements, history, benefits, indications, and contraindications of therapies, as well as zonal reflex maps and their basic techniques. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

<b>MASS 1625</b>	<b>SPORTS MASSAGE</b>	<b>3 CREDITS</b>	<b>75 HOURS</b>
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This course deals with sport and the influence of massage on the athlete. Topics such as the history of sports massage, pre-season massage, season, post season, maintenance and rehabilitation will be discussed. In turn, the RICE technique, functional bandages will also be discussed. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

<b>MASS 1626</b>	<b>CLINICAL MASSAGE</b>	<b>3 CREDITS</b>	<b>75 HOURS</b>
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This course deals with trigger point therapy, also known as "Trigger points" and the application of myo-fascial therapy. In this course, topics such as the history of both therapies, indications, contraindications, trigger points and techniques aimed at releasing movement restrictions originating in the soft tissues of the body will be discussed. The student through tests, assignments, portfolio, and written assignments. Requires laboratory use.

**MASS 1635    EXTERNAL CLINICS****4 CREDITS****180 HOURS**

*Pre-requirements: FIAD 1001, MASS 1213, MASS 1214, MASS 1218, MASS 1219, MASS 1220, MASS 1221, MASS 1222, MASS 1223, MASS 1224, MASS 1615, MASS 1616, MASS 1617, SEMI 1105*

This course offers the student the opportunity to practice the knowledge acquired in the other courses in a real work environment. Techniques learned will be reviewed, but combined massage protocols will also be created for different clients. In turn, you will receive guidance on what to do during your practice phase. It will be evaluated through a portfolio, presentations, an evaluation by the preceptor and another student by the teacher. Requires laboratory use.

**MASS 2101    MYO-FASCIAL THERAPY****3 CREDITS****75 HOURS**

This course aims to reinforce knowledge, combines a collection of approaches and techniques aimed at releasing movement restrictions originating in the soft tissues of the body. The methods related to this therapy focus on how posture habits, specific activities or sedentary lifestyle, as well as the compensation that results from injuries or accidents, causes chronic stress and the avoidance of wide movements. Beyond being a technique, it constitutes an approach to working with tissue restrictions and their interactions with movement and posture.

**MASS 2102    THAI MASSAGE****3 CREDITS****75 HOURS**

Thai massage is one of the thousand-year-old therapies of the art of body massage. It is part of the set of oriental therapies based on the flow of energy and on the approach that leads to see health and sanity as the result of balance and balance of energies in the body. Based on Ayurvedic medicine and yoga, Thai massage incorporates a traditional combination of acupressure and yoga, working with the energy meridians and stretching. Requires laboratory use.

**MASS 2103    TUI NA THERAPY****2 CREDITS****45 HOURS**

The Tui Na is a manual therapy in which massage maneuvers, mobilizations, acupressure, tractions, and manipulations are combined. Through these techniques it is possible to stimulate the flow of Qi (energy) and Xue (blood) of the organism, regulate the internal organs and balance the organism energetically. Requires laboratory use.

**MASS 2104    REIKI THERAPY****2 CREDITS****45 HOURS**

Reiki is a non-intrusive healing technique that uses energy, channeled through the hands of the therapist, to treat physical ailments. It is considered a holistic therapy since it works by harmonizing all aspects of the human being: mind, body, emotions, and spirit. Requires laboratory use.

**MASS 2105    EXTERNAL CLINICS****4 CREDITS****180 HOURS**

*Pre-requirements: FIAD 1001, ENGL 1101, ENTR 1024, MASS 1213, MASS 1214, MASS 1218, MASS 1219, MASS 1220, MASS 1221, MASS 1222, MASS 1223, MASS 1224, MASS 1615, MASS 1616, MASS 1623, MASS 2101, MASS 2102, MASS 2103, MASS 2104, SEMI 1105, SPAN 1101*

This course offers the student the opportunity to practice the knowledge acquired in the other courses in a real work environment. Techniques learned will be reviewed, but combined massage protocols will also be created for different clients. In turn, you will receive guidance on what to do during your practice phase. It will be evaluated through a portfolio, presentations, an evaluation by the preceptor and another student by the teacher. Requires laboratory use.

**MASS 2106    PROFESSIONAL MASSAGE SEMINAR    3 CREDITS****75 HOURS**

This course offers the student the opportunity to strengthen and review the theoretical knowledge acquired during the program. In this way, the student will be able to leave with greater confidence and preparation to take the revalidation exam. A summary aligned to the content of the massage therapy and bodywork revalidation established by the Federation of State Massage Therapy Boards (FSMTB) will be discussed. The steps to follow to apply for the provisional license, the professional license and all the documentation required for them will be discussed.

**MASS 2107    ENERGY MEDICINE****4 CREDITS****90 HOURS**

This course deals with the study and application of techniques on the craniosacral system and, in turn, uses basic knowledge of energy therapies and reiki. The functioning and irregularities of the craniosacral system will be discussed. Similarly, topics such as polarity therapy, the aura, the chakras, the meridians, the five elements, Ayurvedic medicine and healing techniques through the hands will be discussed. In turn, the history, benefits, and influence of these techniques in children and adults will be known. The student will be evaluated through exams, assignments, portfolio, and written work. Requires laboratory use.

**MATH 1101    MATH CONCEPTS****3 CREDITS****45 HOURS**

The course offers the student basic mathematical concepts in general and specific operations for use within the profession. It includes operations such as: decimals, percentages, fractions, rounding, unit conversion and clearing of variables. This course has an additional 11.25 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MATH 1110    BUSINESS MATH****3 CREDITS****45 HOURS**

The purpose of this course is to study and develop the basic and necessary skills of mathematics for commerce. Includes a review of basic arithmetic operations applied to decimals, fractions, and percentages. This course has an additional 11.25 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MATH 1206 BUSINESS MATH****3 CREDITS****60 HOURS**

The purpose of this course is to develop the basic and necessary skills of mathematics for application in business and industry. It consists of a review of basic arithmetic operations, applied to cardinals, decimals, fractions and hundreds, computation of interest (simple and compound) and discounts on purchases. In each of these areas, the application of word problem solving is emphasized. The student's knowledge is determined through practical exercises, tests, and group work.

**MATH 2002 GENERAL MATH****3 CREDITS****45 HOURS**

The course is designed for the student to acquire knowledge and skills in basic mathematical operations for solving mathematical operations with real numbers in all their expressions. In addition, to know and interpret the Roman numerals. This course has an additional 90 hours of external work that the student will carry out as assigned. This course is offered face-to-face and not face-to-face.

**MATH 2005 TECHNICAL MATH****3 CREDITS****60 HOURS**

This course is developed to provide the student with the math skills required in the field of computer-derived technologies. The areas that the course emphasizes are computer programming, application management, and topics aimed at the required certifications. The course emphasizes the application of practical problem solving in the handling of number systems, Boolean logic, exponent and radical, operations of linear equations, logarithmic functions, systems of equations and coordinates. The course requires intense practice and various assessments. This course is offered face-to-face and not face-to-face.

**MATH 2010 INTRODUCTORY ALGEBRA****3 CREDITS****45 HOURS**

The course describes to the student the basic concepts of algebraic expressions and formulas. It is designed for the student to apply operations, algebraic expressions, and formulas in practice exercises. Topics such as problem solving, graphing equations, algebraic expressions, linear equations and inequalities, polynomials, and factoring of polynomials will be discussed. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component. This course is offered face-to-face and not face-to-face.

**MEDS 1100 BASIC COMPUTERIZED  
KEYBOARDING****3 CREDITS****90 HOURS**

This course is designed to develop typing skills for speed and accuracy on the computer keyboard. Through it the student will master the learning of the alphabetic, numeric and symbols keyboard. In addition, you will apply the general and theoretical concepts of the use of the computer keyboard and the Microsoft Word program, the preparation of memoranda and simple

business letters will be presented. In addition, the student will develop desirable habits and attitudes within a positive and favorable work environment. This course has an additional 22.50 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1130    INTERMEDIATE AND ADVANCED                    3 CREDITS                    90 HOURS**  
**KEYBOARDING**

*Pre-requirement: MEDS 1100*

This course continues with the development of typing skills and writing by touch using the alphabetic, numeric and symbol keyboard. Speed and accuracy are also developed to a minimum of 25 words per minute in five (5) minute tests. Production exercises such as memo, letters with special parts, reports with footnotes, tabs, and tables are presented. The computer and the Microsoft Word program are used as a means of producing business documents. This course has an additional 22.50 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1120    DOCUMENT MANAGEMENT                    3 CREDITS                    60 HOURS**

This course provides the student with the knowledge that will allow him to manage, preserve and transfer information in different filing and document management systems in commercial, professional and government offices. The rules for alphabetizing using the different manual and computerized database systems, the transfer and disposition of documents are presented. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1150    OFFICE ADMINISTRATION                    2 CREDITS                    30 HOURS**

This course is designed to develop in the student the skills to manage all types of office. The basic processes and principles in administration and topics related to the planning and organization of the basic tasks of the assistant are presented. Techniques for job search and professional development are also presented. It includes office automation and its impact on the modern office. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1110    CREDIT AND MEDICAL INSURANCE    3 CREDITS                    90 HOURS**  
**BILLING I**

*Pre-requirement: MEDT 1100*

Designed so that the student can obtain basic knowledge and skills that will help them develop a better management of billing and collection for medical and hospital services rendered to the patient. You will also learn about the organization, flowchart and development of a billing and collection system in medical offices and institutions. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1170 CREDIT AND MEDICAL INSURANCE 3 CREDITS 90 HOURS  
BILLING II**

*Pre-requirements: MEDT 1100, MEDS 1110, MEDS 1140*

Designed so that the student can obtain basic knowledge and skills in electronic billing that will help him / her in the development of a better management of billing and collection for medical and hospital services rendered to the patient. Also, you will gain knowledge of computerized billing systems: Med One2 and Immediate (Professional and Institutional). This course has an additional 22.50 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1160 PRINCIPLES OF MEDICAL RECORDS 2 CREDITS 30 HOURS**

This course has been designed so that the student can know the content of a basic medical record by type and service. It will help you develop the knowledge and management of the different formats where you can abstract information, for the release of an invoice, complying with the standards according to HIPAA law on the confidentiality of the clinical record in hospital and outpatient services. In addition, the student is trained in the management of an electronic Medical Record program. This course has an additional 7.50 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1140 BASIC PRINCIPLES OF CLASSIFICATION 4 CREDITS 60 HOURS  
AND CODING ICD-9 - CM AND ICD-10 CM/  
PCS AND CPT**

The coding and classification course trains the student to know and use the ICD-books 10-CM / PCS and CPT. Develop understanding of code logic through medical documentation. The skill of searching for diagnoses and / or procedures in the index and tabulation of books is developed. In addition, it enables the student to select the code according to the location and type of service. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDS 1250 PRACTICE IN MEDICAL SECRETARY 5 CREDITS 225 HOURS AND  
WITH INSURANCE BILLING**

*Pre-requirements: All previous courses*

The Internship in Medical Secretarial is designed to offer the student the opportunity to work as a medical secretary in hospitals, clinical laboratories, and medical offices. The student will put into practice the theoretical concepts presented in the classroom related to billing to medical plans. In addition, you will put into practice typing skills, filing the documents that are generated in the office and the skills required in office work in general. In this practice the student will have the opportunity to fill out forms of commercial medical plans.

**MEDT 1100    MEDICAL TERMINOLOGY****8 CREDITS****120 HOURS**

This course has been designed with the objective of introducing students to the field of Medical Terminology, medical terms used in the various diagnostic methods and their relationship with Medical Plan Billing. It focuses on the formation of medical words by combining prefixes, suffixes, roots, and abbreviations. Divided in its first phase by the organization systems of the anatomical structure of the human body, musculoskeletal, nervous system, cardiovascular system, blood and lymphatic, glandular, respiratory and oncology and in its second phase by the gastrointestinal, genitourinary, integumentary and system female and male reproductive. In addition, they would know about dentistry, neonatology, eyes, and ears. Rather, it is intended to familiarize the student of Billing and Collection of Medical Plans, with the knowledge of the normal functioning of the body. In this way, you can understand deviations from normal in the event of illness or accident and provide better service to the patient. This course has an additional 30 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**MEDT 1111    MEDICAL TERMINOLOGY****2 CREDITS****30 HOURS**

This course provides the student with an introduction to the study of medical terminology. Includes roots, prefixes, suffixes, and the etiology of general medical terminology. Emphasis is placed on technical language, with applications aimed at student performance in their role as a professional in the health area. This course has 7.5 additional hours of outside work. The student will carry out the activities assigned in the External Work Component.

**MEDT 2000    MEDICAL TERMINOLOGY****2 CREDITS****30 Hours**

Study of medical terminology. Includes roots, prefixes, suffixes, and the etiology of general medical terminology. Emphasis is placed on technical language, with applications aimed at student performance in their role as a health professional. This course has an additional 60 hours of outside work.

**MICR 111    BASIC CONCEPTS OF MICROBIOLOGY****3 CREDITS****60 HOURS**

This course provides the student with an introductory overview of the basic concepts of microbiology. The content includes the classifications of the most common microorganisms, their characteristics, and the means of transmission of the most common high-risk diseases. This course has an additional 15 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**NURS 1401    STRUCTURE AND FUNCTIONING  
OF THE HUMAN BODY****2 CREDITS****60 HOURS**

Study the anatomy and physiology of the human body. Describe the body's systems, organs, and functions. Explain the relationship between one system and another to carry out the vital functions of the human body. This course has an additional 15 hours of outside work. The student will carry out a study assignment related to a topic of the course.

**NURS 1411      FUNDAMENTALS OF NURSING                      7 CREDITS                      210 HOURS**

This course is designed to offer the student the concepts related to the evolution of nursing, the nursing process, the ethical-legal aspects, and the importance of belonging to the different nursing associations. The student is introduced to the nursing procedures necessary to practice their profession.

The purpose of the course is to offer the student the necessary knowledge to be able to carry out the functions in patient care efficiently through the teaching of skills and procedures. In it, all the basic concepts necessary in the care of the patient / client are grouped, including the nutritional aspect. You are taught theoretical knowledge that is related to practice in the laboratory.

The student acquires the necessary knowledge to prepare nursing records and reports and recognize the importance of these in their work. In addition, you can use all the formats that currently exist for documentation in medical records. The fundamental part is the development of skills by practicing the procedures. It includes basic knowledge that enables the student to properly handle the client in emergencies. This course has an additional 52.5 hours of outside work. The student will carry out a study assignment on a topic related to the course. The student will work this in the additional hours of external work that this course contains.

**NURS 1421      HUMAN DEVELOPMENT                      4 CREDITS                      60 HOURS**

The student acquires knowledge about the development of the individual through the life cycle. It presents the most important changes that occur in the development of a normal person from birth to death. It includes different health problems that affect the individual throughout the life cycle, in addition to nutritional aspects. This course has an additional 15 hours of outside work. The student will carry out a project on a topic related to the course.

**NURS 1431      BASIC CONCEPTS OF MICROBIOLOGY 2 CREDITS                      30 HOURS**

The student applies basic concepts of microbiology. It includes the classifications of the most common microorganisms, their characteristics, and the means of transmission of the most common high-risk diseases. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

**NURS 1441      MOTHER AND NEWBORN CARE                      6 CREDITS                      90 HOURS**

*Pre-requirements: NURS 1401, NURS 1411*

It includes changes in the reproductive organs, signs, and symptoms of pregnancy. Emphasis is placed on health aspects during pregnancy, the attitude of the expectant mother, and the care of the mother in the three stages during the process of childbirth and the care of the newborn. This course has an additional 22.50 hours of outside work. The student will carry out a project on a topic related to the course.



**NURS 1451    NURSING CARE OF THE ADULT  
AND THE ELDERLY**

**8 CREDITS**

**120 HOURS**

*Pre-requirements: NURS 1401, NURS 1411*

The student acquires knowledge about the concepts of health-disease continuum, holism, homeostasis. It studies the different factors that influence the health of the individual, in addition, primary, secondary, and tertiary prevention. In this course the student intervenes with those individuals classified according to the stage of the life process in which they are as adults and elderly, both in health and illness. The factors that affect the human being through the stages of the life cycle and attention to these aspects that may interfere with the health of the individual are studied. In this course, the body's defenses and implications for nursing intervention and the body's responses to homeostatic imbalances are studied. It also emphasizes the nursing care of the individual who is going to undergo a surgical process and the role of the practical nurse in the stages of the process. The student will be exposed to the knowledge of individuals with diseases of the digestive system, skin, nervous system, musculoskeletal, urinary, reproductive, and ear, nose, and throat conditions. Nursing care for individuals with these conditions will be discussed. This course has an additional 30 hours of outside work. The student will carry out a case study of a topic related to the course.

**NURS 1461    VENIPUNCTURE    SKILLS  
IN NURSING**

**3 CREDITS**

**60 HOURS**

This course is designed to offer the student the concepts related to anatomy and physiology, the components of the blood, the homeostasis process, and the different blood groups, as well as the history, responsibilities, legal aspects, and the safety measures used in the practice of venipuncture and phlebotomy. The purpose of the course is to offer the student the necessary knowledge to be able to carry out venipuncture of the patient efficiently by teaching the skills and procedures related to the preparation of materials for the extraction of laboratory specimens and the taking of samples of blood that require special protocol, handling, and confidentiality in situations such as forensic specimens, toxicology, and alcohol testing. In the course all the basic concepts necessary in patient/client care are grouped, including the ethical and legal aspect. Theoretical knowledge is also taught that will be validated with the practice of skills in the laboratory. The student acquires the necessary knowledge to perform all the venipuncture and phlebotomy functions authorized by law for the category of practical nurse. This course has an additional 15 hours of outside work. The student will carry out a study assignment on a topic related to the course. The student will work this in the additional hours of external work that this course contains.

**NURS 1471    BASIC PRINCIPLES OF  
ELECTROCARDIOGRAPHY**

**1 CREDIT**

**30 HOURS**

This course is designed to offer the student the concepts related to This course has the purpose that the student knows the electrical and mechanical events in the cardiovascular system, its relationship with the nervous system, in addition to knowing, analyzing, and identifying the various records electrocardiographic; approach the various normal and abnormal electrocardiographic principles. Its purpose is that the student can learn to identify and analyze

the various arrhythmias that affect the cardiovascular system in a theoretical phase simultaneous to the laboratory phase with demonstrations of electrocardiographic tracings. In their role as Practical Nurses, the knowledge, identification, and interpretation of these arrhythmias is important. This course has 7.5 additional hours of outside work. The student will carry out the activities assigned in the External Work Component.

<b>NURS 1481</b>	<b>PALLIATIVE CARE AND MANAGEMENT OF GERIATRIC PATIENT</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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This course is designed to offer the student. This course introduces Practical Nursing care with elderly patients and skills related to the elderly in different settings, such as hospitals and long-term care institutions. This course emphasizes the physiological, psychosocial, and cognitive changes in the elderly. The most common health problems and chronic conditions in old age and theories associated with old age are identified. The purpose of the course is to offer the student the necessary knowledge to be able to carry out venipuncture of the patient efficiently by teaching the skills and procedures related to the preparation of materials for the extraction of laboratory specimens and the taking of samples of blood that require special protocol, handling, and confidentiality in situations such as forensic specimens, toxicology, and alcohol testing. In it, all the basic concepts necessary in the care of the patient / client are grouped, including the ethical and legal aspect. You are taught theoretical knowledge that will be validated with the practice of skills in the laboratory. This course has 7.5 additional hours of outside work. The student will carry out a study assignment on a topic related to the course. The student will work this in the additional hours of external work that this course contains.

<b>NURS 1491</b>	<b>PRINCIPLES OF MENTAL HEALTH</b>	<b>4 CREDITS</b>	<b>60 HOURS</b>
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*Pre-requirements: NURS 1401, NURS 1411*

This course is designed to prepare practical nurses to intervene with mental health individuals. The following concepts will be studied: mental health evaluation, real situation of mental disorders in Puerto Rico, the mental health code, personality development, emphasis on the prevention and control of mental illnesses. Students will have the opportunity to apply these mental health concepts in hospital settings and in the community. This course has an additional 15 hours of outside work.

<b>NURS 1501</b>	<b>MEDICINE PRACTICE</b>	<b>2 CREDITS</b>	<b>90 HOURS</b>
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*Pre-requirements: All previous courses*

In this clinical experience, the student applies the knowledge acquired in the pre-clinical phase, related to nursing care for clients with different conditions. Through the teacher's supervision, he performs tasks that allow him to develop the necessary skills to offer quality care. Identify problems and develop a care plan that allows you to meet the needs of the assigned client.

## 90 HOURS

Through this practice, the student offers nursing care to the Pre-operative and Post-operative patient. The student can rotate through the operating room and recovery room areas.

## 90 HOURS

Clinical experience where the student, through selected activities, applies knowledge acquired in the management and care of the patient in the emergency room. Identify the patient's problems and meet their needs.

## 90 HOURS

In this unit the student actively participates in the nursing care of children with different health conditions from the newborn stage to puberty.

## 90 HOURS

Through this practice, the student knows the health problems that most affect the community and the health agencies that intervene to maintain a healthy environment. The student is emphasized so that he can serve as a resource to improve the quality of life in the community.

## 90 HOURS

Applies the knowledge acquired in patient care in a work setting where the individual suffers from some type of mental disorder. The student is offered basic concepts of the different mental conditions that can affect the individual at any stage of his life.

## 90 HOURS

Through this practice, the student offers nursing care to the obstetric, and gynecology patient. The student can rotate through the delivery room, antepartum, and newborn and postpartum areas.

**NURS 1604    NURSING PROCESS****3 CREDITS****45 HOURS**

The course introduces the student to the nursing profession. It imparts knowledge on concepts such as: nursing, legal ethical aspects, communication process, information management technology and the teaching-learning process. Emphasizes the application of the different stages of the nursing process, as a work tool, when planning quality care for the client in any health setting. The student will make oral presentations, written assignments, and simulations where the nursing process and the documentation process are applied through the electronic file.

**NURS 1609    MATERNAL -CHILD NURSING    5 CREDITS  
PROCESS****135 HOURS**

*Pre-requirements: BIOL 1603, NURS 1612, NURS 2613*

In this course the student will apply nursing techniques, acquired to provide care to women during the pre-conceptional stage, pregnancy, childbirth, or cesarean section, postpartum in addition to the immediate care of the newborn. You will use the nursing process and information management technology to guide your actions with the pregnant woman and her family. The process of pregnancy, childbirth and the puerperium of women is discussed, in addition to the health care of the healthy newborn and care. They will make presentations and simulated nursing interventions offering care to the mother and the newborn. It requires clinical experience in various settings.

**NURS 1610    PRINCIPLES OF PHARMACOLOGY****4 CREDITS****90 HOURS**

Introduces students to the field of pharmacology and its relationship to customer care. It includes the study of drugs, their action, side effects, and situations and practices. It focuses on the role and responsibility of nursing professionals in the management and administration of medications, use, adult and pediatric doses, and nomenclatures of various agents. The student will demonstrate the dosage, administration, and nursing skills required when preparing medications, using simulation and information management technology. Requires use of the nursing laboratory.

**NURS 1611    FUNDAMENTALS OF NURSING****6 CREDITS****135 HOURS**

*Pre-requirements: BIOL 1601, NURS 1604*

Course designed in a core way, provides the student with principles and basic skills for managing the client framed in health promotion, disease prevention, treatment, rehabilitation, and support in case of death. Health knowledge is provided based on concepts: asepsis, safety, skin integrity, sexuality, spirituality, death and grief, and information management technology, among others. Different evaluation methods will be used such as: course portfolio, presentations and simulated nursing interventions in care directed to a patient or community. It requires the use of the nursing laboratory and could use other scenarios. This course is offered face-to-face and not face-to-face.

**NURS 1612    PATHOPHYSIOLOGY OF THE  
HUMAN BODY**

**3 CREDITS**

**60 HOURS**

*Pre-requirements: BIOL 1601, BIOL 1602, NURS 1611*

This course presents the physiological processes of the common and recurrent alterations of the human being in its growth and development. The student analyzes anthropological factors of the various pathological processes, as well as the risk factors of the stressful, nutritional, and genetic environment that cause disease. Diagnostic tests, clinical manifestations and treatment methods used in various pathological processes are discussed, in addition to the use of technology in information management. Knowledge will be applied through course portfolio, presentations, and simulated nursing interventions in patient-directed care. It requires the use of the nursing laboratory and could use other scenarios.

**NURS 2501    INTRODUCTION TO THE NURSING  
PROFESSION**

**3 CREDITS**

**45 HOURS**

In this course the student will explore the basic principles and concepts of the nursing profession. You will analyze the historical evolution and contribution of several prominent theorists in the profession. It will examine the different dimensions and roles of nursing care today, taking into consideration the legal aspects that govern the profession. Likewise, they will analyze the concepts of health promotion and maintenance and the importance of the nursing role in health information systems. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**NURS 2531    NURSING ROLE IN HISTORY AND  
PHYSICAL HEALTH EXAM**

**3 CREDITS**

**45 HOURS**

In this course, the student will develop the fundamental skills to carry out a health history and a cerebrospinal fluid physical examination in healthy or sick adult individuals, integrating an aspect of cultural diversity. It will identify the frequent systematic alterations of health and local disorders of the individual to carry out a nursing estimate, differentiating between the subjective and objective data offered by the client against the findings obtained during the physical examination. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**NURS 2541    PHARMACOLOGY**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: NURS 2501, NURS 2561, NURS 2571*

In this course, the student will analyze the basic principles of pharmacology and the ethical-legal aspects in the safe administration of drugs in the Nursing Role professionals. You will examine the historical background, the different classifications and categories of drugs, and the mechanisms of action in the human body through the different systems. Likewise, it will integrate the nursing process for a safe administration of medications. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

*Pre-requirement: MATH 2002, NURS 2501, NURS 2561, NURS 2571*

*Pre-requirement: BIOL 1601, NURS 2501*  
*Concurrent: NURS 2571*

*Pre-requirement: BIOL 1601, NURS 2501*  
*Concurrent: NURS 2561*

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*Pre-requirements: BIOL 1603, NURS 1612, NURS 2613*

<b>NURS 2613</b>	<b>NURSING PROCESS OF THE MENTAL AND EMOTIONAL HEALTH OF THE HUMAN BEING</b>	<b>5 CREDITS</b>	<b>135 HOURS</b>
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<b>NURS 2614</b>	<b>NURSING PROCESS OF ADULTS AND GERIATRICS I</b>	<b>5 CREDITS</b>	<b>135 HOURS</b>
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## Nursing Process of Adults and Geriatric I

<b>NURS 2615</b>	<b>NURSING PROCESS OF ADULTS AND GERIATRIC II</b>	<b>5 CREDITS</b>	<b>135 HOURS</b>
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In this course the student continues to acquire knowledge about the pathological problems of adults and the elderly. It focuses on the care of the individual with neoplasia, gastrointestinal, neurological, integumentary, urinary, reproductive, musculoskeletal disorders, in addition to diseases of the eyes, ears, nose and throat. The student will use the nursing process using

information management technology to guide assistance to the individual with altered human needs. The student will demonstrate with oral and written works and interventions simulating the assistance techniques in the patient. It requires clinical experience in various settings.

**NURS 2616    INTEGRATING SEMINAR**

**3 CREDITS**

**45 HOURS**

*Pre-requisite: NURS 2614*

This course helps the student to transition into their role as a professional nurse in the world of work. Knowledge learned from previous courses is integrated so that they can prepare for the bar exam. They acquire the necessary knowledge and skills through simulations of revalidation exam, job interview, resume preparation and search for opportunities to continue university studies. In addition, current changes in the health of the people and in the health systems available for community service and existing and important controversies are discussed. Capstone course to enroll in the last term.

**NURS 3101    NURSING ROLE IN MENTAL HEALTH    4 CREDITS  
AND PSYCHIATRY**

**75 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*

*Concurrent: NURS 3111*

In this course the student will examine the historical evolution, theoretical models and concepts that influence the professional practice of psychiatric nursing. They will analyze the different mental health disorders, risk factors, needs and their treatments. Will determine the changes in behavior and personality of the individual during the different stages of the life cycle. It will integrate the principles of therapeutic communication, legal and spiritual aspects, and the findings of evidence-based practice. This course requires the student to complete an additional 150 hours of outside work. This course is offered face-to-face and not face-to-face.

**NURS 3111    NURSING ROLE IN MENTAL HEALTH    2 CREDITS  
AND PSYCHIATRY: PRACTICE**

**90 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*

*Concurrent: NURS 3101*

In this course the student will demonstrate cognitive, affective, and psychomotor skills and attitudes that allow them to offer direct nursing care safely and effectively to individuals, families and groups at risk of developing mental health disorders and will examine risk factors, needs and treatments by intervening with the population suffering from mental health disorders. In addition, it will integrate the nursing process, therapeutic communication skills, ethical, cultural and leadership aspects when offering nursing care to the population suffering from mental health disorders in various health settings. This course consists of 90 hours of practice.



**NURS 3120 NURSING CARE ROLE  
OF ADULT AND OLD I**

**5 CREDITS**

**90 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*  
*Concurrent: NURS 3131*

In this course, the student focuses on the nursing care and collaborative management of the adult and elderly individual with health problems which prevent their total independence in the management and fulfillment of their basic needs. Emphasis is placed on caring for the client experiencing surgery, cancer, HIV / AIDS, fluid and electrolyte imbalance, metabolic imbalance, and Ph; cardiovascular, respiratory, and endocrine problems. This course has an additional 180 hours of outside work. The student will carry out a special work on a topic related to the course.

**NURS 3131 NURSING CARE ROLE IN ADULTS  
AND THE ELDERLY I: PRACTICE**

**2 CREDITS**

**90 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*  
*Concurrent: NURS 3120*

In this course, the student develops and applies the skills and competencies necessary to carry out a holistic and effective nursing care aimed at the adult and elderly client with health disorders. Emphasis is placed on the application and evaluation of skills related to metabolic and endocrine, cardio-respiratory health problems and disorders related to the perioperative process. This course consists of 90 hours of practice.

**NURS 3141 NURSING CARE ROLE IN ADULTS  
AND THE ELDERLY II**

**5 CREDITS**

**90 HOURS**

*Pre-requirement: NURS 3120, NURS 3131*  
*Concurrent: NURS 3150*

In this course, the student focuses on the nursing care and collaborative management of the adult and elderly individual with health problems which prevent their total independence in the management and fulfillment of their basic needs. Emphasis is placed on the care of the client who experiences integumentary alterations and burns, shock and trauma, musculoskeletal, renal, gastrointestinal, neurological, sensory-perceptual, and reproductive problems. This course requires the student to complete an additional 180 hours of outside work.

**NURS 3150 NURSING CARE ROLE IN ADULTS  
AND THE ELDERLY II: PRACTICE**

**2 CREDITS**

**90 HOURS**

*Pre-requirement: NURS 3120, NURS 3131*  
*Concurrent: NURS 3141*

In this course, the student develops and applies the skills and competencies necessary to carry out a holistic and effective nursing care aimed at the adult and elderly client with health disorders. Emphasis is placed on the application and evaluation of skills related to neurological, hematological, gastrointestinal, skeletal muscle and integumentary health problems, in addition to the management of the client in shock and trauma. The course consists of 90 hours of clinical practice.

**NURS 3160    NURSING CARE ROLE  
                  IN MATERNITY CARE**

**4 CREDITS**

**75 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*

*Concurrent: NURS 3170*

The purpose of this course is to analyze the characteristics, needs and problems of the family during the cycle of pregnancy, birth, and adaptation to extrauterine life. Emphasis on the factors involved in human sexuality, the male and female reproductive system, and the growth and development process. They will apply the nursing process to the woman and family in each of the stages of the cycle of pregnancy, birth, and adaptation to extrauterine life. This course has an additional 150 hours of outside work.

**NURS 3170    NURSING CARE ROLE  
                  IN MATERNITY CARE: PRACTICE**

**2 CREDITS**

**90 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*

*Concurrent: NURS 3160*

In this course the student will assess the Nursing Role in maternity care as a fundamental part of health services for the population of pregnant women and newborns. Demonstrate basic skills and attitudes necessary to provide direct care to pregnant women and infants safely and effectively. It will integrate the nursing process, therapeutic communication skills, cultural aspects and leadership when offering nursing care to the pregnant woman, the newborn and their family in various health settings.

**NURS 3180    NURSING ROLE IN  
                  PEDIATRIC CARE**

**4 CREDITS**

**75 HOURS**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571*

*Concurrent: NURS 3190*

In this course the student will analyze the different stages of growth and development of the healthy child and adolescent, with special needs and health disorders. They will argue about the importance of the role of family and culture in child and adolescent care. It will examine the legal ethical aspects and the regulations that govern the practice of nursing to offer safe and effective care to children and adolescents. Integrate the evidence-based nursing process safely and effectively when intervening with children and adolescents with health disorders. This course has an additional 120 hours of outside work. The student will carry out a special work on a topic related to the course.

**NURS 3190    NURSING ROLE IN PEDIATRIC CARE:    2 CREDITS                      90 HOURS:  
PRACTICE**

*Pre-requirement: NURS 2501, NURS 2531, NURS 2541, NURS 2551, NURS 2561, NURS 2571  
Concurrent: NURS 3180*

In this course the student will demonstrate the skills and attitudes necessary to offer direct care to children and adolescents with health disorders in a safe and effective way. It will integrate the nursing process, therapeutic communication skills, ethical, cultural and leadership aspects when offering nursing care to children, adolescents, and their families in various health settings. You will apply the nursing process in the promotion, restoration and maintenance of health and disease prevention according to the stage of growth and development. This course consists of 90 hours of practice.

**NURS 3503    NURSING THEORIES                                      3 CREDITS                      45 HOURS  
IN HEALTH PROMOTION \***

This course introduces the student to theories in nursing. The evolution of theories is discussed, emphasizing assumptions, sources, and logical reasoning; in addition to its development and organization process to predict, establish and examine the phenomena that make up the practice of nursing. The main exponents of nursing theories are known, including their models and concepts. An educational talk will be applied with theorizing concepts, to improve customer care. This course is offered face-to-face and not face-to-face.

**NURS 3504    ESTIMATED HEALTH                                      4 CREDITS                      90 HOURS  
FOR PREVENTION \***

This course initiates the student in the development of skills of interviewing clients, taking a nursing history and physical examination, as well as in the theoretical knowledge to interpret the clinical situations and make decisions about the care and prevention of diseases. Factors that promote man's self-realization from infancy to aging are analyzed to develop nursing skills in health promotion. A health history and physical estimate will be made. This course is offered face-to-face and not face-to-face. It requires the use of a face-to-face nursing laboratory.

**NURS 3505    PRINCIPLES OF INVESTIGATION                      3 CREDITS                      60 HOURS  
IN HEALTH AND NURSING \***

*Pre-requirements: NURS 3503, NURS 3504, STAT 3103*

This course offers the student the opportunity to assess the changes in health practice that arise from research, introducing the evidence base into practice. Different statistical designs and analyzes that the researcher can use when conducting a study are described. Nursing research that promotes knowledge and practice of the discipline will be analyzed by carrying out a research project at the end of the course, focusing on the ethical considerations of the patient and the researcher. This course is offered face-to-face and not face-to-face. It requires the use of a face-to-face nursing laboratory.

**NURS 4010    NURSING ROLE IN HEALTH  
INFORMATION SYSTEMS**

**3 CREDITS**

**45 HOURS**

In this course, the student will examine the Nursing Role in the integration of competences and skills of health information systems in the face of the adoption of new technologies. Assess the main issues related to information in nursing, ethical and legal controversies, the quality, and safety of the patient. Also, they will analyze the impact of technology on the use of the electronic medical record and its integration into health scenarios. Likewise, they will argue about the evolution of technology and the impact of information technology in the future of nursing. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**NURS 4030    NURSING ROLE IN NUTRITION**

**3 CREDITS**

**45 HOURS**

In this course the student will be able to analyze the role of the nursing professional in the estimation, analysis, and interventions in the care of nutritional needs in all stages of the life cycle. Emphasis is placed on the discussion of essential nutrients and the importance of the food pyramid for the maintenance of nutritional health. Likewise, they will analyze the influence of food on weight control, the most common health disorders, and pathologies. This course has an additional 90 hours of outside work.

**NURS 4040    CULTURAL DIVERSITY IN THE  
NURSING PROFESSION**

**3 CREDITS**

**45 HOURS**

In this course the student will be able to examine the influence of cultural diversity in nursing practice with the client, individuals, populations and communities. You will analyze the impact of cultural diversity, beliefs, values and their influence on health care and nursing practice. You will explore your own cultural beliefs related to health care, client behaviors, cultural perspectives, and cross-cultural communication barriers. This course requires the student to complete an additional 90 hours of outside work.

**NURS 4050    NURSING ROLE IN PRACTICE  
BASED ON EVIDENCE: INVESTIGATION PROCESS**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: STAT 3103*

In this course, students will be able to assess the historical evolution of evidence-based research and practice as a role in the nursing profession. Analyze the phases of the research process and the ethical-legal aspects to use the research findings in clinical practice. They will discuss the characteristics of quantitative and qualitative research and analyze the results of research articles and their impact on the nursing profession. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

<b>NURS 4060</b>	<b>NURSING CARE ROLE IN FAMILY AND COMMUNITY</b>	<b>4 CREDITS</b>	<b>60 HOURS</b>
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*Pre-requirement: NURS 4010, NURS 4030, NURS 4090*  
*Concurrent: NURS 4070*

The student will apply theoretical and empirical knowledge in the use of the nursing process in populations and community settings to promote, maintain and restore health. The diverse roles and settings of the community and public health nursing professional are examined in the evaluation, applying research skills, effective communication, and meeting the health needs of populations and communities. This course has an additional 120 hours of outside work.

<b>NURS 4070</b>	<b>NURSING CARE ROLE IN FAMILY AND COMMUNITY: PRACTICE</b>	<b>2 CREDITS</b>	<b>90 HOURS</b>
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*Pre-requirement: NURS 4010, NURS 4030, NURS 4090*  
*Concurrent: NURS 4060*

The student will exercise theoretical and empirical knowledge in the development of educational care plans and actions to promote, maintain and restore health in populations and communities. It will apply the roles of the community and public health nursing professional in the different assessment scenarios, applying research skills, effective communication and meeting the health needs of populations and communities. This course consists of 90 hours of practice.

<b>NURS 4080</b>	<b>NURSING SEMINAR</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requirement: NURS 3140, NURS 3150, NURS 3160, NURS 3170, NURS 3180, NURS 3190,  
NURS 4010, NURS 4030, NURS 4040, NURS 4050, NURS 4090*

This course provides the student with the strategies and content introductory to the nursing exam Puerto Rico. The course is designed using the different categories needs of the client: safe and effective care environment, promotion, and maintenance of health, psychosocial integrity, and physiological integrity to offer nursing care to diverse populations and health settings. Likewise, the student will apply prior scientific knowledge of the different nursing roles with a focus on the most common health disorders and disorders in the various specialty areas of the profession: medicine and surgery, mental health and psychiatry, maternity, pediatrics, research, community, and leadership in nursing. This course has an additional 90 hours of outside work.

<b>NURS 4090</b>	<b>NURSING ROLE IN ADMINISTRATION AND LEADERSHIP: SEMINAR</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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In this course the student will be able to analyze the basic foundations of leadership and management in health services. Emphasis is placed on the application of advanced communication skills in collaboration with the multidisciplinary team. The different types of leadership, the characteristics of a leader and organizational changes to perform better teamwork will be discussed. They will also evaluate leadership theories and models to promote safe and

effective work environments. Through the seminar they will be able to apply the steps of the problem-solving method to deal with complex issues within health organizations. This course has an additional 90 hours of outside work. The student will carry out a special work on a topic related to the course.

**NURS 4100    PRACTICUM: ADMINISTRATION AND                    3 CREDITS            135 HOURS**  
**NURSING LEADERSHIP -**  
**CLINICAL EXPERIENCE**

*Pre-requirement: NURS 3140, NURS 3150, NURS 3160, NURS 3170, NURS 3180, NURS 3190, NURS 4010, NURS 4050, NURS 4090, NURS 4090*

*Concurrent: NURS 4080*

In the Practicum clinical experience course the practitioner will have the opportunity to apply and develop the administrative, leadership and supervisory skills discussed in the theoretical course. The student will use his leadership alternately with other students to coordinate and monitor student performance in practice. In addition, he will be involved in administrative matters related to nursing services and will apply a method of problem solving and research to optimize the quality of nursing services. At the same time, it will apply the competences in pharmacology and will offer the care to the assigned clients; in addition, it will fulfill the functions of the clinical unit and the tasks for academic purposes. In the same way, he will assume ethical-legal responsibility and humanistic and Christian commitment during his performance. This practice will be offered concurrent with the theoretical course.

**NURS 4113    NURSING PROCESS    4 CREDITS            90 HOURS**  
**WITH FAMILIES AND COMMUNITY \***

*Pre-requirements: NURS 3503, NURS 3504, NURS 3505, STAT 3103*

This course provides the student the opportunity to examine environmental stressors that alter the well-being of family and groups in the community. The student is directed to visualize the family and the community as responsible agents in their health practices. Using research knowledge is deepened, and principles applied for promotion, restoration of health, and prevention of disease in individuals, families, and community groups. An estimate of the needs of a population is made. This course is offered face-to-face and not face-to-face. It requires practice clinical in various settings.

**NURS 4114    THEORY AND PRACTICE IN THE                    5 CREDITS            135 HOURS**  
**ADMINISTRATION OF NURSING SERVICES\***

*Pre-requirements: NURS 3503, NURS 3504, NURS 3505, NURS 4113, STAT 3103*

This course provides the opportunity to synthesize the knowledge acquired to promote the well-being of groups of individuals in various health settings. The role of the leader is valued and exhibited in promoting changes that improve nursing practice using the results of scientific research. Different leadership roles, interpersonal relationship problems, basic knowledge of the personnel evaluation process, and patterns of task assignment in the hospital environment are analyzed. Analysis of situations is carried out to apply the role of leader. This “Capstone” course is offered face-to-face and not face-to-face. It requires clinical practice in various settings.

**NURS 5110    NURSING THEORIES AND MODELS    2 CREDITS    30 HOURS**

In this course the student can analyze the different nursing theories that guide the practice of the profession. The student develops, relates, and contrasts the assumptions of the different nursing theories. He (she) selects a theory and develops an estimation instrument to apply to a client with a health problem. Their role as a clinical specialist is valued when discussing the application of the selected theory. This course is offered in face-to-face and distance mode.

**NURS 5111    ADVANCED RESEARCH PROPOSAL    3 CREDITS    45 HOURS  
IN NURSING**

*Pre-requirements: QUME 5103*

This course leads the student to value research as an essential need in nursing practice. Through the strategies of the course and using the scientific method, the student will master the necessary steps for the development of a nursing investigation. The student will develop a research problem with an investigative design. This will apply it to a population selected by the student and will carry out its research study which will be presented. This course is offered in face-to-face and distance mode.

**NURS 5112    ADVANCED RESEARCH PROJECT    3 CREDITS    45 HOURS  
IN NURSING**

*Pre-requirements: NURS 5111*

The research project is a requirement of the Master of Science in Nursing Program, as it offers the student an opportunity to develop the necessary skills in the art of research. Through the course, competencies are generated that are later incorporated into the daily practice of advanced nursing. The student develops through the practical experiences of the course, a proposal and application, to present it orally and in written form with the help of a committee of experts who will help in the process. This course is offered in face-to-face and distance mode.

**NURS 6141    ADVANCED THEMATIC SEMINAR    4 CREDITS    90 HOURS  
ADULTS AND THE ELDERLY I**

*Pre-requirements: NURS 6143, PHAR 6150, PHEX 6144*

The course integrates the student in the knowledge and skills to intervene with patients and families with health disorders, in the advanced age stage. The use of critical thinking is promoted through the nursing process, analyzing the health problems that affect this population. Using different teaching techniques, concepts, theories, and research related to the health conditions of old age are discussed. A synthesis of the courses of physical estimation, pathophysiology and advanced pharmacology is applied during clinical practice. This course is offered in face-to-face and distance mode.

<b>NURS 6142</b>	<b>ADVANCED THEMATIC SEMINAR ADULTS AND THE ELDERLY II</b>	<b>4 CREDITS</b>	<b>90 HOURS</b>
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*Pre-requirements: NURS 6141*

The course provides the knowledge and skills for intervention with patients and families with health disorders, during the adult stage. Provides analysis of the various health problems, trends and indicators that define health status. Emphasis is placed on research about health conditions that affect individuals, applying concepts and different theories. The student makes a synthesis of the knowledge acquired in physiopathology, pharmacology, and physical estimation, applying critical thinking through the nursing process to promote and restore health in a clinical practice. This course is offered in face-to-face and distance mode.

<b>NURS 6143</b>	<b>ADVANCED PATHOPHYSIOLOGY</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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This course provides the student with knowledge of pathophysiology that will enable him to promote and restore the health of individuals and families both in health agencies and in the community. Changes of pathophysiology in physiological processes, etiology, clinical manifestations, and mechanisms of restoring physiological homeostasis. General education, pathology and related sciences are integrated for the use of critical thinking in the design of strategies to restore health. The student will use the knowledge acquired to assess an evidence-based nursing practice. This course is offered in face-to-face and distance mode.

<b>NURS 6146</b>	<b>TEACHING AND LEARNING METHODS IN NURSING</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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This course studies the different teaching and learning methods in nursing. The different concepts, the elements that make up effective teaching and the application of educational theories that underpin the teaching process through research are analyzed. In addition, the student prepares to carry out the planning, teaching plan, evaluation, and its application in the teaching-learning process. This course is offered in face-to-face and distance mode.

<b>NURS 6149</b>	<b>MANAGEMENT PROCESSES IN NURSING SERVICES</b>	<b>4 CREDITS</b>	<b>60 HOURS</b>
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*Pre-requirements: MAHE 6140*

In this course the student will analyze theories of management, administration, leadership, human behavior, personnel pattern, budget and its application to administration and management in the Nursing Department. The different methods of problem solving, decision making, planning, organization, direction, and evaluation of the results obtained are discussed. This course is offered in face-to-face and distance mode.



**NURS 6150    MANAGEMENT PRACTICE IN  
NURSING SERVICES**

**2 CREDITS**

**90 HOURS**

*Pre-requirements: NURS 6149*

The course prepares the apprentice to apply the knowledge and skills necessary to lead and manage nursing services. Uses the administrative process as a working tool to apply the concepts of leadership, management, problem solving and decision-making, planning, organization, human resources, direction, control, and professional and social trends in various clinical settings. These transition experiences provide a supportive and managerial role in nursing. This practice of managerial role offers opportunities to establish strategies and develop a successful role in a work environment where there are constant changes in health services. This course is offered in face-to-face and distance mode.

**NURS 6151    CURRICULUM DEVELOPMENT IN  
NURSING EDUCATION**

**3 CREDITS**

**45 HOURS**

Analysis of the basic concepts about the curriculum and curricular design in nursing. The philosophical perspectives, goals, and objectives underlying curriculum development are presented. Discussion of the structural components of the curriculum; content, methods, teaching-learning strategies, resources, and evaluation strategies. Analysis of the future of curricular development in nursing. This course is offered in face-to-face and distance mode.

**NURS 6152    EDUCATIONAL PROCESSES IN  
TEACHING IN NURSING**

**4 CREDITS**

**60 HOURS**

*Pre-requirements: NURS 6151*

Analysis of the educational process in nursing. Discussion of the role of the faculty in higher education, their rights and responsibilities and the ethical-legal aspects that govern the practice of education. The theoretical foundations of the teaching-learning process, strategies to promote critical thinking and active learning to achieve the learning goals are presented. Emphasis on teaching-learning processes, the use of media and multimedia and information resources. Discussion of the evaluation process and evaluation strategies to measure learning outcomes. This course is offered in face-to-face and distance mode.

**NURS 6153    EDUCATIONAL PRACTICE IN  
TEACHING IN NURSING**

**2 CREDITS**

**90 HOURS**

*Pre-requirements: NURS 6152*

This course studies and practices evaluation methods, strategies, models, concepts, principles, and techniques in the classroom and in the clinical setting in higher education in nursing. The apprentice will have the opportunity to design and implement innovative teaching strategies to foster student learning, in the classroom and in the laboratory. Skills will be applied to design and evaluate nursing teaching curricula. This course is offered in face-to-face and distance mode.

**OPTI 2000      EYE ANATOMY AND PHYSIOLOGY                      3 CREDITS    45 HOURS**

*Pre-requirement: BIOL 1009*

In this course the study of the descriptive and functional anatomy of the visual apparatus will be carried out. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2010      PRINCIPLES OF PHYSICAL OPTICS                      3 CREDITS            45 HOURS**

*Pre - requisite: MATH 2010, PHSC 2000*

The fundamental laws and concepts of Physics related to the field of Optics are studied. The theories of light, its nature, physical characteristics, and its propagation are discussed. Concepts about types of lenses and the principles of curved and flat surfaces of mirrors and lenses. Important optical phenomena refraction, reflection, scattering, polarization, prisms, and others are studied in detail. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2020      OPHTHALMIC MATERIALS I                      3 CREDITS            45 HOURS**

*Pre - requisite: PHSC 2000*

This course is an introduction to the didactic and laboratory concepts involved in the identification, location, and fabrication of prescription ophthalmic lenses for optical use. Emphasis is placed on the physical and optical characteristics of the design and manufacture of eyeglasses, including materials, refractive indices, spherical and cylindrical powers. In addition, prescription transposition, optical crossovers, ophthalmic standards, diopter power formula, focal lengths, total lens power, relationship between radius of curvature and refractive index, and lens manufacturing equation will be covered. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component. This course is offered face-to-face and not face-to-face.

**OPTI 2020L    OPHTHALMIC MATERIALS I:                      1 CREDIT            30 HOURS**  
**LABORATORY**

*Pre-requirement: PHSC 2000*

This laboratory partly includes the practice of making ophthalmic lenses and the knowledge of the equipment required for making them and the functions of an optician in a laboratory, including lens manufacturing, completion, handling of machinery, and maintenance.

**OPTI 2130      CONTACT LENSES I                      3 CREDITS            45 HOURS**

*Pre - requisite: OPTI 2000*

Study of the invention and history of contact lenses. Classes of contact lenses are discussed according to material and use. The origins, people who started in this field and how they have evolved over time. Materials used, design of contact lenses relating it to the anatomy and physiology of the cornea and lacrimal system. Advanced techniques for fitting, designing, and caring for soft, rigid, bifocal, therapeutic, cosmetic, and rigid gas permeable contact lenses are highlighted. Adjustment techniques are applied, power calculations, observation techniques with

specialized instruments and other topics that will be practiced in the laboratory. Includes contact lens verification practices. Commercial contact lens care products, complications from misuse are discussed. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the external component.

**OPTI 2130L    CONTACT LENSES I: LABORATORY    2 CREDITS    60 HOURS**

*Pre - requisite: OPTI 2000*

This course includes the development of practical skills for the adaptation, handling and maintenance of hydrophilic contact lenses of various types. This course has an additional 120 hours of outside work. The student will carry out tasks related to the course contents in this component.

**OPTI 2040    OPTIMIC MATERIALS II    2 CREDITS    30 HOURS**

*Pre - requisite: OPTI 2020, OPTI 2020L*

It is considered the assembly of lower and higher power lenses, single vision lenses, multifocal lenses, safety glasses and special lenses. Proficiency is demonstrated in the inspection, handling and identification of various materials for the manufacture of lenses. You learn the importance of the position, tilt and turns of the lens in the frame. Emphasis is placed on the proper handling and maintenance of related optical equipment, machinery, instruments, and devices. Importance is given to lens finishing and polishing, as well as treatments, filters, and tints. Frame identification, measurement accuracy, and pattern selection are emphasized, all following recipe specifications. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2040L    OPHTHALMIC MATERIALS II:  
LABORATORY    2 CREDITS    60 HOURS**

*Pre - REQUIREMENTS: OPTI 2020, OPTI 2020L*

The practice in manufacturing ophthalmic lenses of all kinds continues. The use of special materials, multifocal lenses, special lenses, and polishing and finishing techniques are highlighted. Includes lens inspection practices, optical calculations, frame repair, and use and maintenance of optical equipment. Special emphasis is placed on precision and accuracy in following recipe instructions and specifications. In addition, safety and careful handling of optical laboratory materials, equipment, instrumentation, and machinery are emphasized. This course has an additional 120 hours of outside work.

**OPTI 2140    CONTACT LENSES II    1 CREDIT    15 HOURS**

*Pre - requisite: OPTI 2130. OPTI 2130L*

The practice in manufacturing ophthalmic lenses continues. The use of special materials, bifocal lenses and finishing techniques are highlighted. Includes lens inspection practices, optical calculations, frame repair, and use and maintenance of optical equipment. Special emphasis is placed on precision and accuracy in following recipe instructions and specifications. In addition, safety and careful handling of optical laboratory materials, equipment, instrumentation, and machinery are emphasized. This course has an additional 30 hours of outside work.

**OPTI 2140L    CONTACT LENSES II: LABORATORY    2 CREDITS    60 HOURS**

*Pre-requirement: OPTI 2130, OPTI 2130L*

This course continues to deepen the study of contact lenses. Various types of specialized lenses are studied in detail, starting with rigid and semi-rigid with a description of adjustment techniques, polishing and alterations. The use of therapeutic lenses to correct various conditions is also described. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2060    VISION ANOMALIES    3 CREDITS    45 HOURS**

*Pre-requirement: OPTI 2000*

This course provides the student with the study of abnormalities of the eye, which cause vision problems including problems with the cornea, iris, lens, retina, optic nerve, and others. The manifestation of disorders that alter the function of the eye is studied. The student is prepared to have knowledge of conditions such as cataracts, conjunctivitis, strabismus, pterygium, and the most common diseases that affect our population. The student will thus be prepared to guide and inform the patient in a general way about these conditions and how they affect visual health. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2150    PRE - SIZING INTERNSHIP    2 CREDITS    60 HOURS**

*Pre - requisite: OPTI 2020, OPTI 2020L, OPTI 2040, OPTI 2040L*

This course provides the student with the opportunity to carry out a laboratory for the integration of practical skills in the institution's laboratory in order to refine all the necessary competencies in the clinical area in order to be better prepared for this phase and for the world of work. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2110    PRESCRIPTION DISPATCH I    3 CREDITS    45 HOURS**

*Pre-requirements: OPTI 2040, OPTI 2040L, OPTI 2130, OPTI 2130L, OPTI 2140, OPTI 2140L*

Principles of professional optics. The types and components of eyeglass frames, facial measurements, and alignment are studied. Included are the topics of delivery, adaptation, adjustment, maintenance and repair of eyeglass frames, single vision, and multifocal lenses, handling and maintenance of contact lenses, recommendation of treatments and optical accessories and development of the relationship (dispenser) - patient. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work component.

**OPTI 2110L    PRESCRIPTION DISPATCH I:  
LABORATORY    2 CREDITS    60 HOURS**

*Pre-requirements: OPTI 2040, OPTI 2040L, OPTI 2140, OPTI 2140L*

In this course the student will be exposed to laboratory experiences related to the principles of professional optics. It will be practiced through exercises with the types and components of the

frames of glasses, facial measurements, and alignment. The delivery, adaptation, adjustment, maintenance and repair of eyeglass frames, single vision, and multifocal lenses, handling and maintenance of contact lenses, recommendation of treatments and optical accessories and development of the relationship (dispenser) - patient will be practiced. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2100      LAWS REGULATING THE OPTIC                      2 CREDITS                      30 HOURS**  
**PRACTICE**

In this course the laws that regulate the profession of licensed opticians are discussed and the difference of practice in the field of optics among other visual health professionals is established. Ethical issues related to the practice of optics, relationships with patients, with colleagues, with other related professionals and with the community in general are emphasized. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2160      PRESCRIPTION DISPATCH II                      3 CREDITS                      45 HOURS**

*Pre-requirement: OPTI 2110, OPTI 2110L*

The various types of frames and their components are studied. Also, factors that affect an ophthalmic prescription, such as distance to the vertex, lens turns and tilt, and magnification. Also, the design and application of multifocal segments is learned. Emphasis is placed on precision in taking measurements and heights. Dedication to service and professionalism in prescribing are emphasized, so that the patient is satisfied. Integration of termination operations, basic adjustment techniques, interpretation of complex prescriptions are learned. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**OPTI 2120      CLINICAL PRACTICE                      9 CREDITS                      405 HOURS**

*Pre-requirement: All previous courses*

Supervised clinical practice in a commercial optical office by a licensed ophthalmologist or optometrist, preferably with optical laboratory facilities. Integration and execution of techniques and knowledge acquired in previous courses.

**PHAR 1618      PHARMACEUTICAL MATH                      5 CREDITS                      90 HOURS**

The purpose of the course is for the student to master the skills in pharmaceutical mathematics that allows them to assume the role of assisting the pharmacist in the dispensing processes of the different types of prescriptions and medical orders received in different pharmacy settings. It includes basic operations, different measurement systems used in dispensing, dose calculations, solution preparation, reduction and increase of formulas and temperature. The teaching and learning process will be carried out through lectures, teamwork, and interactive exercises. The application of the concepts and skills learned through word problems is required in the laboratory.

**PHAR 1619      PHARMACY AND MARKETING                      4 CREDITS                      60 HOURS**

The purpose of the course is for the student to see the pharmacy from an administrative point of view, feeling empowerment of the business to maintain the clientele and be at the competitive level of the market. The historical background of the pharmacy, the responsibilities and administrative functions, the different types of pharmacies and the functions of the pharmacy technician, operational and administrative aspects of a pharmacy, including purchasing, inventory, merchandise management and marketing are discussed. Provides the student with basic skills in managing a business. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises.

**PHAR 1620      PHARMACEUTICAL LEGISLATION                      3 CREDITS                      45 HOURS**

The purpose of the course is for the student to obtain knowledge, mastery and recognize the scope of the laws and regulations as they are applied in their tasks, functions, and responsibilities. State and federal laws and regulations that govern the practice of pharmacy in Puerto Rico, the Controlled Substances Law, and the Regulations that regulate the Manufacture, Distribution, and Dispensing of drugs, among others, are discussed. The teaching and learning process will be carried out through conferences and socialized discussion.

**PHAR 1621      PHARMACOGNOSIA    4 CREDITS                      60 HOURS**

*Pre-requirement: PHAR 1618*

The purpose of the course is for the student to acquire knowledge of drugs obtained from animal, vegetable, and microorganism sources to exercise and apply the knowledge, skills in their tasks and responsibilities. Crude drugs of natural origin and microorganisms or biotechnology are studied, drugs that are obtained from natural products and that through modifications in the extraction and purification processes are elaborated in laboratories, vitamins, minerals, carbohydrates, alkaloids, glycosides, anti-infectious and biological products, medicinal plants, natural and homeopathic products. The teaching and learning process will be carried out through conferences, socialized discussion, and teamwork. The course requires a laboratory. This course is offered face-to-face and not face-to-face.

**PHAR 1622      DOSAGE    4 CREDITS                      75 HOURS**

*Pre-requirement: PHAR 1618*

The purpose of the course is for the student to acquire basic knowledge related to the doses and routes of administration of drugs. The concepts of doses, routes of administration, dosage forms, drug classification, self-medication, concepts to dispense drugs correctly and precisely so as not to make mistakes, abbreviations that are used in the interpretation of prescriptions, calculations and interactions of the drugs are discussed. medicines. Emphasize the use of books or internet technology when searching for drug information. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises. The course requires a laboratory. This course is offered face-to-face and not face-to-face.

**PHAR 1623    DISPATCH TECHNIQUES****5 CREDITS****105 HOURS***Pre-requirements: PHAR 1618, PHAR 1621, PHAR 1622, PHAR 1624, PHAR 1625*

The purpose of the course is for the student to acquire knowledge and skills in the preparation of different dosage forms and the dispensing of prescriptions. The student becomes familiar with and uses the pharmacy equipment for dispensing compounding prescriptions or extemporaneous preparations. The RX 30 computerized system is also used. The teaching and learning process will be carried out through lectures, socialized discussion, teamwork, and interactive exercises. The course requires a laboratory.

**PHAR 1624    PHARMACOTHERAPY I****5 CREDITS****90 HOURS**

The purpose of the Pharmacotherapy I course is for the student to acquire basic knowledge related to drugs, supplements or products and their pharmacological effect. The human body is studied from the structural and functional point of view and the therapy of medications for the treatment and relief of symptoms in the most common pathological disorders. It includes pharmacokinetics, pharmacodynamics, adverse effects, and drug interactions, among others. Some of the systems discussed are Nervous, Cardiovascular, Hematological Systems, Muscular-Skeletal System, ophthalmic and auditory conditions, and the treatment of Cancer. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises. The course requires a laboratory.

**PHAR 1625    PHARMACOTHERAPY II****5 CREDITS****90 HOURS***Pre-requirement: PHAR 1624*

The purpose of the Pharmacotherapy II course is for the student to acquire basic knowledge related to drugs, supplements or products and their pharmacological effect. The human body is studied from a structural and functional point of view and drug therapy for the treatment and / or relief of symptoms in the most common pathological disorders. It includes pharmacokinetics, pharmacodynamics, adverse effects, and drug interactions, among others. Some of the systems discussed are Respiratory, Digestive, Endocrine, Genito-Urinary and Integumentary Systems. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises. The course requires a laboratory.

**PHAR 2101    PHARMACEUTICAL CHEMISTRY****3 CREDITS****45 HOURS***Pre-requirement: PHAR 1618*

The purpose of the course is for the student to acquire knowledge related to the basic principles of the states of matter; solid, liquid and gaseous and understanding about the composition of drugs and biological and pharmacological processes. The basic concepts about the composition, structure, properties and behavior of matter, the atomic theory, the periodic table, solutions, acids and bases, the theoretical aspects of inorganic and organic chemistry that help to understand the processes of the body are discussed. and substances of biological and pharmaceutical importance.

The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises.

**PHAR 2102    INSTITUTIONAL PHARMACY**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: PHAR 1618*

The purpose of the course is to develop in the student the responsibility, in a precise and concrete way, in the dispensing of medicines, with high quality and safety to the patient within the institutional pharmacy. The procedures that are carried out, the types of hospitals, accreditation processes, minimum quality standards, drug formulations, different systems of dispensing, distribution, and procedures on the handling of different medications. Emphasis on the competencies of the Pharmacy Technician, interpretation of medical orders, dispensing, pharmaceutical calculations, reconciliation of medications including controlled substances. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises.

**PHAR 2103    STERILE PREPARATIONS AND  
                  ASEPTIC TECHNIQUES**

**3 CREDITS**

**45 HOURS**

*Pre-requirements: PHAR 1618, PHAR 2102*

The purpose of the course is for the student to master aseptic techniques to guarantee the quality of the product and patient safety and to train them for the dispensing of sterile parenteral preparations. Emphasis is placed on hand washing techniques, pharmaceutical calculations, references, safety techniques, aseptic techniques in parenteral composition, proper use of equipment, preparation of sterile products, and safe handling of antineoplastic drugs. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises.

**PHAR 2109    INTERNSHIP I**

**14 CREDITS**

**540 HOURS**

*Pre-requirements: PHAR 1618, PHAR 1619, PHAR 1620,*

*PHAR 1621, PHAR 1622, PHAR 1623, PHAR 1624, PHAR 1625, SEMI 1105, SEMI 2507*

The purpose of the course is to integrate, apply and practice the knowledge and skills acquired, during the approved courses in a real work setting. The internship phase is carried out within a community and / or institutional pharmacy, under the direct supervision of a licensed pharmacist duly authorized by the Board of Pharmacy in Puerto Rico and designated as the preceptor pharmacist. The total hours required during Internship I is 540 hours.

**PHAR 2110    INTERNSHIP II**

**14 CREDITS**

**540 HOURS**

*Pre-requirements: PHAR 1618, PHAR 1619, PHAR 1620, PHAR 1621, PHAR 1622, PHAR 1623,  
PHAR 1624, PHAR 1625, PHAR 2109, SEMI 1105, SEMI 2507*

The purpose of the course is to integrate, apply and practice the knowledge and skills acquired, during the approved courses in a real work setting. The internship phase is carried out within a



community and / or institutional pharmacy, under the direct supervision of a licensed pharmacist duly authorized by the Board of Pharmacy in Puerto Rico and designated as the preceptor pharmacist. The total hours required during Internship II is 540 hours.

**PHAR 2112    INTERNSHIP III**

**11 CREDITS**

**500 HOURS**

*Pre-requirements: ENGL 1101, ENGL 1102, PHAR 1618, PHAR 1619, PHAR 1620, PHAR 1621, PHAR 1622, PHAR 1623, PHAR 1624, PHAR 1625, PHAR 2101, PHAR 2102, PHAR 2103, SEMI 1105, SPAN 1101, SPAN 1102*

The purpose of the course is to integrate, apply and practice the knowledge and skills acquired, during the approved courses in a real work setting. The internship phase is carried out within a community and / or institutional pharmacy, under the direct supervision of a licensed pharmacist duly authorized by the Board of Pharmacy in Puerto Rico and designated as the preceptor pharmacist. The total hours required during Internship I is 500 hours.

**PHAR 2113    INTERNSHIP II**

**11 CREDITS**

**500 HOURS**

*Pre-requirements: ENGL 1101, ENGL 1102, PHAR 1618, PHAR 1619, PHAR 1620, PHAR 1621, PHAR 1622, PHAR 1623, PHAR 1624, PHAR 1625, PHAR 2101, PHAR 2102, PHAR 2103, PHAR 2112, SEMI 1105, SEMI 2507, SPAN 1101, SPAN 1102*

The purpose of the course is to integrate, apply and practice the knowledge and skills acquired, during the approved courses in a real work setting. The internship phase is carried out within a community and / or institutional pharmacy, under the direct supervision of a licensed pharmacist duly authorized by the Board of Pharmacy in Puerto Rico and designated as the preceptor pharmacist. The total hours required during Internship II is 500 hours.

**PHAR 6150    ADVANCED PHARMACOLOGY**

**2 CREDITS**

**30 HOURS**

In the course, the actions, and effects of drugs in the different pathological processes are analyzed. The role of the nurse (or specialist in the administration of medication within the multidisciplinary team) is analyzed. The chemical processes of drugs, their therapeutic effects and unwanted effects are analyzed through reading. The student in group discussion deepens their previous knowledge of their nursing interventions related to pharmacotherapy. The student will make oral presentations and case study.

**PHEX 6144    ESTIMATED HEALTH IN  
ADVANCED PRACTICE**

**2 CREDITS**

**60 HOURS**

This course develops history taking and physical examination skills throughout the life cycle. Applies scientific knowledge of anatomy, physiology, pathology to perform physical examination and examination of the client. It uses different findings to establish nursing diagnoses in the problems encountered. To be used as a basis when planning and evaluating care. The student applies a history and an estimation instrument applying a nursing theory. The student will take a practical exam and carry a portfolio of physical exams.

<b>PHSC 2000</b>	<b>INTRODUCTION TO PHYSICS</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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The course is designed to facilitate the learning of the basic concepts and principles of physics that will form the foundation of most science and technology studies. Physics is described as a mathematical science that studies the nature of matter, energy, and the relationships between the two. This course has an additional 90 hours of outside work. This course is offered face-to-face and not face-to-face.

<b>PHSC 2030</b>	<b>ULTRASOUND PHYSICS AND INSTRUMENTATION I</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requirement: MATH 2010*

In this course the fundamentals and concepts related to ultrasound physics are studied, considering the practice of mathematical operations applied to ultrasound. The main content areas of the course include definition and categories of sound, classification of continuous and pulsed wave, as well as the parameters that describe them. It explains how sound propagates, how echoes are produced, their different intensities, and how the sound source is attenuated. The course gives a comprehensive explanation of the basic components of the ultrasound transducer and their functions, going through the ultrasound transducer arrangements used today. Their construction, form of image they produce and their characteristics and capabilities in the different modalities of diagnostic ultrasound are explained. The resolution details concerning the frequency and the anatomy of the sound source are studied.

The course includes ultrasound instrumentation from source formation, electrical signal processing, image processing, and monitor. The course details contrast resolution and temporal resolution. This course has an additional 90 hours of outside work. The student will carry out tasks related to the course in the external work component.

<b>PHSC 2040</b>	<b>ULTRASOUND PHYSICS AND INSTRUMENTATION II</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requirement: PHSC 2030*

This course provides the student with the basic principles of both venous and arterial hemodynamics, as well as the physics of Doppler. The different types of Doppler are studied, each with its advantages and disadvantages. The different components of the spectral image are shown, and the student learns the spectrum analysis. Flow patterns and how each affects flow volume is described. The different artifacts in the diagnostic image are taught, how they are produced and how to improve them to benefit the quality of the ultrasound image. The thermal and mechanical effect is described as part of the biological effects. The intensities and mechanisms by which biological effects are produced are studied. The ALARA principle is emphasized. This course has an additional 90 hours of outside work. The student will perform an assignment related to the course in this component.

**POSC 2013    INTRODUCTION TO  
POLITICAL SCIENCE \***

**3 CREDITS**

**45 HOURS**

The main objective of the course is to study the development of the forms of political association that have existed from ancient times to the present in human groups. It is intended to explain the nature and purpose of the state. The elements that are considered in the development and the constitutional structure of current governments are identified and explained. The course is offered through lectures, data analysis, graphics, newspaper readings and articles, group work, socialized discussion, action research surveys, and critical feedback. \* This course is offered face-to-face and not face-to-face.

**PSCY 1100    PRINCIPLES OF COMMUNITY  
SOCIAL PSYCHOLOGY**

**2 CREDITS**

**30 HOURS**

*Pre-requirements: SPAN 1121, MATH 1101, VETR 1211*

The purpose of this course is to provide the student with an analytical vision about the phenomena of collective groups or communities, based on social and environmental factors, whose purpose is to carry out actions aimed at improving the living conditions of the subjects. The methodology used will allow students to develop their knowledge for the management of the territorial and participatory environment of the community and therefore of society, in the different intervention processes, trying to generate long-term changes in the social systems in which they groups are inserted. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**PSYC 2014    PRINCIPLES OF PSYCHOLOGY**

**3 CREDITS**

**45 HOURS**

The course is an introduction to the basic concepts of the discipline of Psychology and its application to the personal and professional life of the student body. Throughout it, knowledge is offered on the biological bases of human behavior, learning and memory, motivation and emotion, the life cycle of human development, personality development and other topics related to human behavior. Emphasis is placed on scientific research to study and analyze human behavior. This course is offered in face-to-face and non-face-to-face modality. This course is offered face-to-face and not face-to-face.

**QUME 5103    QUANTITATIVE METHODS\***

**3 CREDITS**

**45 HOURS**

Basic course in business statistics; they emphasize specific applications to administrative disciplines. In this course, sampling, probability, dispersion, and distribution methods are studied. In addition, hypothetical decisions, analysis of variances, are tested *chi* square, linear regression, and correlations. Topics of nonlinear regression, multivariate analysis, and exploratory data analysis are introduced. Quality control and administrative decision case studies are assigned and discussed. Knowledge is measured through tests, practice exercises, case analysis, and discussion questions. ‡This course is also offered in a non-face-to-face mode.

**RADI 2000      INTRODUCTION TO RADIOLOGY      2 CREDITS      30 HOURS**

This course describes to the student the field of radiological technology, its origin and development. It explains the roles of the professional and their interaction with patients, the ethical and legal aspects that apply to the discipline. In addition, it introduces the student to medical terminology. Guides the student on the requirements of the practice of the profession and post-graduate studies. The basic knowledge of radiation protection, management and patient care is provided as an introductory method to their clinical practice. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2010      PATIENT CARE AND MANAGEMENT      3 CREDITS      45 HOURS**

This course relates the student to infection control techniques and the principles of asepsis for the management and care of the patient in any clinical setting. In turn, he relates it to the management techniques used with patients admitted to his service for their safety. This course will train the student to take vital signs, identify emergencies and manage them during a radiological intervention. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2020      RADIOGRAPHIC POSITIONING AND      2 CREDITS      30 HOURS**  
**RELATED ANATOMY I**

*Pre-requirements: BIOL 1602, RADI 2000, RADI 2010*

*Concurrent: RADI 2020L*

This course explains to the student the principles, general rules of patient positioning for taking radiographic images and the techniques used to carry out radiological procedures. The subjects that make up the course are thorax, abdomen, pelvis and hip. The student will recognize pathologies related to the radiographed anatomical parts. In the course, students will be offered the topics that will be applied to the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the external work component.

**RADI 2020L      RADIOGRAPHIC POSITIONING AND      1 CREDIT      30 HOURS**  
**RELATED ANATOMY I: LABORATORY**

*Pre-requirements: BIOL 1602, RADI 2000, RADI 2010*

*Concurrent: RADI  
2020*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, protocols and techniques used to perform the procedures will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The subjects that make up the course are thorax, abdomen, pelvis and hip. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in radiographic

images. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2030    KNOWING MODALITIES AND                    2 CREDITS                    30 HOURS**  
**IMAGING EQUIPMENT**

*Pre-requirements: RADI 2000*

The course includes an introduction to diagnostic modalities and x-ray equipment aimed at medical treatment in a radiology department. It includes the basic concepts of the operation of the new modalities used in clinical diagnosis, including Computed Tomography (CT), Arteriography, Bone Densitometry, Magnetic Resonance, Radiotherapy, Nuclear Medicine, Fluoroscopy, Ultrasound and Mammography. The different modalities will be compared in relation to conventional and digital radiology from the point of view of utility, cost, and application. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2040    INTEGRATING SEMINAR                    2 CREDITS                    60 HOURS**

*Pre-requirements: RADI 2000, MEDT 2000*

*Concurrent: RADI 2030*

This course provides the student with the necessary concepts for its execution within clinical practices. The course provides the necessary knowledge about the radiographic equipment and room. In addition, the student will relate the knowledge of the course with the different areas of a radiology department. The student will be introduced to expected clinical simulations in their actual clinical practices. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2050    PRINCIPLES OF RADIOGRAPHIC EXPOSURE   3 CREDITS   45 HOURS**

*Pre-requirements: RADI 2000, PHSC 2010*

*Concurrent: RADI 2060*

This course relates the student to the X-ray machine, its shapes, sizes, the X-ray tube, its scale, the high voltage section, and how all of this is integrated and works. On the other hand, it describes the production of X-rays, their emission and the factors that affect their emission. The course presents the interaction of X-rays with matter, the five concepts that allow this interaction to occur, defines differential absorption, contrast examination and exponential attenuation. Through this course the student will be related to radiographic technique, the emission of X-rays, the factors that affect the quantity and quality of the emission, the production and control of "scatter radiation", the radiographic view. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2060    PRINCIPLES OF RADIOBIOLOGY                    2 CREDITS                    30 HOURS**  
**AND RADIOLOGICAL PROTECTION**

*Pre-requirements: PHSC 2010*

The course describes to the student the fundamental principles that are involved in the interaction of ionized radiation with biological tissues. During this course, the student will understand the short- and long-term effects of radiation on humans and the protection mechanisms to use radiation more safely when performing diagnostic and treatment studies on a patient. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2070      RADIOGRAPHIC POSITIONING AND 2 CREDITS      30 HOURS**  
**RELATED ANATOMY II**

*Pre-requirements: RADI 2020, RADI 2020L*

*Concurrent: RADI 2070L*

This course explains to the student the principles, general rules of patient positioning for taking radiographic images and the techniques used to carry out radiographic procedures. The subjects that make up the course are the entire lower and upper extremities and their joints. The topics have been developed continuously to the corresponding previous course as a requirement. The student will recognize pathologies related to the radiographed anatomical parts. Apply the knowledge of patient evaluation, medical order, radiation protection, exposure factors and radiographic quality. The course will provide students with the topics that will be applied to the corresponding laboratory. The course requires contact hours in the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2070L      RADIOGRAPHIC POSITIONING AND 1 CREDIT      30 HOURS**  
**RELATED ANATOMY II: LABORATORY**

*Pre-requirements: RADI 2020, RADI 2020L Concurrent: RADI 2070*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, protocols and techniques used to perform the procedures will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The subjects that make up the course are lower extremities and upper extremities. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in radiographic images. The course will be developed concurrently with the corresponding theory course. This course has an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2080      CLINICAL INTERNSHIP I      3 CREDITS      135 HOURS**

*Pre-requirements: ANAT 2020, RADI 202, RADI 2020L, RADI 2040*

*Concurrent: RADI 2060, RADI 2070, RADI 2070L*

This course provides the student with the necessary concepts for its execution within clinical practices. The course provides the necessary knowledge about the radiographic equipment and room. The student will relate the knowledge of the course with the different areas of a

radiology department. The student will be introduced to expected clinical simulations in their actual clinical practices.

**RADI 2170    WARRANTY AND RADIOGRAPHIC    2 CREDITS    30 HOURS**  
**QUALITY CONTROL**

*Pre-requirements: RADI 2050*

The course provides the student with the ability to understand everything concerning the production, acquisition, and evaluation of a diagnostic radiographic image. The importance of understanding the factors that affect radiographic quality is emphasized. The student will be taught about digital radiographic equipment and its optimal operation. In addition, the student will have the opportunity to gain knowledge about technical factors, automatic exposure control, digital image characteristics and the different types of artifacts that can affect image quality in a digital radiography. The course offers the knowledge to implement a Quality Assurance Program in a Radiology Department, emphasizing quality control tests that are carried out on equipment related to digital radiology, applications and components related to communication networks within of digital radiology. The student in this course will be trained to understand the importance of ensuring the quality of the radiographic image in the process of obtaining a correct diagnosis. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the external work component. This course is offered face-to-face and not face-to-face.

**RADI 2100    RADIOGRAPHIC POSITIONING    2 CREDITS    30 HOURS**  
**AND RELATED ANATOMY III**

*Pre-requirements: RADI 2070, RADI 2070L*

*Concurrent: RADI 2100L*

This course explains to the student the principles, general rules of patient positioning for taking radiographic images and the techniques used to carry out radiographic procedures. The subjects that make up the course are skull, facial bone and the entire spine. The student will recognize pathologies related to the radiographed anatomical parts. Apply the knowledge of patient evaluation, medical order, radiation protection, exposure factors and radiographic quality. The course will provide students with the topics that will be applied to the corresponding laboratory. The course requires contact hours in the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2100L    RADIOGRAPHIC POSITIONING AND    1 CREDIT    30 HOURS**  
**RELATED ANATOMY III: LABORATORY**

*Pre-requirements: RADI 2070, RADI 2070L Concurrent: RADI 2100*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, protocols and techniques used to perform the procedures will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The subjects that make up the course are skull and spine. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in radiographic images. The course



<b>RADI 2110</b>	<b>CLINICAL INTERNSHIP II</b>	<b>3 CREDITS</b>	<b>135 HOURS</b>
<i>Pre-requirements: RADI 2050, RADI 2060, RADI 2070, RADI 2070L, RADI 2080</i>			
<i>Concurrent: RADI 2170</i>			

<b>RADI 2120</b>	<b>CONTRAST MEDIA</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
<i>Pre-requirements: RADI 2000, RADI 2010, ANAT 2020, MEDT 2000</i>			

<b>RADI 2130</b>	<b>RADIOLOGICAL PATHOLOGY</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
<i>Pre-requirements: ANAT 2020, RADI 2170</i>			
<i>Concurrent: ANAT 2030</i>			

<b>RADI 2140</b>	<b>RADIOGRAPHIC POSITIONING AND RELATED ANATOMY IV</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
<i>Pre-requirements: RADI 2100, RADI 2100L, RADI 2120</i>			
<i>Concurrent: RADI 2140L</i>			

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lower gastrointestinal system, urinary system, neurological system, and bone. The student will apply the knowledge on radiographic positioning studied in previous courses required to carry out the different studies. The student will recognize pathologies related to the anatomical parts radiographed and evaluated. You will apply the knowledge of patient evaluation, medical order, radiological protection, exposure factors and radiographic quality. The course requires contact hours in the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2140I RADIOGRAPHIC POSITIONING AND 2 CREDITS 30 HOURS  
RELATED ANATOMY IV: LABORATORY**

*Pre-requirements: RADI 2100, RADI 2100L, RADI 2120*

*Concurrent: RADI 2140*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, the protocols and techniques used to carry out the procedures learned in previous courses will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The topics that make up the course are special radiographic studies. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in radiographic images. This course requires an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 2150 CLINICAL INTERNSHIP III 3 CREDITS 135  
HOURS**

*Pre-requirements: RADI 2110, RADI 2100, RADI 2100L, RADI 2120, RADI 2170*

*Concurrent: RADI 2140, RADI 2140L*

This course gives the student the opportunity to practice in real clinical settings. The student will demonstrate and apply the knowledge previously acquired in courses on taking radiographic images of the skull, spine and its execution in the labor field in different clinical situations.

**RADI 2160 PRE-BOARD SEMINAR 1 CREDIT 15 HOURS**

*Pre-requirements: All previous courses*

*Co-REQUIREMENTS: ANAT 2003, RADI 2130, RADI 2140, RADI 2140L, RADI 2150*

This course will enable the student to identify and self-assess those areas of the concentration courses, where they need to reinforce their knowledge. The following areas will be worked on: anatomy, patient care and management, equipment maintenance, image production and evaluation, radiographic procedures and radiographic pathology. This course requires an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RSCH 5113      RESEARCH METHODOLOGY                      3 CREDITS                      45 HOURS**

Discusses the identification of problematic situations that allow research, their analysis, and the related historical background. The dependent and independent variables of the problem are recognized. It also works with the development of basic research questions, formulate hypotheses, recognize the limiting factors of the development of the study and definitions of terms. The literature review, population and study sample, design of the instruments for data collection, operational procedures, data analysis, statistical presentation of the findings, discussion of results, related conclusions and the recommendations that arise from the analysis are also discussed. This course is offered in the face-to-face and non-face-to-face modality.

**SCIE 4001      GENERAL SCIENCE I                                      3 CREDITS                      45 HOURS**

The course aims to develop in the student an integrated understanding of science, as well as the composition, functioning and conservation of the human body and the effects of these in the life of man. The teaching and learning process will be carried out through lectures on current political and social situations, discussion of clinical cases using presentations, organization charts, empty sketches and visits to the community.

**SCIE 4002      ENVIRONMENTAL SCIENCE II                              3 CREDITS                      45 HOURS**

The purpose of the course is for the student to develop skills in the relationship of man with his environment. It will review other sciences such as: Sociology, Politics and Economics that will help to obtain a health, political - social, clinical, and preventive basis for economic and health problems. The teaching and learning process will be carried out through conferences, analysis of current political and social situations, discussion of clinical cases using presentations, organization charts, empty sketches, and visits to the community.

**SECR 1706      PROFESSIONAL IMAGE DEVELOPMENT      3 CREDITS                      45 HOURS**

This course aims for the student, based on analysis of readings, collaborative work, visual presentations and talks, to cultivate a positive personality, good character, good health, good manners, social grace and a pleasant personal appearance. You will project these desired elements through your personality. It is evaluated through oral presentation, planning of an educational activity, Supplementary Independent Component and in its professional projection.

**SECR 1707      DOCUMENT MANAGEMENT                                      3 CREDITS                      45 HOURS**

The purpose of this course is to train the student in the information management cycle and the ethical and legal aspects that govern it. The correct use of the coding rules is integrated for the different file systems and work is carried out on the design of electronic databases. The methods to achieve this are conference, simulations, case studies, application exercises and research project. The evaluation method includes application tests, critical analysis of cases and Supplementary Independent Component.

## PROCEDURES

## 45 HOURS

**SECR 2705      SPEED WRITING IN SPANISH**

## 45 HOURS

The course presents the basic principles of the speed writing method. The mastery of the skills of taking dictation, reading and transcription by hand is developed. Spanish grammar and language are included for a professional transcription. The appraisal is through execution exercises, debate and concept map. The works are evaluated based on the acceptability of the transcription of the dictations.

## MEDICAL TERMINOLOGY

## 45 HOURS

The Medical Terminology course was designed so that the student knows and learns the terms and concepts used in a medical facility. It will provide the student the opportunity to learn the different parts of the human body and their structures. In addition, the student will know the medical terms and their meanings. You will know what the prefixes, suffixes and the roots of these terms are. This is accomplished through lectures and presentations. It is assessed through a focused list, questions, and discussion. The evaluation is through exams, Supplementary Independent Component, and participation.

## MEDICAL CODING

## 30 HOURS

The course is designed to familiarize the student with the use of the updated ICD9 (“International Classified Disease”) manuals, the Medical Diagnostic Manual, medical equipment, the updated CPT (“Current Procedural Terminology”) Manual, and the Procedures Manual. The student will be able to use the codes according to the new revision of the International Classification of Diseases and Health-Related Problems. The student will develop the technique of changing the description of the diagnoses in words by numerical codes based on the manuals.

## 45 HOURS

The course is aimed at knowing all those elements necessary to bill the different health insurance companies and describe the billing cycle. The data collection procedures required by medical plans when submitting bills for services provided by health professionals are included. Handling the bill and what are the processes used in medical billing.

## 30 HOURS

This course will teach the student the use of electronic billing programs for medical plans. The student will learn the skills and techniques related to invoicing by electronic means and to use all the necessary documentation to create a complete cycle of electronic invoicing. You will learn the methods and requirements for processing electronic medical claims as required by health insurance companies. In addition, the student will be able to follow up and recognize error messages in the creation of claims. Laboratory use required.

**150 HOURS**

In this course, students will have the opportunity to transfer the knowledge and skills acquired in the classroom to a real office environment. In addition, you will also participate in enriching experiences and strengthening skills in those areas necessary in the Practice Seminar. The evaluation methods are theoretical exams, rubrics and professional portfolio and evaluations of the Center of Practice.

## 45 HOURS

The purpose of this course is to make students aware of the laws and regulations that significantly impact organizations in terms of safety and health. In this course they must learn the regulations of the Occupational Safety and Health Administration, federal and state. Students learn to design an occupational safety and health program and implement occupational safety and health training. Student knowledge is determined through readings, reports, and projects. \* This course is offered face-to-face and not face-to-face.

## 45 HOURS

Through the course, the aim is to develop in the students the competences related to oral and written communication, the use of technology, the use of information from literature and critical thinking in relation to a diversity of topics related to the learning process. adaptation to university life and personal, academic, and professional development. This course will be evaluated with written or oral assignments, exams or short tests and multiple activities. It is offered face-to-face and not face-to-face. This course is offered face-to-face and not face-to-face.

<b>SEMI 2507</b>	<b>INTEGRATION SEMINAR TO THE ROLE OF THE PHARMACY TECHNICIAN</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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*Pre-requirements: PHAR 1618, PHAR 1619, PHAR 1620, PHAR 1621, PHAR 1622, PHAR 1623, PHAR 1624, PHAR 1625, SEMI 1105*

The purpose of the course is to support the student in the transition to the role of Pharmacy Technician in the workplace. Emphasis is placed on the review and integration of knowledge and skills for the preparation of the revalidation exam. Techniques and strategies in job search, resume preparation, interview, attitudes, and skills necessary to strengthen personal and professional development and achieve goals; are discussed. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises.

<b>SEMI 2704</b>	<b>AUTOMATED OFFICE SEMINAR</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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*Pre-requirements: COMP 1703, INFO 2701, SPAN 2207*

This course is based on simulations of the different documents that are prepared in public or private offices. To carry out these tasks, the advanced commands of the Spreadsheet, Electronic Presentations and Publications, Text Processing, Database, and Internet are used. You work independently with deadlines. The teacher when correcting the works, offers individualized re-teaching in grammar, language, applications, and formats used. Job evaluations are based on acceptability. Requires use of the laboratory and the Internet.

<b>SEMI 3008</b>	<b>LIFE REFLECTION SEMINAR</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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The purpose of the course is for the student to reflect on the most relevant aspects of their personal, social, and professional life to create a physical and mental balance that helps them discover the phases that they must improve from their current position and the steps to take. continue in the future. The teaching and learning process will be carried out through reflections, a concept map, socialized discussion, and oral reports on topics related to the objectives of the course.

<b>SEMI 6160</b>	<b>INTEGRATIVE SEMINAR IN ADMINISTRATION</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requirements (Human Resources): RSCH 5113, HURE 6131, HURE 6152 and QUME 5103*

*Pre-requirements (Management): RSCH 5113, MANA 5108, MANA 6141 and QUME 5103*

*Pre-requirements (Health Organizations): RSCH 5113, MAHE 6139, MAHE 6140 and QUME 5103*

Integrative course and the cornerstone of the graduate program in Business Administration. The student is expected to apply several skills from specialty courses in the graduate program to develop, implement, and initiate a change management plan in a well-known organization. Knowledge is measured through oral presentations, written reports, essays, case analysis, and research. This course is offered in the face-to-face and non-face-to-face modality.

**SOCI 2015      PRINCIPLES OF SOCIOLOGY \*                      3 CREDITS                      45 HOURS**

The purpose of the course is to expose the student to the knowledge and methodologies that define Sociology as scientific knowledge. Through it, the importance of critical analysis in the face of social changes and the implications of these changes in society is highlighted. The course includes conferences, exhibitions or work papers, guided / group discussions, among other strategies such as those related to technological communication media to understand contemporary social reality. This course will be evaluated with exams, homework, among other criteria. The course is offered in face-to-face and non-face-to-face modalities.

**SONO 2000      INTRODUCTION TO MEDICAL SONOGRAPHY 3 CREDITS      45 HOURS**

It introduces the student to the profession of medical sonography. It includes the historical development of the profession, emphasizes the role of the Sonographer and the terminology associated with the characteristics of the image. It introduces the basic principles of ultrasound, tracking methods, image documentation, report preparation, equipment care, and quality control, and laws related to the profession. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2200      PATIENT CARE AND MANAGEMENT IN      3 CREDITS                      45 HOURS  
SONOGRAPHIC IMAGES**

This course relates the student to infection control techniques and the principles of surgical asepsis to maintain a sterile field during the management and care of the patient in any clinical setting. At the same time, he relates it to the management techniques used to take diagnostic images to the patient admitted to his service, safely and effectively. This course will train the student to take vital signs and offer first aid during a medical emergency. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2010      ABDOMINAL SONOGRAPHY                      4 CREDITS                      75 HOURS**

*Pre-requirement: SONO 2000, SONO 2200, MEDT 2000*

Study of the protocol techniques and procedures that are used mostly in the evaluation of the abdomen. Includes a review of anatomy and physiology related to organs abdominals, the study of anatomical variants, normal and pathological sonographic appearance of the organs and structures contained in the abdominal cavity, also the various types of complementary studies that can help when offering a sonographic diagnosis and the application of Doppler as a complement or part of a general abdominal sonographic study. This course has an additional 150 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2020 GYNECOLOGICAL SONOGRAPHY****4 CREDITS****75 HOURS***Pre-requirement: SONO 2010, SONO 2200*

Study of the protocol techniques and procedures that are used mostly in the evaluation of the abdomen. It includes a review of the anatomy and physiology related to the abdominal organs, the study of anatomical variants, normal and pathological sonographic appearance of the organs and structures contained in the abdominal cavity, as well as the various types of complementary studies that can help at the time of offer a sonographic diagnosis and the application of Doppler as a complement or part of a general abdominal sonographic study. This course has an additional 150 hours of outside work. The student will carry out the activities assigned in the External Work Component

**SONO 2130 LABORATORY FOR THE INTEGRATION OF CLINICAL SKILLS IN MEDICAL SONOGRAPHY****2 CREDITS****60 HOURS***Pre-requisite: SONO 2000, SONO 2010, SONO 2200*

This laboratory will be an introductory one where the student will know the role of the sonographer, the components of a sonography laboratory, the techniques, and protocols in the field of general sonography. You will learn how to manage a patient, interpret medical orders, and how to make a sonographic report. This course has an additional 120 hours of outside work. The student will carry out tasks related to the course contents in this component.

**SONO 2050 OBSTETRIC SONOGRAPHY****4 CREDITS****75 HOURS***Pre-requirement: SONO 2000, SONO 2200, MEDT 2000, PHSC 2030*

This course details each stage of pregnancy, including embryonic and fetal anatomy, as well as normal and pathological sonographic appearance. Studies complications related to pregnancy, multiple pregnancies, pregnancy failure, premature delivery, fetal death, disorders coexisting with pregnancy and pathological conditions of the fetus. Study the special procedures that are performed using ultrasound equipment. Discusses the innovative modalities in obstetric sonography and the application of Doppler as a complement to a sonographic study. This course has an additional 150 hours of outside work. The student will carry out tasks related to the course in this component.

**SONO 2140 CLINICAL PRACTICE I****2 CREDITS****90 HOURS***Pre-requirement: SONO 2130*

Practical experience in a real setting and under the direct supervision of the clinical instructor. The student's performance in performing abdominal, gynecological, and obstetric sonographic studies of the first, second or third trimester will be evaluated. It includes interpretation of the medical order, analysis of the patient's medical history, tracking techniques, protocol, identification of cuts, evaluation of organs and anatomical structures. Normal variants, normal and pathological appearance, evaluation of the image, attitudes, and professional ethics. This experience will be of great help to reinforce and integrate the knowledge acquired in the classroom.



**SONO 2070 SURFACE STRUCTURE SONOGRAPHY 4 CREDITS****75 HOURS***Pre-requirement: SONO 2000, SONO 2200, PHSC 2040*

The course includes the normal anatomy, physiology and pathologies of the superficial structures that can be evaluated with diagnostic ultrasound. It also includes clinical signs and symptoms, interpretation of laboratory values, and protocol techniques used in conducting sonographic studies of these structures, including thyroid, parathyroid, sinus, testicles, prostate, penis, popliteal region, neonatal brain, and skeletal muscle. It emphasizes the importance of relating the complementary studies with the sonographic findings that can be found. This course has an additional 150 hours of outside work. The student will carry out tasks related to course topics in this component.

**SONO 2150 PATHOLOGY APPLIED TO SONOGRAPHY 3 CREDITS****45 HOURS***Pre-requirement: BIOL 1602, SONO 2130*

This course discusses the pathological processes associated with the organs and structures of the abdominal cavity and the superficial structures of the human body that can be evaluated using medical sonography. The etiology, signs and symptoms, normal sonographic appearance and abnormal sonographic patterns of these organs and structures are also discussed. Differential diagnoses and the etiology of congenital anomalies are discussed, laboratory tests and other imaging modalities are correlated. In the course the measurements of the organs are discussed, to rule out pathological findings related to the size of the organs, and the location, size and composition of the different pathologies. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2160 CLINICAL PRACTICE II****2 CREDITS****90 HOURS***Pre-requirement: SONO2140*

Practical experience in a real setting and under the direct supervision of the clinical instructor. The student's performance in carrying out the various sonographic studies, including those of superficial structures, will be evaluated. It includes interpretation of the medical order, analysis of the patient's medical history, tracking techniques, protocol, identification of cuts, evaluation of organs and anatomical structures. Normal variants, normal and pathological appearance, evaluation of the image, attitudes, and professional ethics. This experience will be of great help to reinforce and integrate the knowledge acquired in the classroom.

**SONO 2180 PATHOLOGY APPLIED TO SONOGRAPHY 3 CREDITS****45 HOURS***Pre-requirement: SONO2150*

Study, analysis, and discussion of the physiology of the systems that make up the human body. It also includes the pathology with its etiology, symptoms, and signs, as well as the protocol techniques with which the normal and pathological sonographic appearance can be evaluated. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2080 PRE-REVALID SEMINAR****2 CREDITS****30 HOURS**

*Pre-requirement: SONO2000, SONO2010, SONO2020, SONO2050, SONO2070, SONO2130, SONO2140, SONO2150, SONO2160, SONO2200*

This course provides the student with the opportunity to review the concepts acquired in their formal academic preparation as a medical sonographer. It will discuss Ultrasound Physics and Instrumentation, including the topics of Clinical Safety, Physical Principles, Ultrasound Transducers, Pulsed Instrumentation, Doppler Instrumentation, Hemodynamics, Quality Assurance, Artifacts, Protocols and New Technologies. In addition, the anatomy, physiology, laboratory tests and benign and malignant pathologies of the organs included in the abdominal, pelvic, obstetric, and superficial structures sonographic studies will be discussed. Finally, comprehensive patient care will be included in a diagnostic sonography unit. These topics will be discussed according to the outline of the Examining Board of Diagnostic and Treatment Imaging Technologists. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2170 SPECIAL PROCEDURES IN  
MEDICAL SONOGRAPHY****2 CREDITS 3****30 HOURS**

*Pre-requisite: SONO2130*

Study of the techniques of invasive, interventional, and therapeutic procedures guided through sonography. It includes the preparation of the patient, equipment, materials, and protocol of the different procedures. The role of the sonographer in performing the different procedures is discussed, such as: breast biopsy, thyroid biopsy, soft tissue biopsy, thoracentesis, paracentesis, chorionic villus sampling, amniocentesis, fine needle aspiration, umbilical cord sampling, blood transfusion, umbilical cord, in vitro fertilization. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SONO 2190 CLINICAL PRACTICE III****5 CREDITS****225 HOURS**

*Pre-requirement: SONO2160*

Practical experience in a real setting and under the direct supervision of the clinical instructor. The student's performance in carrying out the various sonographic studies, including those of superficial structures, will be evaluated. It includes interpretation of the medical order, analysis of the patient's medical history, tracking techniques, protocol, identification of cuts, evaluation of organs and anatomical structures. Normal variants, normal and pathological appearance, evaluation of the image, attitudes, and professional ethics. This experience will be of great help to reinforce and integrate the knowledge acquired in the classroom.

**SPAN 1100 BASIC SPANISH****4 CREDITS****60 HOURS**

The purpose of the course is to develop in the student the skills related to the correct and effective use of the Spanish language as an oral and written communication instrument. Emphasis will be placed on the study of the morphosyntactic and normative aspects of the Spanish language through the study of sentence structure, the morphosyntactic function of words in sentences and

the rules of spelling. Likewise, the student will develop their writing skills in paragraphs and original compositions. This course has 15 hours of external work. The student will carry out a study assignment related to a topic of the course.

**SPAN 1101 BASIC SPANISH I                      3 CREDITS                  60 HOURS**

The SPAN 1101 course aims for the student to expand the basic skills of oral and written communication. Special attention will be given to the study of the structure of the simple grammatical sentence. In addition, some aspects of spelling will be studied: punctuation marks, upper and lower case letters, accentuation and good use of the vocabulary. The teaching and learning process will be carried out through conferences, socialized discussion, teamwork, and interactive exercises. This course is offered face-to-face and not face-to-face.

**SPAN 1102      BASIC SPANISH II                                  3 CREDITS                                  45 HOURS**

*Pre-requisite: SPAN 1101*

The SPAN 1102 course is intended to reaffirm oral and written communication skills. Different texts and fragments of Puerto Rican, Latin American and Spanish literature will be analyzed and discussed: short story, novel, poetry, and essay. The teaching and learning process will be carried out through readings, socialized discussion, oral reports of literary analysis and teamwork. This course is offered face-to-face and not face-to-face.

**SPAN 1111 BUSINESS SPANISH 2 CREDITS 30 HOURS**

*Pre-requirement: SPAN 1100*

The purpose of this course is to improve and develop in the student the ability to write with precision, correctness, and appropriate tone the different types of business and informal letters and memoranda. The procedure to follow will be, analysis, organization and writing of each type of commercial communication studied in class. This course has 7.5 additional hours of outside work. The student will carry out a study assignment related to a topic of the course.

<b>SPAN 1121</b>	<b>EFFECTIVE SPANISH COMMUNICATION SKILLS</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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This theoretical and practical course provides the student with the basic techniques and skills for effective, professional, and assertive verbal and written communication with veterinary clinical staff and clients. The advantages of mastering communication skills lie, not only in improving interaction with the client, but also in reducing conflicts with other team members, improving job satisfaction, strengthening education skills and customer recommendation, encourage other team members to improve their communication patterns and reduce errors that occur due to poor communication. This course has an additional 11.25 hours of outside work. The student will carry out a special work on a topic related to the course.

**SPAN 1151    BASIC EFFECTIVE COMMUNICATION   4 CREDITS                      60 HOURS**  
**SKILLS, AND CUSTOMER SERVICE**

This course prepares the student with the basic techniques and skills for effective, professional, and assertive verbal and written communication with laboratory personnel and clients. The advantages of mastering communication skills lie, not only in improving interaction with the client, but also in reducing conflicts with other members of the work team by reducing errors that occur due to poor communication. During the course, the basic elements necessary for the study of business opportunities and the processes required for the growth of an existing business are also worked on. This course has 15 hours additional outside work. The student will carry out the activities assigned in the External Work Component.

**SPAN 2207    BUSINESS WRITING IN SPANISH    3 CREDITS                      45 HOURS**

*Pre-requisite: SPAN 1102*

The purpose of this course is to develop and improve the ability to create a student's own writing style. The basic principles of writing are emphasized to develop a professional efficiently prepared in the skills of writing business documents such as: letters, summaries, memos and applications. Grammatical, orthographic and morphosyntactic concepts are integrated. Student knowledge is determined through lectures, socialized discussion, interactive exercises, and creative writing of business documents.

**SPAN 3002    ADVANCED SPANISH \*                      3 CREDITS                      45 HOURS**

*Pre-requirement: SPAN 1102*

The SPAN 3002 course places the student in front of the humanizing context represented by their language and the literary work. He studies the literary human being: the poet, the essayist, the storyteller who uses language as an instrument of his literary creation. The teaching of language and literature is integrated with grammatical, orthographic and morphosyntactic explanation. The teaching and learning process is developed through lectures, text readings, socialized discussion and literary analysis reports. This course is offered face-to-face and not face-to-face. This course is offered face-to-face and not face-to-face.

**STAT 3103    STATISTICS \*                      3 CREDITS                      45 HOURS**

The purpose of this course is to familiarize the student with the basic concepts and tools of statistics that allow them to make effective decisions. The course content includes data collection and tabulation, table construction, sampling, measures of central tendency, measure of dispersion, graphs, probability, and others. The student's knowledge is determined through exercises, exams, and research papers. This course is offered face-to-face and not face-to-face.

**VETR 1211      INTRODUCTION TO VETERINARY      4 CREDITS      60 HOURS**  
**MEDICINE AND ANIMAL BIOSECURITY**

This course presents the responsibilities, ethical elements, and essential tasks of the veterinary assistant. As part of a program in animal health, it presents the laws applicable to the exercise of the profession and the techniques of safe handling of animals. As a veterinary technical professional, you will be trained to work on specific management techniques: holding the animal, interpretation of behavior, the animal. basic elements of healthy nutrition and well-being of animal. We work with the basic standards, procedures and biosafety protocols aimed at maintaining control of occupational risk factors from biological agents in the different services, which protect workers, as well as patients and visitors who are exposed to risks of health care and the environment in which they develop, achieving prevention and safety. The basic procedures necessary for the protection of animals and the relationship between health and well-being of these will also be covered, as well as respect and consideration for them, promoting a humane treatment integrating, high ethical content and attitudes of responsibility. It works on the element of responsibility and obligations on the part of pet owners, as well as correct protocols for mobilization and animal hygiene and the care of the veterinary team. This course has an additional 15 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1221      BASIC SCIENCE CONCEPTS      4 CREDITS      60 HOURS**

This course provides the student with the basic principles of Science, integrating the theoretical, heuristic, and axiological knowledge of Biology, Chemistry and Physics, to be able to describe and explain the main general laws that govern the living world, as well as to understand, explain and value the origin of life, the organization of living beings, the relationships between them and their environment and their evolution. This course has an additional 15 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1231      GENERAL PRINCIPLES OF THE      2 CREDITS      60 HOURS**  
**VETERINARY OPERATING ROOM**

The tasks of the veterinary assistant in surgical procedures are quite diverse. For this reason, this practical laboratory course provides the student with the fundamental concepts for the preparation of the patient before and after any surgical procedure, as well as the identification, handling, care and packaging of surgical instruments. This course has an additional 15 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1241      ANIMAL ANATOMY AND PHYSIOLOGY 5 CREDITS      90 HOURS**

This course allows the student to know the animal body in general, emphasizing the systems: Integumentary, Bone, Muscular, Nervous, Endocrine, Respiratory, Cardiovascular, Lymphatic, Digestive, Urinary and Reproductive, its functions and the organs that compose them. It is also intended to introduce the student to the concepts of organization, function, and integration of body systems, using the dog as a model and comparing it with other domestic animals using

skeletons, models, audiovisuals, dissection specimens and laboratory experiences, since their knowledge represents the bases necessary to begin their studies in the field of Veterinary Medicine. This course has an additional 22.5 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1261    VETERINARY MICROBIOLOGY                    3 CREDITS                    45 HOURS**

*Pre-requirements: VETR 1211, VETR 1221*

This course allows the student to know the animal body in general, emphasizing the systems: Integumentary, Bone, Muscular, Nervous, Endocrine, Respiratory, Cardiovascular, Lymphatic, Digestive, Urinary and Reproductive, their functions and the organs that compose them. It is also intended to introduce the student to the concepts of organization, function and integration of body systems, using the dog as a model and comparing it with other domestic animals using skeletons, models, audiovisuals, dissection specimens and laboratory experiences, since the knowledge of them represents the necessary bases to begin their studies in the field of Veterinary Medicine. This course has an additional 11.25 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1271    PATHOLOGY, TOXICOLOGY, AND                    4 CREDITS                    60 HOURS  
                  VETERINARY PHARMACOLOGY**

*Pre-requirements: VETR 1211, VETR 1221, VETR 1241*

This course introduces the student to the processes of study the anatomical, physiological, and chemical alterations that occur in the animal organism because of the disease, as well as the causes that produce the lesions of a certain pathological process. It relates the clinical symptoms presented in animals with the main forms of diagnosis and corresponding therapeutic processes. It also includes the study of general pharmacology and toxicology in veterinary medicine with the purpose of interpreting the method of action of medicines for veterinary use and of some natural resources in the treatment of diseases or alterations of animal species. On the other hand, the various techniques of administration and dosage of drugs are studied and how these are distributed, transformed, and eliminated from the body. The effects that these drugs produce in the animal are also described and special emphasis is placed on the modifications of the pathological processes as well as the undesirable effects that they cause. This course has an additional 15 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1281    PRINCIPLES OF VETERINARY    2 CREDITS                    30 HOURS  
                  ODONTOLOGY**

*Pre-requirements: VETR 1211, VETR 1221, VETR 1231, VETR 1241*

Dentistry is the science that is dedicated to the study of the oral cavity, teeth, and related structures. This branch of veterinary medicine is the most advanced specialty, both in terms of materials and techniques. The veterinary assistant is an indispensable member of the oral hygiene team, since periodontal disease is a subject of education for the client and this education is mainly the responsibility of the first contact of the veterinary assistant and after the veterinarian. This

course allows students to become familiar with the main components of the stomatognathic apparatus of domestic animals with special emphasis on the dog and horse. In addition, it is intended that the student knows the oral and dental anatomy, the proper use of the dental record or odontogram, the instruments and materials most used in dental practice, the most appropriate ergonomics in the handling of animals in the treatments within the oral cavity, understand the most common oral cavity lesions, their etiology, symptoms, and treatment options. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1291    PRINCIPLES OF VETERINARY                      4 CREDITS                      75 HOURS**  
**NURSING**

*Pre-requirements: VETR 1211, VETR 1221, VETR 1231, VETR 1241, MATH 1101*

This course has the general purpose of incorporating in the student the fundamental methodological bases of veterinary nursing, for their performance as a professional in animal health. It works with the functions, obligations, and limitations of the veterinary nurse with special emphasis on assistance before, during and after a surgical intervention; as well as in emergency situations, describing the actions in response to them. This course has an additional 18.75 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1301    ANIMAL NUTRITION                                      2 CREDITS                      30 HOURS**

*Pre-requirements: VETR 1211, VETR 1221, VETR 1241, MATH 1101*

This course presents the main characteristics of the composition of food. Types of food, consumption, and utilization of ingested nutrients. Definitions and main nutritional characteristics. Regulation of water intake and factors that affect it. Requirements in quantity and quality of food, variations according to the productive stages in the animals. It works with methods of estimating consumption to guide on adequate general nutrition, as well as the concept of digestibility in food and factors that they modify. This course has 7.5 additional hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1311    HANDLING, CARE, AND DISEASES                      4 CREDITS                      90 HOURS**  
**IN FARM ANIMAL**

*Pre-requirements: VETR 1211, VETR 1221, VETR 1241, MATH 1101*

This course aims for the student to acquire knowledge about the basic notions of zootechnics, agriculture and livestock nutrition, as well as to learn everything related to the production of cattle, sheep, goats, pigs, poultry, and rabbits. Concepts of comparative anatomy and physiology of domestic animals will be explained, such as, for example, the locomotor system and the digestive, urinary, integumentary, and nervous systems. You will study what are the genetic bases, ethnology and breeds of different types of animals and you will learn what the facilities where they are should be. The basic care of farm animals will be studied, knowing how the restraint, handling, emergencies, first aid and the most frequent diseases are developed. Finally, everything related to the production of meat, milk and eggs will be explained. This course has an additional 22.5 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1321    CLINICAL VETERINARY  
PROCEDURES**

**3 CREDITS**

**90 HOURS**

*Pre-requirements: VETR 1211, VETR 1211, VETR 1231, VETR 1241, MATH 110*

This course will train the student in the conceptual and technical management of the taking and handling of samples, as referred by the veterinarian. These include samples of: Hematology, Immunology, Urinalysis, Blood Chemistry, Microbiology, Parasitology and Cytology among others, to facilitate an accurate diagnosis. This course has an additional 22.5 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1331    INTRODUCTION TO VETERINARY  
RADIOLOGY AND SONOGRAPHY**

**4 CREDITS**

**90 HOURS**

*Pre-requirements: VETR 1211, VETR 1231, VETR 1241 MATH 1101*

Both radiology and ultrasonography are the main diagnostic imaging tools for multiple pathologies and trauma in veterinary medicine. Before interpreting the image to reach a diagnosis, it is necessary to obtain a quality image that provides as much information as possible. For this reason, this course will train the student in a theoretical and practical way on the principles of the most suitable radiological and ultrasound techniques for the diagnostic approach. Notions about the physics of radiation and X-rays will be received, in addition to knowing the basic aspects of radiology and radiobiology. Through combining practical and theoretical sessions, you will learn the techniques necessary to start using the ultrasound system and to take X-rays in different areas of the body. This to carry out a correct exploration to generally recognize the anatomical organs, especially those present in the thoracic and abdominopelvic cavities. This course has an additional 22.5 hours of outside work. The student will carry out a special work on a topic related to the course.

**VETR 1361    VETERINARY CLINICAL PRACTICE**

**3 CREDITS**

**135 HOURS**

*Pre-requirements: All program courses except PSYC 110*

This practical course promotes the realization of the concepts acquired throughout the student's academic training. Under the supervision of a veterinarian, they will be able to carry out the procedures and protocols necessary to work with animal health. The student will work in a clinic, veterinary hospital, shelter, or other facility that works directly with the care of small animals, as well as in an equine clinic, dairy, ranch, piggy, poultry or rabbit farm or other facility that works directly with the care of older animals and will offer its services in order to put them into practice under the supervision of a veterinarian and an academic supervisor of clinical practice.

**VETR 1370    VETERINARY CLINICAL PRACTICE**

**6 CREDITS**

**270 HOURS**

*Pre-requirements: All program courses except PSCY 1100*

This practical course promotes the realization of the concepts acquired throughout the student's academic training. Under the supervision of a veterinarian, they will be able to carry out the procedures and protocols necessary to work with animal health. The student will work in a clinic, veterinary hospital, shelter, or other facility that works directly with the care of small animals, as



well as in an equine clinic, dairy, ranch, piggy, poultry or rabbit farm or other facility that works directly with the care of older animals and will offer its services to put them into practice under the supervision of a veterinarian and an academic supervisor of clinical practice.

## **HIGH SCHOOL IN DIAGNOSTIC IMAGING WITH CONCENTRATION ON CT AND MRI**

### **COURSE DESCRIPTION**

<b>SPAN 201</b>	<b>BASIC SPANISH I</b>	<b>3 Credits</b>	<b>45 hours</b>
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This course aims to develop in students the linguistic awareness necessary to effectively use the Spanish language as an instrument of personal, social, professional, and artistic communication. Students will develop their language skills through the study of communication concepts and linguistic and morphosyntactic aspects to promote their communication skills in reading literary texts and producing original compositions. As a general education course, SPAN 201 introduces the student to the concept of literary genres, with emphasis on the study of the short story and novel as a genre and the analysis of literary texts from modern and contemporary Puerto Rican, Caribbean and Spanish literature. The study and analysis of stories and novels aims to develop in the student his appreciation for literature as an artistic work and a reflection of human conditions and characteristics. The texts selected for this course will emphasize the characteristics of Puerto Rican, Latin American and Spanish history, and culture. The analysis of these texts will motivate the student to think about his personal and social reality as an individual and as a member of a particular society (Puerto Rico) and its surrounding nations. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

<b>SPAN 202</b>	<b>BASIC SPANISH II</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*Pre-requisite: SPAN 201*

The course initiates the student in the study of the following literary genres: theater, essays, and poetry and enriches the student's cultural background through the analysis of literary texts that contribute to strengthening their cultural identity as Puerto Ricans and Hispanic Americans. In addition, the course refines the writing skills of the student started in the SPAN course 201 and contributes to increasing their written and oral communication skills. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

<b>ENGL 201</b>	<b>BASIC ENGLISH I</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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This course is designed for college students in a first level reading and writing course. It focuses on the reading and writing skills necessary for effective comprehension and communication. This course has 90 additional hours of outside work. The student will perform the assigned activities in the Component External Work.

**ENGL 202      BASIC ENGLISH II****3 CREDITS****45 HOURS***Pre-requirement: ENGL 201*

This course is designed to teach the reading and study skills essential to succeed in college. It focuses on the understanding and retention of textbook comprehension skills and on advancing vocabulary and reading skills. This course has 90 additional hours of outside work. The student will perform the assigned activities in the Component External Work.

**MATH 201      INTRODUCTORY ALGEBRA****3 CREDITS****45 HOURS**

The course describes to the student the basic concepts of algebraic expressions and formulas. It is designed for the student to apply the operations, algebraic expressions, and formulas in practice exercises. Topics such as problem solving, graphing equations, algebraic expressions, linear equations and inequalities, polynomials, and factoring of polynomials will be discussed. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**HUMA 301      HUMANITIES****3 CREDITS****45 HOURS**

In this course, students will be guided in the recognition of those foundational ideas of Western culture by analyzing the contribution of classical and Judeo-Christian civilization based on the values and worldview of the peoples that share Western culture. Likewise, the contributions of some individuals and of the collective in general in the historical evolution of humanity in various fields of knowledge will be studied in which the contributions of each stage of history are analyzed until reaching the contemporary era. The study of each of the traditional stages of history will promote reflection on the development of ideas in the West according to the historical-social context in which they arose and their subsequent evolution until reaching the cultural reality of humanity in the century. XX and early XXI century. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**HIST 301      HISTORY OF PUERTO RICO****3 CREDITS****45 HOURS**

The study and critical analysis of the historical development of the Puerto Rican people through its chronological dimension is the focus of interest in this course. The endogenous political and economic forces that have influenced the socio-political development of the country will be analyzed. Likewise, particular emphasis will be placed on some milestones in national history that served as the basis for the development and reaffirmation of Puerto Rican nationality and those men and women who contributed to it from positions of leadership such as the people who contributed with their daily deeds. to its development. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**COMU 301     EFFECTIVE COMMUNICATION****3 CREDITS****45 HOURS***Pre-requirements SPAN 201, SPAN 202 or courses in Spanish*

In this course the student will develop the necessary skills to promote effective communication at academic, personal, and professional levels. The knowledge of some basic psycholinguistic concepts and the strategies acquired around effective oral communication will enable you to successfully face different situations of information exchange with your peers. Likewise, the student will learn different oral presentation techniques, identify the situations that can affect an effective communicative process and critically analyze all communicative acts based on the knowledge of the elements and functions of language. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**SPAN 301     20th CENTURY PUERTO RICAN LITERATURE****3 CREDITS**

This course aims to initiate the student in a detailed study of the stylistic and thematic characteristics of 20th century Puerto Rican literature as a representation of our culture and national identity. It presents the evolution of the traditional genres of our literature during the 20th century, their best exponents, recurring themes, and their location in literary times. The student will be exposed to a summary of the development of Puerto Rican literature since its emergence in the 19th century and then begin a detailed study of the evolution of Puerto Rican literature in the 20th century. Likewise, the course aims to refine the student's knowledge of the concept of literary genres, especially through the study of texts by canonical authors that exemplify the characteristics of the short story, novel, essay, theater, and poetry written during the century. last. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**CISO 301     INTRODUCTION TO SOCIAL SCIENCES****3 CREDITS**

The study of the social sciences covers the introduction to the knowledge of the phenomena of a social nature from a scientific perspective. It is presented how the social institutions developed by human beings in their historical development exert a great influence on the way of life of peoples and, consequently, of the individual. Therefore, the study of social sciences enables students to better understand their social reality, the endogenous and exogenous forces that affect their self-realization and that of the community and country in which they live. It is intended to introduce the student to the study of relevant theoretical and methodological problems in the field of social sciences. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**ARTS 301     APPRECIATION OF ARTS****3 CREDITS**

The study of the theory and function of art where artistic creation is highlighted as a language, the innate tendency to artistic expression, human beings as creators of forms, the nature of the work of art (personality of the artist and his social circumstances), the stages in the history of art, artistic styles, and their expression in the plastic arts. Likewise, it is intended to develop in students the critical ability to analyze artistic works in all their main manifestations. For this reason, the study and appreciation of music, theater and cinema is included as it reflects the

artistic and creative sensitivity of human beings in their historical evolution. In this course, the history of Western art will be studied, framed in its historical-chronological context, highlighting its artistic forms, its repetition in its evolution and its main events. There will also be a look at the art of Puerto Rico. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**PHSC 200      INTRODUCTION TO PHYSICS**

**3 CREDITS**

*Pre-requirement: MATH 201*

The course is designed to facilitate the learning of the basic concepts and principles of physics that will form the foundation of most science and technology studies. Physics is described as a mathematical science that studies the nature of matter, energy, and the relationships between the two. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**PHSC 201      RADIOLOGICAL PHYSICS**

**3 CREDITS**

*Pre-requirement: PHSC 200*

This course instructs the student on the physical concepts applied in radiation. Study the interaction of matter and energy in all its various facets. The certainty in the description of this interaction is manifested by mathematical operations that are graphically demonstrated by radiological studies. The student will know the terminology, the applications of physical laws and mathematical operations necessary to understand the development of modern radiology. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**COMP 200      INTRODUCTION TO COMPUTERS**

**2 CREDITS**

This course introduces the student to the world of computers, its history, composition, flexibility, and application. It describes the electronic equipment most used to process data, its interrelation with the computer and the way to communicate with it. The student will use the classroom as a laboratory to develop his portfolio that will include his worksheets as he applies the skills learned from the programs to which he will be related. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**PSYC 200      PRINCIPLES OF PSYCHOLOGY**

**3 CREDITS**

The course is an introduction to scientific psychology, its scope and limits, the biological and cultural bases that constitute the human subject, and selected topics in general psychology. Among others, perception, emotion, cognition, learning, memory, language, and considerations about the role of discipline in the world of work are discussed. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**ANAT 201      HUMAN ANATOMY AND PHYSIOLOGY I****4 CREDITS**

This course is designed to facilitate the learning of the human body. Integrated concepts of Biological Sciences will be reviewed. The student will know the body, the principles of support and movement. In addition, you will study the concepts of communication, control, and integration of the cells of the nervous system and the endocrine system. It provides the student with the anatomical concepts necessary to begin their studies in the field of Radiological Technology. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component. This course has a laboratory.

**ANAT 202      HUMAN ANATOMY AND PHYSIOLOGY II****4 CREDITS***Pre-requisite: ANAT 201*

This course is designed to facilitate the learning of the human body. The student will know the principles of transport and defense, respiration, nutrition, excretion, reproduction, and development. It provides the student with the anatomical concepts necessary to begin their studies in the field of Radiological Technology. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component. This course has a laboratory.

**ANAT 203      SECTIONAL ANATOMY****3 CREDITS***Pre-requisite: ANAT 202*

This course provides the student of diagnostic imaging sciences with the tools to learn and understand the relationship of anatomical structures in three dimensions. Helps the student to review the anatomy of radiological interest in radiographic studies. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**MEDT 200      MEDICAL TERMINOLOGY****2 CREDITS**

This medical terminology course emphasizes the learning and application of medical terminology and its meanings in the health field. The medical terminology course is designed to familiarize the student with medical terms, definitions, and instructions used by healthcare professionals. In addition to knowing medical terminology, the student will apply the knowledge acquired when interpreting a medical order and professional communication. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 200      INTRODUCTION TO RADIOLOGY****2 CREDITS**

This course describes to the student the field of radiological technology, its origin and development. It explains the roles of the professional and their interaction with patients, the ethical and legal aspects that apply to the discipline. In addition, it introduces the student to medical terminology. Guides the student on the requirements of the practice of the profession

and post-graduate studies. The basic knowledge of radiation protection, management and patient care is provided as an introductory method to their clinical practice. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 218      PATIENT CARE AND MANAGEMENT**

**2 CREDITS**

This course relates the student to infection control techniques and the principles of asepsis for the management and care of the patient in any clinical setting. In turn, he relates it to the management techniques used with patients admitted to his service for their safety. This course will train the student to take vital signs, identify emergencies and manage them during a radiological intervention. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 202      RADIOGRAPHIC POSITIONING  
AND RELATED ANATOMY I**

**2 CREDITS**

*Pre-requirements: ANAT 201, RADI 200, RADI 201*

*Concurrent: RADI 202L*

This course explains to the student the principles, general rules of patient positioning for taking radiographic images and the techniques used to carry out radiological procedures. The subjects that make up the course are thorax, abdomen, pelvis and hip. The student will recognize pathologies related to the radiographed anatomical parts. In the course, students will be offered the topics that will be applied to the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the external work component.

**RADI 202L      RADIOGRAPHIC POSITIONING AND  
RELATED ANATOMY I: LABORATORY**

**1 CREDIT**

*Pre-requirements: ANAT 201, RADI 200, RADI 201*

*Concurrent: RADI 202*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, protocols and techniques used to perform the procedures will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The subjects that make up the course are thorax, abdomen, pelvis and hip. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in radiographic images. This course requires an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 203      KNOWING MODALITIES AND IMAGING EQUIPMENT      2 CREDITS**

*Pre-requirements: RADI 200*

The course includes an introduction to diagnostic modalities and x-ray equipment aimed at medical treatment in a radiology department. It includes the basic concepts of the operation of the new modalities used in clinical diagnosis, including Computed Tomography (CT), Arteriography, Bone Densitometry, Magnetic Resonance, Radiotherapy, Nuclear Medicine, Fluoroscopy, Ultrasound and Mammography. The different modalities will be compared in relation to conventional and digital radiology from the point of view of utility, cost, and application. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 204      INTEGRATING SEMINAR      2 CREDITS**

*Pre-requirements: RADI 200, MEDT 200*

*Concurrent: RADI 203*

This course provides the student with the necessary concepts for its execution within clinical practices. The course provides the necessary knowledge about the radiographic equipment and room. In addition, the student will relate the knowledge of the course with the different areas of a radiology department. The student will be introduced to expected clinical simulations in their actual clinical practices. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 205      PRINCIPLES OF RADIOGRAPHIC EXPOSURE      3 CREDITS**

*Pre-requirements: RADI 200, PHSC 201*

*Concurrent: RADI 206*

This course relates the student to the X-ray machine, its shapes, sizes, the X-ray tube, its scale, the high voltage section, and how all of this is integrated and works. On the other hand, it describes the production of X-rays, their emission and the factors that affect their emission. The course presents the interaction of X-rays with matter, the five concepts that allow this interaction to occur, defines differential absorption, contrast examination and exponential attenuation. Through this course the student will be related to radiographic technique, the emission of X-rays, the factors that affect the quantity and quality of the emission, the production and control of "scatter radiation", the radiographic view. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 206      PRINCIPLES OF RADIOBIOLOGY AND  
RADIOLOGICAL PROTECTION      2 CREDITS**

*Pre-requirements: PHSC 201*

The course describes to the student the fundamental principles that are involved in the interaction of ionized radiation with biological tissues. During this course, the student will understand the short- and long-term effects of radiation on humans and the protection mechanisms to use radiation more safely when performing diagnostic and treatment studies on a patient. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 207      RADIOGRAPHIC POSITIONING AND  
RELATED ANATOMY II**

**2 CREDITS**

*Pre-requirements: RADI 202, RADI 202L*

*Concurrent: RADI 207L*

This course explains to the student the principles, general rules of patient positioning for taking radiographic images and the techniques used to carry out radiographic procedures. The subjects that make up the course are the entire lower and upper extremities and their joints. The topics have been developed continuously to the corresponding previous course as a requirement. The student will recognize pathologies related to the radiographed anatomical parts. Apply the knowledge of patient evaluation, medical order, radiation protection, exposure factors and radiographic quality. The course will provide students with the topics that will be applied to the corresponding laboratory. The course requires contact hours in the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 207L      RADIOGRAPHIC POSITIONING AND  
RELATED ANATOMY II: LABORATORY**

**1 CREDIT**

*Pre-requirements: RADI 202, RADI 202L*

*Concurrent: RADI 207*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, protocols and techniques used to perform the procedures will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The subjects that make up the course are lower extremities and upper extremities. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in images radiographic. The course will be developed concurrently with the corresponding theory course. This course has an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 208      CLINICAL INTERNSHIP I**

**3 CREDITS**

*Pre-requirements: ANAT 202, RADI 202, RADI 202L, RADI 204*

*Concurrent: RADI 206, RADI 207, RADI 207L*

This course provides the student with the necessary concepts for its execution within clinical practices. The course provides the necessary knowledge about the radiographic equipment and room. The student will relate the knowledge of the course with the different areas of a radiology department. The student will be introduced to expected clinical simulations in their actual clinical practices.



*Pre-requirements: RADI 205*

The course provides the student with the ability to understand everything concerning the production, acquisition, and evaluation of a diagnostic radiographic image. The importance of understanding the factors that affect radiographic quality is emphasized. The student will be taught about digital radiographic equipment and its optimal operation. In addition, the student will have the opportunity to gain knowledge about technical factors, automatic exposure control, digital image characteristics and the different types of artifacts that can affect image quality in a digital radiography. The course offers the knowledge to implement a Quality Assurance Program in a Radiology Department, emphasizing quality control tests that are carried out on equipment related to digital radiology, applications and components related to communication networks within of digital radiology. The student in this course will be trained to understand the importance of ensuring the quality of the radiographic image in the process of obtaining a correct diagnosis. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the external work component.

<b>RADI 210</b>	<b>RADIOGRAPHIC POSITIONING AND RELATED ANATOMY III</b>	<b>2 CREDITS</b>
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*Pre-requirements:* RADI 207, RADI 207L

Concurrent: RADI 210L

This course explains to the student the principles, general rules of patient positioning for taking radiographic images and the techniques used to carry out radiographic procedures. The subjects that make up the course are skull, facial bone, and the entire spine. The student will recognize pathologies related to the anatomical parts X-rayed. Apply the knowledge of patient evaluation, medical order, radiation protection, exposure factors and radiographic quality. The course will provide students with the topics that will be applied to the corresponding laboratory. The course requires contact hours in the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

<b>RADI 210L</b>	<b>RADIOGRAPHIC POSITIONING AND RELATED ANATOMY III: LABORATORY</b>	<b>1 CREDIT</b>
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*Pre-requirements:* RADI 207, RADI 207L

*Concurrent: RADI 210*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, protocols and techniques used to perform the procedures will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The subjects that make up the course are skull and spine. The student will recognize pathologies related to the radiographed

anatomical parts and will identify the corresponding anatomy in radiographic images. The course will be developed concurrently with the corresponding theory course. This course requires an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 211      CLINICAL INTERNSHIP II**

**3 CREDITS**

*Pre-requirements: RADI 205, RADI 206, RADI 207, RADI 207L, RADI 208*

*Concurrent: RADI 217*

This course gives the student the opportunity to practice in real clinical settings. The student will demonstrate and apply the knowledge previously acquired in courses on taking radiographic images of the lower and upper extremities and their execution in the workplace in different clinical situations.

**RADI 220      PHARMACOLOGY AND CONTRAST MEDIA IN  
DIAGNOSTIC IMAGES**

**2 CREDITS**

*Pre-requirements: RADI 200, RADI 201*

The content of this course provides the student with the basics of pharmacology, venipuncture, and the administration of diagnostic contrast agents and intravenous medications. Proper delivery to the patient is emphasized during these procedures. Throughout the course the student will learn the different contrast media used to differentiate radiographic structures that otherwise could not be visualized in the absence of contrast media. In addition, the student will learn the composition, administration, contraindications, adverse reactions and their role in the preparation and management of contrast media. Legal ethical aspects related to the profession are reviewed. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 213      RADIOLOGICAL PATHOLOGY**

**2 CREDITS**

*Pre-requirements: ANAT 202, RADI 217*

*Concurrent: ANAT 203*

This course includes the study of the diseases and injuries that most commonly affect the body and their relationship with the visible changes in the radiographic image. It includes the analysis of the epidemiology and natural history of these conditions. The course is designed with the purpose of familiarizing the student with those pathologies that can be diagnosed through the application of x-rays and the techniques that must be applied. This course has an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 214      RADIOGRAPHIC POSITIONING  
AND RELATED ANATOMY IV**

**2 CREDITS**

*Pre-requirements: RADI 210, RADI 210L, RADI 212*  
*Concurrent: RADI 214L*

This course explains to the student the principles, general rules of patient positioning for the performance of special radiographic studies and the techniques used to perform the different procedures. The topics that make up the course are related to the upper gastrointestinal system, lower gastrointestinal system, urinary system, neurological system, and bone. The student will apply the knowledge on radiographic positioning studied in previous courses required to carry out the different studies. The student will recognize pathologies related to the anatomical parts radiographed and evaluated. You will apply the knowledge of patient evaluation, medical order, radiological protection, exposure factors and radiographic quality. The course requires contact hours in the corresponding laboratory. This course requires an additional 60 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 214L      RADIOGRAPHIC POSITIONING AND RELATED  
ANATOMY IV: LABORATORY**

**1 CREDIT**

*Pre-requirements: RADI 210, RADI 210L, RADI 212*  
*Concurrent: RADI 214*

This course will give the student the opportunity to apply the knowledge and skills acquired in the corresponding theoretical course. The principles, general rules of patient positioning for taking radiographic images, the protocols and techniques used to carry out the procedures learned in previous courses will be applied. Through clinical simulations the student will learn to carry out the different procedures corresponding to the topics learned in the theoretical course. The topics that make up the course are special radiographic studies. The student will recognize pathologies related to the radiographed anatomical parts and will identify the corresponding anatomy in radiographic images. This course requires an additional 30 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 215      CLINICAL INTERNSHIP III**

**3 CREDITS**

*Pre-requirements: RADI 211, RADI 210, RADI 210L, RADI 212, RADI 217*  
*Concurrent: RADI 214, RADI 214L*

This course gives the student the opportunity to practice in real clinical settings. The student will demonstrate and apply the knowledge previously acquired in courses on taking radiographic images of the skull, spine, and its execution in the labor field in different clinical situations.

**RADI 250      ADVANCED SECTIONAL ANATOMY**

**4 CREDITS**

*Pre-requirements: ANAT 203*

This course provides the student with the ability to locate and identify structures in the axial (transverse), planes (oblique), sagittal, coronal, and orthogonal planes. This is a necessary skill in many imaging and therapeutic modalities. Volumetric data sets and 3-D reconstruction of body structures are increasingly important for critical diagnosis and treatment of disease. To improve

patient care and assist clinicians with prognosis, radiologic science professionals must understand cross-sectional anatomy. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 300      PHYSICS - INSTRUMENTATION AND IMAGES IN      3 CREDITS**  
**COMPUTED TOMOGRAPHY**

*Pre-requirements: RADI 250*

The content of this course provides the student with an understanding of the physical principles and instrumentation involved in computed tomography. The historical development and evolution of computed tomography will be reviewed. Physics topics covered include X-radiation in CT imaging, CT beam attenuation, linear attenuation coefficients, tissue characteristics, and the application of Hounsfield Units. Data acquisition and manipulation techniques, image reconstruction algorithms will also be explained.

Computed tomography systems and operations will be explored with full coverage of radiographic tube setup, collimator design and function, detector types, computer and processor features and functions. CT image processing from data acquisition through post-processing, archiving and patient related factors will be examined. Other elements that affect image quality will be explained, as well as artifact reduction and production and image communication. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 301      PROCEDURES FOR THE FORMATION OF      3 CREDITS**  
**IMAGES BY COMPUTED TOMOGRAPHY**

This course provides the student with detailed coverage of the procedures that are performed for CT imaging of adult and pediatric patients. Procedures include, but are not limited to, indications for the procedure, patient education, preparation, orientation, and positioning, patient history, and evaluation, use of contrast media, reference image, parameters of Selectable browsing and archiving of images. The course teaches the differentiation of specific structures, the patient's symptoms, and the pathology. The CT images studied will be reviewed for quality, anatomy, and pathology. CT procedures vary from center to center and usually depend on the preferences of the radiologists. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 302      PATHOLOGICAL CORRELATION BY TOMOGRAPHY      3 CREDITS**

*Pre-requirement: RADI 250*

This course provides the student with comprehensive coverage of common diseases that can be diagnosed with the use of CT. Each disease or traumatic process is examined from its description, etiology, associated symptoms, and diagnosis with its appearance on CT. Terms associated with these pathologies will be included. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 305      PHYSICS - PRINCIPLES, PARAMETERS, AND CONCEPTS      3 CREDITS**  
**OF MAGNETIC RESONANCE**

*Pre-requisite: RADI 250*

The content of this course provides the student with an overview of the physical principles of MRI. Topics are developed in individual outlines and can be sequenced according to the desired level of knowledge. Topics include the history of MR, nuclear MR (NMR), signal production, tissue characteristics, sequence pulses, imaging parameters, and imaging options. In addition, the content introduces quality assurance measures used to maintain image quality. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 303      PROCEDURES FOR OBTAINING      3 CREDITS**  
**IMAGES BY MAGNETIC RESONANCE**

*Pre-requisite: RADI 250*

The content of this course provides the student with imaging techniques related to the central nervous system (CNS), neck, thorax, musculoskeletal system, and the abdominopelvic regions. The content covers clinical applications, coils available and their specific use, considerations in scan sequences, alternatives in protocols (Ex. slice thickness, phase direction, and flow compensation), and positioning criteria. Anatomical structures and the plane that best demonstrates the anatomy are discussed, as well as signal characteristics of normal and abnormal structures. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 304      PATHOLOGICAL CORRELATION BY      3 CREDITS**  
**MAGNETIC RESONANCE**

*Pre-requirement: RADI 250*

The content of this course provides the student with familiarization with the most common pathologies found in magnetic resonance imaging and the appearance of these pathologies in various imaging protocols. The content covers a broad spectrum of commonly scanned body systems and areas. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 401      CLINICAL INTERNSHIP IN COMPUTED      6 CREDITS**  
**TOMOGRAPHY**

*Pre-requirement: RADI 250, RADI 300, RADI 301, RADI 302*

The contents and experiences of clinical practice should be designed to develop sequentially, apply, critically analyze, integrate, synthesize, and evaluate the concepts and theories in the compliance of radiological procedures. They are examined and evaluated through structured, sequential assignments based on clinical competencies, the concepts of team practice, patient-centered clinical practice, and professional development are discussed.

Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiological imaging, and total quality management. Measurement of competence levels and results ensure the well-being of the patient's preparation, during and after the radiological procedure.

**RADI 402      CLINICAL INTERNSHIP IN MAGNETIC RESONANCE      6 CREDITS**  
**AND COMPUTED TOMOGRAPHY**

*Pre-requisite: RADI 250, RADI 303, RADI 304, RADI 305*

Content is presented as progress in proficiency levels through clinician performance of proficiency objectives and tests. Students may have access to educational materials, facilities, procedures, and personnel necessary to achieve the content objectives. The objectives include demonstration and observation of an activity, after which the student assists in carrying out the activity. When a satisfactory degree of competence is evident, the student can carry out the activity under direct supervision. When both the student and instructor are satisfied with the student's competence, the student performs MR imaging procedures under indirect supervision to gain experience and knowledge.

**RADI 403      PRE-BOARD SEMINAR IN TECHNOLOGY      3 CREDITS**  
**RADIOLOGY, CT, AND MRI**

*Pre-requisite: ALL CONCENTRATION COURSES OF THE PROGRAM*

The content of this course provides the student with a review of the content of radiological technology (RT) and the modalities of Magnetic Resonance (MRI) and Computed Tomography (CT). This review is based on the content of the exam from the American Registry of Radiologic Technologists (ARRT) and the Examining Board of Radiological Technologists of Puerto Rico. In addition, the content of this course allows you to assess the knowledge and cognitive skills that underlie the intelligent performance of tasks normally performed by radiologic technologists who perform computed tomography and magnetic resonance imaging. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 306      ETHICS AND LAW IN IMAGE SCIENCES      3 CREDITS**

The content of this course provides the student with a fundamental foundation in ethics. The historical and philosophical basis of ethics and the elements of ethical conduct are also discussed. The student examines a variety of ethical problems and dilemmas encountered in clinical practice. An introduction to legal terminology, concepts, and principles are discussed as well. Topics include misconduct, negligence, and legal and professional standards. The importance of proper documentation and informed consent is emphasized. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 307      COMPUTERS IN IMAGING AND INFORMATICS****3 CREDITS***Pre-requisite: COMP 200*

The content of this course provides the student with knowledge in computing and information processing. Presents applications of computers in radiological science related to image capture, display, storage, and distribution. Additional content is designed to provide the basics of patient information management. The management of the medical record, including privacy and regulatory issues, are examined. The role of the radiological technologist is identified and discussed. Additionally, this content imparts an understanding of the components, principles, and operation of digital imaging systems found in MR and CT, image data handling, data storage and manipulation (post-processing). The factors that affect the image such as acquisition, visualization, archiving, and retrieval are also discussed. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 404      RESEARCH AND LITERACY  
METHODS IN COMPUTER SCIENCE****3 CREDITS***Pre-requirement: COMP 200*

The content of this course provides the student with knowledge in research methods and information skills, which are important because the health profession is continually changing, which requires the radiologic technologist to possess new knowledge to function competently. The radiologic technologist must contribute to the body of knowledge and be able to effectively analyze resources to promote growth in the profession. The lifelong learning attitude enables the radiologic technologist to stay in tune with the current healthcare environment and be prepared to help foster the future and increase awareness of the profession in the global community. This content is aimed at developing and disseminating intellectual inquiry, information literacy, and the use of academic research methods. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**RADI 405      EDUCATIONAL PRINCIPLES FOR TECHNOLOGISTS****3 CREDITS***Pre-requirement: COMP 200*

The content of this course provides the student with the knowledge to impart an understanding of the strategies and techniques for the development of skills as an effective facilitator of learning in the clinical setting. This course has an additional 90 hours of outside work. The student will carry out the activities assigned in the Component.

## ACADEMIC CALENDAR \*

### Undergraduate - Regular Programs 2020 - 2021

#### AUGUST

29 Faculty Meeting

#### SEPTEMBER

1 Beginning of classes

1-12 Late Registration and Changes

7 Holiday - Labor Day

12 Deadline for incompletes

15 Deadline for teachers to submit incomplete removals to the Registrar's Office

14-19 US Constitution Week (*NON-HOLIDAY*)

19 Deadline to file graduation application (August 2021)

21-26 Suggested Week for Student Assessments

Sept 28- Oct 3 Virtual expression of the faculty with the President  
Virtual expression of the students with the President

#### OCTOBER

12 **Holiday** - Columbus Day

19-24 Suggested Week for Student Assessments

#### NOVEMBER

2 Deadline for partial withdrawals

3 **Holiday** - General Elections

2-7 Week for academic advising

9-18 Enrollment process for next term

11 **Holiday** - Veteran's Day



16-21	Suggested Week for Student Assessments
19	Discovery Day and Culture - Puerto Rico (there are classes and administrative work)
25	Deadline for incomplete applications
26-28	Academic and Administrative Recess (Thanksgiving)
<b>DECEMBER</b>	
5	Deadline for total withdrawals
7-12	Final Student Assessments:
	Dec 7, 2020, L classes
	Dec 8, 2020, K classes
	Dec 9, 2020, LM classes, M classes
	Dec 10, 2020, KJ classes, J classes
	Dec 11, 2020, V classes
	Dec 12, 2020, S classes
12	Deadline for students to confirm enrollment with debt and/or documents pending for practice
15	Deadline for teachers to report grade records in the system
<b>JANUARY 2021</b>	
9	Faculty Meeting
11	Beginning of classes
11-23	Late Registration and Changes
18	<b>Holiday</b> - Martin Luther King, Jr. Day
23	Deadline for incomplete removals
26	Deadline for teachers to submit incomplete removals to the Registrar's Office
30	Deadline to file graduation application (December 2021)

## **FEBRUARY**

1-6 Suggested Week for Student Assessments

15 **Holiday** - Presidents Day and National Heroes Day

## **MARCH**

1-6 Suggested Week for Student Assessments

13 Deadline for partial withdrawals

15-20 Week for academic advising

22 **Holiday** - Emancipation Day

23-31 Enrollment process for next term

23-27 Virtual expression of the faculty and students with the Institutional Board of Directors

Mar 29 - Apr 3 Suggested Week for Student Assessments

## **APRIL**

1-3 Academic and administrative break (Easter)

10 Deadline to request incompletes

17 Deadline for Total Withdrawals

19-24 Student's Final Assessments

Apr 19, 2021, L classes

Apr 20, 2021, K classes

Apr 21, 2021, LM classes, M classes

Apr 22, 2021, KJ classes, J classes

Apr 23, 2021, Friday classes

Apr 24, 2021, Saturday classes

24 Deadline for students to confirm enrollment with debt and/or pending documents for practice

Deadline for Completing FAFSA Free Application for Federal Student Aid - (Pell Grant) Year 2021-2022

27	Deadline for professors to submit grade records to the system
<b>MAY</b>	
1	Faculty meeting
3	Beginning of classes (students)
3-15	Late Registration and Changes
15	Deadline for incomplete removal
18	Deadline for professors to submit incomplete removals to Registrar's Office
22	Deadline to apply for graduation (April 2022)
24-29	Suggested Week for Student Assessments
31	<b>Holiday</b> - Memorial Day
<b>JUNE</b>	
12	Graduation Acts (Academic Recess) *
21-26	Suggested Week for Student Assessments
<b>JULY</b>	
3	Deadline for partial withdrawals
5	<b>Holiday</b> -United States Independence (Sunday is celebrated on Monday)
6-10	Week for academic advising
12-21	Enrollment process for the next term
12-17	Suggested Week for Student Assessments
31	Deadline to request incompletes
<b>AUGUST</b>	
7	Deadline for total withdrawals
9-14	Final Student Assessments

Aug 9, 2021, L classes

Aug 10, 2021, K classes

Aug 11, 2021, LM classes, M classes

Aug 12, 2021, KJ classes, J classes

Aug 13, 2021, Friday classes

Aug 14, 2021, Saturday classes

14                      Deadline for students to confirm enrollment with debt and/or pending documents for practice

17                      Deadline for professors to submit grade records to the system

**\*Subjected to change**

## **Academic Calendar \***

### **Graduate Program**

**2020 - 2021**

#### **August - October 2020**

##### **August**

10                      Beginning of classes (students)

10-15                      Late registration and changes

15                      Deadline for incomplete removals

18                      Deadline for professors to submit incomplete removals

24-29                      Suggested Week for Student Assessments

29                      Deadline to apply for graduation (January-March 2021)

##### **September**

7	<b>Holiday</b> - Labor Day
14-19	US Constitution Week ( <i>NON-HOLIDAY</i> )
	Suggested Week for Student Assessments
16-19	Enrollment process (October-December 2020)
19	Deadline for partial withdrawals
26	Deadline for total withdrawals
Sept 28 - Oct 3	Virtual expression of the faculty with the President
	Virtual expression of the students with the President
Sept 28 - Oct 3	Student's Final Assessments
<b>October</b>	
6	Deadline for professors to submit grade records to the system
<b>October - December 2020</b>	
<b>October</b>	
12	<b>Holiday</b> -Columbus -Day
19	Beginning of classes (students)
19-24	Late registration and changes
24	Deadline for incomplete removals
27	Deadline for professors to submit incomplete removals
<b>November</b>	
2-7	Suggested Week for Student Assessments
3	<b>Holiday</b> - General Elections
7	Deadline to apply for graduation (March-May 2021)
11	<b>Holiday</b> - Veteran's Day
16-21	Suggested Week for Students Assessments

19	Discovery Day and Culture - Puerto Rico (there are classes and administrative work)
18-21	Enrollment process (January - March 2021)
21	Deadline for partial withdrawals
26-28	Academic and Administrative Recess (Thanksgiving)

## **December**

5	Deadline for total withdrawals
7-12	Student's Final Assessments
15	Deadline for professors to submit grade records to the system

## **January-March 2021**

### **January**

11	Beginning of classes (students)
11-16	Late registration and changes
16	Deadline for Incomplete removals
18	<b>Holiday</b> - Birth of Martin Luther King, Jr. Day
19	Deadline for professors to submit incomplete removals
25-30	Suggested Week for Student Assessments
30	Deadline to request graduation (June-August 2021)

### **February**

15	<b>Holiday</b> - Presidents day and National Heroes Day
16-20	Suggested Week for Student Assessments
17-20	Enrollment process (March - May 2021)
20	Deadline for partial withdrawals
27	Deadline for total withdrawals

## **March**

- 1-6 Student's Final Assessments
- 9 Deadline for professors to submit grade records to the system

## **March - May 2021**

## **March**

- 15 Beginning of classes (students)
- 15-20 Late registration and changes
- 20 Deadline for incomplete removals
- 22 **Holiday** – Emancipation Day
- 23 Deadline for teachers to submit incomplete removals
- 23-27 Virtual expression of the faculty and students with the Institutional Board of Directors

## **March 29 - April 3 Academic break (Easter)**

## **April**

- 1-3 Administrative break (Easter)
- 5-10 Suggested Week for Student Assessments
- 10 Deadline to apply for graduation (August - October 2021)
- Apr 26 - May 1 Suggested Week for Student Assessments
- Apr 28 - May 1 Enrollment process (June - August 2021)

## **May**

- 1 Deadline for partial withdrawals
- 8 Deadline for total withdrawals
- 10-15 Student's Final Assessments
- 18 Deadline for professors to submit grade records to the system
- 31 **Holiday** - Memorial Day

## **June - August 2021**

## June

12	Graduation Acts (Academic Recess) *
14	Beginning of classes (students)
14-19	Late registration and changes
19	Deadline for removal of incompletes
22	Deadline for professors to submit removal of incompletes
June 28 - July 3	Suggested Week for Student Assessments

## July

3	Deadline to apply for graduation (October-December 2021)
5	<b>Holiday</b> - Independence of the United States (If Sunday, it is celebrated on Monday)
19-24	Suggested Week for Student Assessments
21-24	Enrollment process (August - October 2021)
24	Deadline for partial withdrawals
31	Deadline for total withdrawals

## August

2-7	Student's Final Assessments
10	Deadline for professors to submit grade records to the system

**\*Subjected to change**



## COSTS OF STUDIES AT THE UNDERGRADUATE LEVEL<sup>1</sup>

Cost structure by term, for Certificate, Associate and Baccalaureate Programs:

Fees and Other Charges		
Admission		\$ 10.00
Re-admission		25.00
General Fee per enrolled term		60.00
Late registration		* * 10.00
Incomplete removal		*** 25.00
Transcripts		5.00
Work experience (Pro-Follow) - For each course requested for evaluation		**** 150.00
Work experience (nursing portfolio) - For each course requested		50% course cost
Challenge exams		**** 210.00
Nursing challenge exams		**** 250.00
Degree Award		50.00
Duplicate Documents		***** 5.00
Replacement ID card		5.00
Amount of Credits	Cost per term all Programs (except for Business Administration programs)	Cost per term: Baccalaureate, Associate Degree and Certificate in Business Administration; Associate Degree in Office Administration
12 -15 credits	\$ 3,530.00	\$ 3,173.00
9 - 11 credits	\$ 2,648.00	\$ 2,380.00
6-8 credits	\$ 1,763.00	\$ 1,587.00
5 credits or less	\$ 294.00 per credit	\$ 264.00 per credit

If the student enrolls 16 credits or more, the cost (after 15 credits) will be calculated proportionally, according to the cost of enrollment per semester. Fees and charges are added to the tuition charge, as applicable.

\*\*Does not apply to new students or re-admissions.

\*\*\* For the removal of incomplete from the first class. Each removal of incomplete from additional classes will be \$5.00.

\*\*\*\* To be paid in advance.

\*\*\*\*\* By duplicate document. (Includes a copy of the Class Program. To be paid at the time of your request.

**Note:**

- a. The university reserves the right to modify study costs without prior notice.
- b. The student's account will be charged the cost for: 1) value received or to be received for activities or services not contemplated above, if the student agrees with it; and 2) for fines for violation of regulations, and library, among others.
- c. Fees and other charges are non-refundable after the start of classes. Review date:  
June 2020

**Effective date: for all students enrolled for the academic term of**  
September 2020

<sup>1</sup>Cost table applicable to students enrolled in the Caguas Sur and Yauco campuses.

## STUDY FEES

Costs applicable to students enrolled in the campuses of Bayamón, Carolina and the town of Caguas Norte. Columbia Central University has established the costs of studies that are classified as follows:

- Admission and Readmission
- Tuition Fee Cost for Diploma, Associate Degree and Baccalaureate Programs
- Miscellaneous
- Tuition Costs Less than 12 Credits

### Admission and Readmission Fee

Columbia Central University has established the following costs for applications for admission, re-admission and for special students, which are not refundable:

Application	Non-Refundable Costs
Admission	\$25.00
Re-Admission	\$25.00
Especial Students	\$25.00

### Cost of Tuition

#### 1. Diploma Programs

The tuition cost will be \$ 3,550.00 per semester for any of the diploma programs with a full academic load (12 credits or more), which includes the total tuition costs and laboratory fees.

If the student does not enroll in a full academic load, understand 11 credits or less, the cost will be calculated proportionally according to the cost of registration per semester for the class program.

The program includes a charge for practical experience and other articles and materials as identified in the Curriculum Sheet delivered to the Admissions Office.

Columbia Central University will deliver the articles that apply to students when the study program so requires.

#### 2. Associate Degree Programs

The cost of tuition for associate degrees will be \$ 3,550.00 per semester. This cost applies to all enrollment between 12 credits up to a maximum of 18 credits.

If the student enrolls in 11 credits or less, the cost will be calculated proportionally according to the cost of registration per semester for the study program.

If the student enrolls in 19 credits or more, the cost of credits more than 18 will be calculated proportionally according to the cost of registration per semester for the study program.

The program includes a charge for laboratory, charge for clinical experience and other materials and articles as identified in the Curriculum Sheet delivered to the Admissions Office.

Radiology students will be charged \$75.00 for each dosimeter lost and \$20.00 per month for each dosimeter delivered outside of the exchange date. They must also bear the cost of the RX marker in the amount of \$20.00.

Columbia Central University will deliver the articles that apply to students when the study program requires it.

### 3. Baccalaureate Programs

The cost of tuition for associate degrees will be \$3,550.00 per semester. This cost applies to all enrollment between 12 credits up to a maximum of 18 credits.

If the student enrolls in 11 credits or less, the cost will be calculated proportionally according to the cost of registration per semester for the study program.

If the student enrolls in 19 credits or more, the cost of credits more than 18 will be calculated proportionally according to the cost of registration per semester for the study program.

The program includes laboratory charge, clinical experience charge and other items and materials as identified in the Curriculum Sheet delivered to the Admissions Office.

Columbia Central University will deliver the articles that apply to students when the study program so requires.

## Miscellaneous Costs

Columbia Central University has established miscellaneous costs, which are subject to change as they can be reviewed annually. Below are the costs according to the requested service:

Requested Service	Cost
Transcript of Credits	\$ 2.00
Certification of Graduation	\$ 2.00
Fee for Graduation Acts for Diploma Programs	\$ 75.00
Fee for Graduation Acts for Associate Degree and Baccalaureate Programs	\$ 75.00
Duplicate Diploma	\$ 15.00
Class Observant	\$ 50.00
Revalidation Review (Applies to non-graduates)	\$ 50.00 per day taking the Review
Challenge Exam	\$ 100 (Must be paid before taking the exam)
Educational Experience in Continuous Growth (Experiential learning)	\$ 150 per course requested.
Study Certificates for Active Students	Under no cost for active students.
Study Certificates for Graduate Students	\$ 2.00
Replacement ID Card	\$ 5.00
Additional Parking Stamp	\$ 10.00

## COSTS OF STUDIES AT GRADUATE LEVEL

Cost per Credit Non-graduated students	\$ 165.00
Cost per Credit Graduated students	150.00
Admission Fee Non-graduated students	50.00
Readmission Fee	25.00
Graduation Fee for Non-Graduated Students	100.00
Graduation Fee for Graduated Students	75.00
General Fee	* 125.00
Transfer Validation	** 25.00
Transcripts	5.00
Challenge Exam	200.00
Modules	*** 35.00
Work experience Portfolio -For each course requested for evaluation	250.00

\* Per semester and per enrolled student. For those students who enroll in 7 credits or more. In the case of students enrolled in 6 credits or less, the fee will be \$ 75.00.

\*\* More than 5 credits accepted in transfer, \$ 5.00 will be charged for each additional credit accepted.

\*\*\* The cost is for each module requested. Requirement of the Master's Program in Business Administration for those students who do not have a Baccalaureate degree in the area of Administration. Includes: Principles of Management, Principles of Marketing, Principles of Economics, Introduction to Accounting and Economics.

Review date: December 2020

Effective date: From enrollment end of August 2018.

## RIGHT TO CORRECT THE CATALOG

The provisions contained in this publication should not be considered as an irrevocable contract between an applicant or student and Columbia Central University. The Institution reserves the right to amend this Catalog while it is in force. Each one of the changes that this Catalog undergoes will be notified and exposed for the benefit of the entire university community, through previously approved amendments.

### Special Re-educational Measures

Everything contained in this catalog should not be construed as limiting the authority of the Columbia Central University Board of Directors or the Institution's Administration to initiate and adopt measures deemed necessary in situations not foreseen or contained in this document.

### Separation in Catalog Provisions

The non-constitutionality or non-execution of any of the parts of this Catalog will not affect the validity of its remaining parts.