





# INSTITUTIONAL CATALOG

2023-2024

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## MESSAGE FROM THE PRESIDENT

Welcome to Columbia Central University. We are honored that you have selected our University to continue your post-secondary education that will lead to your professional development. Our faculty and staff are committed to providing you with an educational environment of excellence that will enable you to achieve the best possible results in the program you have selected.

Our University has remained a solid, constant and firm organization in its commitment to educate professionals of excellence and total dedication to their vocations. We have the technology, equipment, materials, laboratories, and the best resources to prepare the future professionals of Puerto Rico, according to the real needs of the profession. In this way, we put at the disposal of the community highly qualified human resources trained in the most advanced trends currently used in the job market.

Cordially yours,

**José A. Córdova**  
**President**



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# GENERAL INFORMATION

# INSTITUTIONAL BOARD OF DIRECTORS

The governance of Columbia Central University is carried out by an Institutional Board of Directors and a Corporate Board of Directors. The purpose of the Institutional Board is to serve the public interest, be responsible for the quality and integrity of the University, and ensure the University fulfills its mission and goals. Currently, these boards are composed of the following members:

## **Corporate Board of Directors**

Atif Gilani-----Director

Brad Whitman-----Director

Ruchi Hazaray-----Director

## **Institutional Board of Directors**

Alberto Estrella, Esq.-----Chair

Ruchi Hazaray-----Vice Chair

Sara Salva-----Secretary

Owen Wing-----Member

Francisco Bartholomei-----Member

Vicente Feliciano-----Member

Marcos Vidal-----Member

Michael Bannett-----Non-Voting Member

José Córdova-----Non-Voting Member



## 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 is 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

Transform and develop individuals, in an integral manner, for their success.

## VISION

To be an innovative university, with sustained growth, various study modalities and Avant-garde offerings.

## INSTITUTIONAL GOALS

1. Transformation and Integral Development
  - a. Facilitate a university experience that provides the knowledge, tools and skills that lead to personal, professional, and social improvement.
2. Quality of Services
  - a. Development of a student-centered culture of service that facilitates their experience and satisfaction.
3. Academic Excellence
  - a. Maintain high standards of educational quality, enhancing the ability and knowledge of the faculty and students, integrating expertise in teaching subjects, with a diversity of strategies, adjusting to the needs of the student body, thus fostering academic, personal, and professional skills.
4. Effectiveness and Institutional Development
  - a. Promote a culture of continuous improvement in its administrative and academic management, which allows the university to remain relevant and competitive in the markets it serves.

# INSTITUTIONAL VALUES

1. Innovation
  - a. We are constantly evolving.
2. Excellence
  - a. We continually learn, add value in everything we do, and exceed expectations.
3. Orientation to Results
  - a. We have excellent operational discipline that allows us to fully comply and create impact.
4. Passion for Service
  - a. We value our constituents and serve them with care.
5. Respect for Diversity
  - a. We recognize and value our differences and capitalize on them.
6. Teamwork
  - a. We recognize our interdependencies and work together.
7. Integrity
  - a. We conduct ourselves with transparency and maintain consistency between what we communicate and what we do.
8. Sense of urgency
  - a. We act in an empowered manner.

## 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 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 merger, 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.

In March 2023, Renovus, acquired National College of Business and Technology, Inc., the owner of NUC University. Currently, Renovus owns both Columbia Central University and NUC University. The two institutions plan to merge in Fall 2023 and operate under the NUC name and institutional structure.

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 years.

## 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, associates, 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 have five modern classrooms, a 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.



In these facilities, the Institution offers the following academic programs:

1. Master's Degree in Business Administration, specialty in Management
2. Master's Degree in Business Administration, specialty in Human Resources
3. Master's Degree in Business Administration, specialty in Health Organizations Management
4. Master of Science in Nursing, specialty in Adults and the Elderly, with a choice of a role in Education or Management.
5. Bachelor's Degree in Business Administration
6. Bachelor's Degree in Information Technology, Networks and Security
7. Bachelor's Degree of Science in Nursing RN to BSN
8. Bachelor's Degree of Science in Nursing
9. Bachelor's Degree of Science in Diagnostic Imaging with concentration in CT and MRI
10. Associate Degree in Cyber Security
11. Associate of Science Degree in Nursing
12. Associate Degree in Business Administration
13. Associate Degree in Therapeutic Massage
14. Associate Degree in Pharmacy Technician
15. Associate Degree in Audio
16. Associate Degree in Graphic Design
17. Associate Degree in Cardiac and Vascular Technology
18. Associate Degree in Optical Sciences
19. Associate Degree in Radiological Technology
20. Associate Degree in Medical Sonography
21. Computer Repair Technician
22. Preschool Teacher Assistant
23. Practical Nursing
24. Professional Pet Groomer
25. Medical Secretary with Medical Insurance Billing
26. Veterinary Assistant
27. Laboratory Assistant with Electronic Processing

## YAUCO CAMPUS

The Yauco Campus consists of three buildings in 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 students' 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 allows 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. In these facilities, the Institution offers the following academic programs:

1. Bachelor's Degree of Science in Nursing RN to BSN
2. Bachelor's Degree in Information Technology, Networks and Security
3. Associate of Science Degree in Nursing
4. Associate Degree in Pharmacy Technician
5. Associate Degree in Graphic Design
6. Computer Repair Technician
7. Laboratory Assistant with Electronic Processing
8. Veterinary Assistant with Pet Grooming

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

## *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, rector 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. Bachelor's in Nursing Sciences
2. Bachelor's Degree of Science in Diagnostic Imaging with concentration in CT and MRI
3. Associate Degree in Radiological Technology
4. Associate Degree in Medical Sonography
5. Associate Degree in Optical Sciences
6. Associate Degree in Cardiac and Vascular Technology
7. Associate Degree in Nursing Sciences
8. Laboratory Assistant with Electronic Processing
9. Veterinarian Assistant
10. Practical Nursing
11. Professional Pet Groomer
12. Medical Secretary with Insurance Billing Progra

## 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 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 academic 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 means 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 loans are 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.

## 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 for 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 for 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 refers 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.

## *Treasury 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 a 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 these grants is to help the student obtain a certificate or an academic degree for those students who thus qualify. The offer of this aid 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 Program*

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 students 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) 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 requires a high school diploma or its equivalent (for undergraduate programs), and graduation from a bachelor degree program for graduate programs. 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.

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 for offering clear and complete information about academic programs to any person interested in attending the University. Among the main information that is given to the prospective student is the curriculum for the program of interest, the admission requirements to be completed, practice requirements and licensure disclosures (if applicable), and the eligibility criteria to apply for licensure and/or licensure exams per board review requirements (if applicable), among other documents. In addition, the interested party is directed to go through the Financial Aid Office and the Bursar's Office to receive all the information about the available financial 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.
2. Be a high school graduate or have the recognized equivalent preparation:
  - a. High school completion must be verified by submitting the official high school transcript or original diploma. A student who cannot provide an official high school transcript or a copy of his/her diploma because the school closed may be permitted to provide a signed affidavit of high school completion. Such exceptions are only allowed in the most exceptional cases and must be reviewed and approved by the Academic Opportunity Program.
  - b. Documentation of successful completion of the general education development (GED) or other state sanctioned test or diploma equivalency certificate is accepted as equivalent to high school completion.
  - c. If the student is transferring from another post-secondary institution, an official college transcript documenting completion of 1) an associate's degree 2) successful completion of at least 60 semester or trimester credit hours or 72 quarter credit hours that does not result in the awarding of an associate's degree, but that is acceptable for full credit toward a bachelor's degree at any institution or 3) enrollment in a bachelor's degree program where at least 60 semester or trimester credit hours or 72 quarter credit hours have been successfully completed, including credit hours transferred into the bachelor's degree program.
  - d. Documentation of completion of home schooling at the secondary school level (additional details below under "Admission of Homeschooling Students").
3. The student must have earned a minimum grade point average of 2.00 or more in high school or from the postsecondary institution they are transferring from. Those students who do not meet the required GPA of 2.00, may be eligible for admission as regular students under the "Academic Opportunity Program" (POA). (See Academic Opportunity Program Policy published in the institutional catalog).

4. If the student cannot present an official transcript or the results of the equivalency exam, the high school diploma will be accepted, and a true and exact copy of the original diploma will be taken by college personnel 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 document the GPA earned 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. Students under 18 years of age must be accompanied by their parents or their sponsors when completing the admissions process.
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 be 18 years of age or older by the time the requirement applies.
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.

### *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 or Graduate Program Office. Students who have graduated from CCU will also have to file an application for admission to the preferred graduate program.
2. Submit one (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 three (3) letters of recommendation from 3 people who can offer an opinion about the candidate's chances of success in graduate studies. See forms included in the application.

4. International students must provide the official transcript, diploma or degree received with their grades and grade point 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.

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

Masters in Business Administration

- Have a 2.50 cumulative baccalaureate grade point average. Students interested in being admitted who have a lower grade point average, refer to the POA.

Masters 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-Residential (distance) modality, in addition to the aforementioned requirements, the applicant must:**

- Distance education students enrolled in graduate programs must be residents of Puerto Rico. Prospective students must present the university with a copy of an identity document from the state which proves their identity and residence. 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 unexpired passport. 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 graduated from high school.

The admissions officer will use the document provided by the Board of Postsecondary Institutions (or the appropriate predecessor or successor agency), which indicates the school's license date, to determine if the high school was licensed when the student graduated. If the school was licensed when the student graduated, the documentation of high school completion is accepted. If the school was not licensed at the time the student graduated, the student is directed to consult with the school. If the school was not registered/licensed at the time the student graduated, the student will not be admitted to the University.

In those cases that the documents presented by the student for validation reflect inconsistencies 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 change in name.

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

CCU, as part of its admission policy, verifies high school graduation documents in the admission process for students from accelerated schools in Puerto Rico. This policy applies to all incoming students who earned their high school diploma from an accelerated school and do not provide documentation of a recognized equivalent to a high school diploma. 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 (or the appropriate predecessor or successor agency).

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

1. Official accelerated school credit transcript.

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

**High school credentials of questionable validity**

All high school diplomas and/or transcripts submitted by prospective and admitted students are individually reviewed by admissions officers. If CCU has any reason to question the validity of a student's documentation of high school completion, the admissions officer will check with the high school to confirm the validity of the student's diploma and will confirm with the relevant department or agency in the state in which the secondary school is located (including via a published list) that the secondary school is recognized as a provider of secondary school education. A student's self-certification of high school graduation is not sufficient to validate a questionable high school credential.

*Admission of Homeschooling Students*

Students from homeschooling may apply to CCU in three ways:

1. Present evidence of having completed a program of study 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 home studies will prepare a transcript of the courses completed by the student. It should include the name of the course, period in which the course was taken, and grade obtained. The student must complete all courses required by the Puerto Rico Department of Education to complete High School.
  - b. Affidavit that highlights that the student completed their studies through the home learning modality (homeschooling).
3. If the completed a program of study equivalent to high school graduation in the United States or a foreign company, the student must submit their transcripts to the National Association of

Credential Evaluation Services (NACES) for evaluation. NACES will confirm if the student's program of study is equivalent to high school completion.

### *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 Credit**

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 completed in the institution of origin will be considered individually for validation; CCU reserves the right to determine the awarding of transfer credit for courses completed at other institutions. For more details, refer to the Course Validation Policy.

- For students at the graduate level, transfer credit hours will be accepted up to a maximum of 18 credits. Ordinarily, completed courses with a grade of less than B will not be accepted as transfer credits. Courses accepted in transfer will not be considered to compute the student's grade point average at CCU.
- For students with professional experience who are applying to the Master of Business Administration Program, CCU offers the opportunity to consider and credit 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 awarded. At the undergraduate level, a student can also be awarded credits for professional experience (residency requirements apply).

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 completed 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 prior to the acceptance of transfer credit. This provision applies only to undergraduate programs.

The student with veteran's 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. 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 regarding this at the Admissions Office, so that it can be referred to the Dean of Academic Affairs.
- In those cases that present evidence of having completed 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 complete at least 21 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 complete 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, in which at least 18 credit hours must be completed in the student's 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 the missing documents. 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. Such a student is considered to be conditionally admitted and financial aid will not be disbursed to the student until all admission requirements have been satisfied.

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 to 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 postsecondary 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 is 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.

## Dispositions

1. Students:
  - a. Not having previously enrolled in the course.
  - b. Have approved all requirements established for the course to be challenged.
  - c. 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.
  - d. Once enrolled in the courses, the student will not have the right to request a challenge exam for said courses.
  - e. The challenge exam is not a substitute or alternative for completing courses or making up courses previously attempted and not approved.
  - f. The student may only challenge up to a maximum of 3 courses per semester.
  - g. Make the payment at the Treasurer's Office.
  - h. 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 to 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 three people 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 the 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 based on 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.



- 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 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 of the courses offerings that follow in the Suggested Studies Program, uninterrupted (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 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 to 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 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 work 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 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, as long as he/she is enrolled in an approved academic program under the distance education modality (hybrid program or online program). A hybrid program is one that offers fully online courses and face-to-face courses such as laboratory courses and internships. The suggested program of study of the student in this modality clearly identifies the courses of the program that will be offered completely online and those that must be taken face-to-face, in order to fulfill the objectives of the program. An online program is one that offers its courses completely online.

## 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 on 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 those 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 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.

## ATTENDANCE 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 on 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 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 on 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 (including 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.
  - b. 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 check daily 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, and is 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.

## TITLE IV FUNDS RETURN POLICY (R2T4)

Under the Title IV funding (federal financial aid) regulations issued by the U.S. Department of Education, the following policies have been established for those students enrolled in an eligible program who are withdrawn, expelled, or for any reason do not complete the period of enrollment or payment period in which they were enrolled. Please review CCU's Withdrawal Policy for information on the process to withdraw. A student is not considered withdrawn if any of the following applies:

1. The student completes the requirements for graduation before completing the payment period (applicable only to graduation from the student's program of enrollment as of that payment period).
2. If the student is enrolled in a program comprised of modules and any of the following applies:
  - a. The institution obtains written confirmation that the student will attend a later module in the same payment period or period of enrollment that begins no later than 45 calendar days after the end of the module the student ceased attending. (If the student is enrolled in any full-term courses during the payment period the 45-day timeline does not apply, but the student must confirm in writing that they will be returning to a module that begins later in the payment period),
  - b. The student successfully completes one or more modules that, together, comprise at least 49% of the days in the payment period (excluding scheduled breaks of five or more consecutive days and all days between modules); or
  - c. The student successfully completes coursework equal to or greater than the coursework required for half-time enrollment.

Regulations for the Title IV programs require that when a student ceases attendance during a payment period or period of enrollment, the amount of financial aid earned by the student up to that point be determined using a pro rata calculation. To determine the amount earned by the student, CCU performs

a pro rata calculation that uses the number of days completed in the payment period (as of Last Day of Attendance) as the numerator, and as the denominator, the number of days in the semester, or as follows if enrolled in a semester containing modules:

- If eligible for Pell Grant, Iraq-Afghanistan Service Grant during the period - days in modules the student actually attended, or
- If eligible for Direct Loan or FSEOG funds during the period (regardless of eligibility for other Title IV programs) - days in modules the student was enrolled in on the first day of the period or enrolled in at any time during the period.

Institutional breaks of five (5) consecutive days or more, if applicable during the payment period, will be excluded from the calculation. For example, if, as of the last day of attendance, a student completed 50 days of a semester of 100 days, they will have earned 50% of their Title IV aid for that semester.

If the percentage that results from the formula is greater than 60%, the student earned 100% of the financial aid for which he/she was eligible.

If the percentage earned is 60% or less and the financial aid for which the student was eligible prior to ceasing attendance has already been disbursed, the University and/or the student will be responsible for reimbursing the portion of the funds the student did not earn. The unearned portion of Title IV funding the institution is responsible for, must be returned to the U.S. Department of Education no later than 45 days from the date CCU determined the student stopped attending (Date of Determination).

If the Institution is not required to return all of the unearned funds, the student may be required to return the remaining amount. If applicable, within 30 days from date of determination of withdrawal, CCU will contact the student to coordinate arrangements to return the student portion of unearned grant funds. Students must make satisfactory arrangements to repay unearned grant funds within 45 days of receiving CCU's notice of overpayment. If the student fails to make satisfactory arrangements, CCU will proceed to report the student's overpayment to NSLDS. Please note that failure to make satisfactory arrangements may result in the student losing eligibility for Title IV funds.

**Any unearned funds are returned in the following order:**

- Unsubsidized Direct Loans;
- Subsidized Direct Loans;
- Direct PLUS Loans;
- Federal Pell Grants;
- IASG Grants;
- FSEOG Grants;
- TEACH Grants.

The student portion of grants will not be returned if the grant overpayment is \$50 or less. Any loan amount returned by the borrower must be repaid according to the terms of the borrower's promissory note.

If the financial aid for which the student was eligible has not yet been disbursed, the student may be eligible to have the financial aid earned disbursed after the R2T4 calculation has been performed. If the R2T4 calculation determines the student has received less in Title IV disbursements than they have earned, the student may be offered a post-withdrawal disbursement (PWD). CCU may automatically disburse all or a portion of the PWD that consists of grant funds in order to satisfy tuition, fees, room, and board, as applicable, within 45 days of the date the CCU determined the student ceased attending. CCU will seek the student's permission to use PWD grant funds for all other educationally related charges. Any PWD of loan funds must be offered to the student or parent borrower in writing within 30 days and accepted by the student or parent borrower and disbursed within 180 days of the date CCU determined the student ceased attending. Loan borrowers who are offered a PWD of loan funds will receive written instructions for declining the PWD or accepting all or a portion of the PWD. A borrower can never receive a PWD for funds for which they did not meet the eligibility criteria at the time they ceased attending.

For additional information, the student can request a copy of the form used to calculate the Return of Title IV Funds entitled: "Treatment of Title IV funds When a Student Withdraws", which is available in the Financial Aid Office.



The R2T4 calculation is separate from CCU's refund policy. If a student ceases attending, the Title IV funds that previously paid or were anticipated to pay the student's balance due to CCU may be reduced resulting in the student owing a balance to CCU. CCU will seek payment from the student for any balance due on the student's account due to the return of funds to the U.S. Department of Education.

**CLARIFICATION:** This policy may be modified by new regulations issued by the Federal Department of Education and the Accrediting Agency, or as otherwise deemed appropriate. In that case, CCU will update the relevant publications. We encourage the student to consult the newsletters, catalogs, offices, or other means of the University concerning new refund policies to be issued, if applicable.

## 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 for 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 the 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 benefit.

# 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 that end, CCU 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 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 contracting with CCU.

## **Objective**

This policy offers the necessary support and guidance to clarify the responsibility of staff and students 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 possesses is intended to ensure and satisfy the needs of the university community and its resources. It is necessary that everyone who uses our facilities observe good judgement and apply what is described in this policy. You must try to be careful in your activities and not try to alter or circumvent the security measures provided by the institution. When necessary, you should request technical support.

## **Collaborative Content**

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

## **Security**

In compliance with Law 267 of 2000, our university has acquired several security systems. These systems provide security for 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 that the user take security measures when using the computer resources of the university. 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 pages that are not secure. If you see a message, comment, image, or anything else online that is thought to endanger personal safety or the University, it should be brought to the attention of a professor or supervisor immediately.

Personnel who, as part of their duties, handle sensitive information must take the necessary precautions to protect said information. You must not share your information system access credentials with another user.

To maintain our equipment and systems at an optimal level, we recommend our users report any malfunctions to the Department of Information Systems 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 carrying out 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 an unexpected way.

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

### **Copyright Policy**

The university has a Copyright Policy (Employee and Faculty Handbooks, Student Consumer Handbook) to which users must refer to the handling of information in such a way that is not violated. When using online information to carry out work and research, the user will have the responsibility to adequately cite the sources from which they were obtained, giving credit to the original author.

### **Cyber Bullying**

Cyberbullying, as set forth in our Institutional Bullying/Harassment and Cyberbullying Policy (Employee and Faculty Handbooks, Student Consumer Handbook), will not be tolerated. Harassing, disrespecting, sending harassing or threatening messages, demeaning, impersonating, disclosing confidential information about a person, misleading, excluding, and online harassing are all examples of cyberbullying. You should not send electronic messages or post comments with the intention of frightening, hurting, harming, or intimidating someone.

Engaging in these activities or engaging in any online activity intended to harm (physically or emotionally) another person, will result in disciplinary action as set forth in our policy. In some cases, cyberbullying can be a crime. All user activity is monitored.

## **Acceptable Uses of Technology**

The technology provided to our users can be used to:

1. Access the infrastructure and resources for activities related to the university.
2. Promote the responsible use of university resources.
3. Treat university property carefully and notify technical support staff if any problems occur with its operation.
4. Immediately notify a professor or supervisor if you see threatening, questionable, or inappropriate content online.

## **Unacceptable Uses of Technology**

1. Post unauthorized information/graphics belonging to the university, its employees, or its students.
2. Visit improper or inadequate sites.
3. Design, create, or post sites that do not follow the standards of the university.
4. Use logos without authorization from the university.
5. Use online chat rooms. This does not apply to the Chat tool in Canvas LMS or MS Teams.
6. Violate the copyright of information obtained through the web. Make or use illegal copies of copyrighted software, store such copies on CCU systems, or transmit them over university networks.
7. Access video games for recreational use.
8. Access social media sites such as Facebook, Twitter, Instagram, and others during work and/or class hours; excluding personnel assigned to use said sites for purposes aimed at promoting the university of its educational programs.
9. Access sites to view or download movies or TV shows.
10. Send inappropriate emails such as: nonessential messages including jokes, thoughts of the day, chain emails, political ads, personal commercial use and making comments that affect the

institutional image.

11. Gain access to or use another person's system, files, or data without permission.
12. Share a password or other means of authentication with any other person, either internal or external to CCU.
13. Use computer programs to decode passwords or access control information.
14. Attempt to circumvent the security measures of the system or the institutional network.
15. Engage in any activity that is intended to harm systems or any information stored on them, including creating or spreading malware; discontinue services; or make unauthorized modifications to CCU data.

### **Confidentiality**

No personal or private email is confidential. Emails may be subject to revision without notice.

### **Disciplinary Actions for Employees**

All violations will be handled like any other infraction of university policies and sanctions will be applied as established in the Employee and Faculty Handbooks. These sanctions can range from a written reprimand 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 Handbook. These sanctions may include a written warning, suspension, or expulsion, depending on the seriousness of the violation.

# INSTITUTIONAL DISTANCE EDUCATION POLICY

## Introduction

Columbia Central University (CCU) recognizes the value of distance education as a means to further its educational mission and reach a diverse student population with a wide range of needs. The purpose of this policy is to provide institutional standards and definitions for distance education in order to guarantee the academic quality that characterizes CCU is maintained in all distance education programs and courses. This policy will be applicable to all administrative staff, faculty, and students of all CCU campuses, distance education programs, and online courses as defined in the Terms and Definitions section of this policy; and contractors related to distance education.

## Applicability

This policy shall apply to all administrative staff, faculty, and students of all CCU campuses, distance education programs and courses as defined in this policy, and distance education related contractors.

## Definitions

- **Distance Education:** Educational process in which all or most of the instruction occurs with faculty and student in different locations using one or more types of technology to support regular and substantial interaction synchronously (in real time) or asynchronously between parties in order to develop skills and competencies in students. The types of technology that can be used are the internet, satellite communication, and audio and video conferencing.
- **Online Program:** Academic program authorized to be offered through distance education delivery method. In these programs, 100% of the required courses are offered in a distance education format.
- **Hybrid Program:** Academic program authorized to be offer through distance education delivery method in a combination of onsite and online courses. For ACEN-authorized programs, if 25% or more of nursing courses are offered online.
- **Onsite Program:** Academic program authorized to be offered in face-to-face mode in the campuses for which it is authorized. In these programs, up to 49% of the courses could be offered online.



- **Online Course:** Course that offers 100% of the total hours of instruction through the internet using the synchronous and asynchronous communication tools available on the Canvas LMS.
- **Onsite Course:** Course that requires the physical presence of the professor and the student(s) in the classroom and/or university laboratory for 100% of the hours of instruction.
- **Onsite Course with Online Support:** Face-to-face course that integrates the Canvas platform as a support resource for the teaching and learning process. This support can be for sending assignments, reviewing material, practice exercises, among others. This support does not replace synchronous meetings according to scheduled times. Synchronous meetings could be with faculty and students in the classroom or with faculty in the classroom and students from home or elsewhere connected through MS Teams on Canvas LMS.
- **Faculty:** Any qualified person who performs instructional activities in a course. Is responsible for the quality and content of instruction.
- **Substantial Interaction:** Engage the student in teaching, learning, and assessment, consistent with the content under discussion, and includes at least two of the following:
  - provide direct instruction,
  - assess or provide feedback on student work in the course,
  - provide information or answer questions about the content of the course or competition,
  - facilitate a group discussion about the content of the course or competition,
  - other instructional activities approved by the regulatory entities.

## Provisions

To maintain the highest academic quality, consistent with our mission and institutional and accreditation standards, all distance education programs and courses offered by CCU must meet the requirements established in this policy.

The requirements are based on the standards for the evaluation of distance education of Middle States Commission on Higher Education (MSCHE), Accreditation Commission for Education in Nursing (ACEN) and National Council for State Authorization Reciprocity Agreements (NC-SARA); and have been specifically developed based on CCU's mission and context.

### **Fulfillment of the mission and policy**

All distance education efforts must be consistent with the institutional mission and are subject to CCU policies.

### **Academic Quality**

All distance education programs and courses will meet the same academic requirements, quality standards, and student learning objective's evaluation of face-to-face programs or courses offered by CCU. The faculty must guarantee the same academic standards for distance education students as those that apply to face-to-face students and provide syllabuses that contain rubrics to evaluate the learning expectations of the students.

To ensure academic quality, CCU will evaluate the syllabi, planned learning outcomes, and effectiveness evaluations of distance education courses according to consistent standards that are used with face-to-face courses.

### **Delivery Methods**

All online courses and face-to-face courses with online support will use the Canvas LMS to deliver prescribed and validated academic content. Faculty is required to enrich the course with additional content of their own and may integrate other websites or external tools at their discretion, but they must be accessible or linked through Canvas LMS.

Regardless of the modality used, reasonable efforts must be made to ensure that all course content is accessible to students with disabilities.

All faculty teaching distance education must comply with federal and state law and university copyright policy in the preparation and delivery of course material.

Faculty and administrative staff must take the same care with the educational files and records of distance education students as they do with face-to-face students.

### **Student Identity Verification**

CCU has to authenticate the identity of all distance education students (hybrid programs and online programs). During the admission process, the applicant will be required to present a copy of a state identity document.

For class registration, students must send the same identity document legalized by a notary of the country or state in which he/she resides. This document must be the National Identity Document (DNI), identification issued by the state or country of origin or passport valid by the expiration date. In the event that the applicant can appear in person at the CCU offices, he/she has the option of validating their identification at our offices without notarization.

All students at CCU are provided a unique university-issued username and password for secure access to university systems, including for distance learning, after the registration process is completed. It is against university policies for a user to give someone his or her password or to allow others to use his or her account (Acceptable Use of Technology Policy, Online Services Use and Security Policy, and the Institutional Policy on Copyright and Academic Integrity).

Faculty must verify distance learning student identity prior to any in-person or online classroom activity and may require students to present a state or federal government-issued photo ID or turn on their camera at any time to receive the service or participate in the activity. When enrolling in an online course, the student accepts the use of the camera and the microphone in order to verify his/her identity. For more information on the use of cameras, see Guidelines for camera usage in distance education.

### **Institutional Support**

Distance education students shall have access to all the academic support services, instructional equipment and services, campus events, and other non-academic activities, which the teaching instruction provides for other students. Support services may include but are not limited to:

- **Academic Advising:** students can visit the campus for in-person advising. Students who are unable to attend campus may receive academic advising by phone, email, or other electronic means. In such cases, students should contact the academic dean of the campus to obtain contact information for their advisor.
- **Counseling:** students can receive support from the Guidance and Counseling Office in person, by phone, email, or other electronic means.
- **Disability Support Services:** students needing accommodation for disabilities must apply to the Counseling Office in person, by phone, email, or other electronic means. The application must include a medical certification that specifies the required accommodation and shall be requested in advance.

- **Tutoring Services:** students can request the service through the Counseling Office in person, by phone, email or by other electronic means. They can also be referred to by the faculty, retention official, or other academic staff.
- **Library and Learning Resources:** CCU library has a wide range of support systems for distance education, including virtual resources, virtual reference, open access resources, electronic books, among others. This service is integrated into all courses through the Canvas LMS.
- **Canvas Support:** for any assistance related to Canvas LMS, users can submit a service request by email at [apoyocanvas@columbiacentral.edu](mailto:apoyocanvas@columbiacentral.edu).
- **Technical Support:** for technical support, users can submit a service request by email at [apoyotecnico@columbiacentral.edu](mailto:apoyotecnico@columbiacentral.edu) or call 787-745-7005 (Monday to Friday 8:00am – 5:00pm).

For more details on institutional support services, please refer to the Student Consumer Handbook.

### **Requirements and Expectations for Distance Education Faculty**

As with face-to-face courses, faculty assumes primary responsibility and oversight for online courses, ensuring both the rigor of the courses and the quality of the instruction.

**Validate student attendance:** every faculty must contact each student enrolled in an online course to ensure that the student accesses it during the first two weeks of class. In addition, he/she must register student attendance at Campus Portal.

**Office Hours:** each distance education faculty shall schedule a minimum of two (2) synchronous office hours per week to attend students through Canvas LMS tolls. Faculty must report these hours to Academic Dean and post them on the online course home page the first week of class.

**Response Time:** faculty in online courses are required to maintain a maximum response time of 24 working hours to answer students' emails or Canvas messages and are expected to display high levels of social and cognitive presence, as well as high-quality writing skills.

High-quality social presence is defined as:

- Faculty accesses the course and the discussion forums several times a week.
- The faculty publishes announcements or sends course communications several times a week.
- Posts are directed at students. Professor demonstrates professional behavior and evidence of respect for diversity and the viewpoints of others.

High-quality cognitive presence is defined as:

- Professor encourages discussion.
- Posts are clear, original, and relevant.
- Reasoning shows well-developed analytical skills and critical thinking.
- Faculty encourages the students to achieve their objectives.
- Faculty provides appropriate supporting details and examples. High-quality writing skills are defined as:
  - All posts are well written and demonstrate accurate spelling and grammar, good organization, careful editing, conciseness, and clarity.

For detailed information on communication expectations, see the Policy for Faculty-Student Communication in Distance Education.

**Interaction:** interaction, like communication, is a vital factor in distance education. A student who feels engaged in the course is more likely to complete it and report a positive distance learning experience. It is the professor's responsibility to integrate strategies for substantial interaction with students and between students.

This interaction can occur synchronously (videoconference, chats, polls, telephone) or asynchronously (discussion forums, videos, audios, announcements, activities, exercises, links to web pages, surveys). The faculty is responsible for instructing students and managing their online courses with appropriate and innovative teaching techniques to engage students in active learning in order to achieve desired learning outcomes.

All instructors must include in the online course a personalized welcome, their contact information and synchronous office hours, academic closing at the end of each module and a course recap message prior to concluding the course. For more details see the Course Planning Guide.

**Student Referrals:** Faculty of online courses, as in face-to-face courses, are expected to refer students to the various service offices as needed. Referrals must include, but are not limited to retention, orientation, counseling, tutoring, library.

**Qualifications:** All faculty must obtain certification in distance education and use of the Canvas LMS prior to offering an online course. This requirement may be obtained through the university's Faculty Training in Distance Education Fundamentals and Canvas LMS course, through an organization or entity previously approved by the vice presidency of academic affairs, or when it is determined that previous teaching experience is sufficient to guarantee the quality of instruction. If faculty obtains the certification from an external organization or entity, he/she must submit a copy of the certificate awarded that demonstrates it.

It will be the associate vice-presidency of curricular innovation and distance education in collaboration with the vice-presidency of academic affairs who will determine if the previous experience of the professor is sufficient to exempt him/she from certification. In addition, online teaching evaluations to faculty will be considered for future course assignments. All professors who take the Teacher Training course offered by CCU must teach one online course prior to receiving the corresponding certificate. For more details see the Faculty Recruitment Manual and Lecturer Manual.

**Faculty evaluations:** It is the responsibility of the academic deans to coordinate the faculty evaluation process, according to the procedures described in the Faculty Evaluation Manual. In addition, students have the opportunity to evaluate the performance of the faculty in each online course. All faculty assigned to an online course will be evaluated in their administrative and teaching management, regardless of their type of contract.

**Academic load:** Distance education courses are part of the teaching load of the faculty, with the same compensation as face-to-face courses. Online courses can also be taught as an overload, with the same compensation rate as face-to-face courses. Any exception will be reviewed on a case-by-case basis and the Vice President for Academic Affairs will make the final determination. For more details see the Faculty Manual.

**Ownership of Materials:** Faculty must be aware of copyright, trademark, and licensing provisions when offering distance education courses, and therefore must be familiar with CCU's Copyright and Academic Integrity Policy. Examples include the use of photographs, graphics, text selections, audio, or video clips. It is the faculty responsibility to acquire and document the usual permissions prior use of protected material.

Ownership rights to materials developed by the faculty are governed by the relevant agreement between the faculty member and CCU and will be determined, in part, by whether or not the faculty member was paid additional compensation (stipend) for developing these materials. "Course Materials" shall include additional course notes, lectures, syllabi, reading lists, assignments, tests, guides, content in any media (written, visual, audio), among others.

**Course Development Agreement with Stipend:** CCU will own and copyright materials in distance education courses for which the faculty member will receive additional compensation based on the parties' course development agreement.

**Non-Stipend Course Development Agreement:** All faculty members must enrich the prescribed content of distance education courses as part of their duties without receiving any additional compensation. In this case, faculty has the right to the materials for their exclusive use. This content will not be part of the course template on future occasions. CCU may, with the written permission of the professor, receive a non-exclusive right to use the materials for educational purposes, including derivative use rights, regardless of whether the professor is assigned to teach the course or remains employed by the university.

### **Development and approval of online courses**

All online courses at CCU are considered comparable to face-to-face courses and adhere to the same standards, prerequisites, and course requirements as face-to-face sections of equal courses. To encourage high-quality course offerings, online courses must not only meet the same quality standards as face-to-face courses, but additional review is also necessary to ensure the suitability and feasibility of CCU's chosen instructional format for teach the course. Online courses must be approved by CCU before being taught.

The Associate Vice President for Curriculum Innovation and Distance Education is responsible for the development and implementation of online courses and supports the Subject Matter Expert (SME) in aspects of course design and development. This support is offered through a combination of online activities, face-to-face workshops and individual consultations that prepare SMEs to develop courses in line with CCU's course quality review, either by internal CCU staff or external staff hired to said purposes.

All courses will be designed based on 8 modules equivalent to: 1 week for each module in graduate courses and 1 week in module one and two weeks in modules 2 to 8 in undergraduate courses.

### **Review of Course Design Quality**

Based on the standards of best practices, as well as the principles of research and instructional design, CCU carries out several processes to guarantee the quality of online courses and support continuous improvements in them. During the course development process, the quality of the course is addressed in the following:

- Originality, innovation, timeliness, and depth of the content
- Alignment of content with objectives, instructional activities, and assessments
- Interaction and feedback
- Grammar and orthography
- Technology and course tools

### **Distance Learner Requirements and Expectations**

Distance learning students will be held to the same academic standards as face-to-face students and are subject to the Institutional Policy on Copyright and Academic Integrity and other student conduct policies. Distance learning students should also be aware of other relevant academic policies and regulations, including those related to admission, registration, tuition, refund, credit transfer, and attendance. It is the student's responsibility to check the university's website for more details on institutional policies.



CCU may limit the extent to which students enrolled in face-to-face programs may take online courses in their program of study to comply with applicable state and federal regulations.

Every student of an online course has the responsibility to:

- Complete the affidavit when registering to verify his/her identity. If he/she can present documents onsite, will be exempt from this responsibility.
- Accept the use of the camera and microphone in order to verify his/her identity.
- Participate in the training on the use and management of the Canvas platform that the university offers each semester or review the tutorials on [www.comousacanvas.com](http://www.comousacanvas.com).
- Access Canvas LMS at least once a week to carry out the activities and actively participate in the enrolled online course.
- Study the contents offered, investigate the indicated topics, and meet the requirements according to the course syllabus.
- Send some communication to faculty with a frequency not greater than 14 calendar days. This communication may be course content related.
- Send any communication to another classmate related to any group activity of the course with a frequency not greater than 14 calendar days.
- Respect the correct use of information sources and the copyright of all content susceptible to intellectual property.

For more details, see the Institutional Attendance Policy.

# USE AND SECURITY OF ONLINE SERVICES POLICY

## **Introduction**

The university community commits to accept the conditions stipulated in this policy, in which the use of services for exclusively academic and administrative purposes is indicated, which prohibits any commercial use of the network, as well as any inappropriate practices or any other activity that tend 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. The online services are used entirely at the user's own risk. CCU will not be responsible for any loss, damage or inconvenience arising directly or indirectly from the use of any of the University's online services. Although every effort will be made to maintain the services, facilities, and the integrity of the information and software, CCU does not accept responsibility for the malfunction, loss of data or software or the violation of any security mechanism, except to the extent legally required.

## **Objective**

This document establishes the rules and procedures for the use and management of the university's online services in a safe, legal, equitable, and considerate manner.

## **User codes, passwords, data, and its protection**

User accounts are provided for work and study purposes. They are not private. All electronic communications using University user accounts belong to CCU (including their content and attachments). Electronic messages can be disclosed in legal proceedings and can be recovered even after a user has deleted them.

- a. All registered users will be responsible for protecting their username and data from any unauthorized access.
- b. Any unauthorized access to a username will be notified immediately by the affected user.
- c. Access to user accounts other than your own is prohibited.
- d. The accounts are not meant to be shared, the user must preserve their password and change it regularly as required by the system.
- e. CCU reserves the right to cancel at any time any user account used for any purposes other than those authorized.

- f. In rare circumstances, it may be necessary for CCU to gain access to an individual user account. For example, sudden or unexpected absence, to address legal compliance situations, or to advance a legitimate college need. Said access must be authorized by the president & CEO or the rector of the venue.

### **Technical Support**

- a. If the student or user has problems with their account, they will have several alternatives to solve their problem:
  - 1. Call the Department of Information Systems and request technical support.
  - 2. Send an email.
  - 3. Complete the online service request, visit  
<https://columbiacentral.sysaidit.com/servicePortal>.
- b. CCU technicians do not provide technical support nor are they responsible for the hardware or software installed on personal equipment, that is, laptop or desktop computers, or mobile devices that are not owned by CCU.

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

- a. These systems are used to store, manage, and exchange information between offices to streamline services to students.
- b. These systems are used by CCU employees to manage student information.
- c. Every employee will be responsible for protecting their username and password.
- d. The employee must not leave their system account open while they're away from their desk.
- e. The employee is responsible for ensuring the access granted to all CCU systems to which they are authorized to work.

### **University webpage**

- a. The electronic website, [www.columbiacentral.edu](http://www.columbiacentral.edu), allows students to acquire useful information and tools from CCU.
- b. The webpage provides access to publications and student services.

### **Protection or Backup of Information Systems**

The content of the systems is safeguarded by the university's Department of Information Systems to guarantee the availability of the information and protect the information of CCU students.

### **Software and web applications to support the academy**

- CCU makes software and web applications (Canvas LMS, Inmediata, SIMTICS, VSim, Rx30, CT Program, Innovations, 123 Pets, SAIL, among others) available to users to support the academic process.
- The use of these resources is limited to employees, officially enrolled students and the faculty assigned to the courses, according to the terms of the corresponding contracts and licenses.
- It is the user's responsibility to safeguard and protect the access credentials granted by CCU.
- CCU will provide training (face-to-face, virtual, manual) on the use and management of the various applications to users.
- Technical support will be channeled through the Online Service Request.

## **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 the 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. An 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 at the 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 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 committing 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 the 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. This 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

### **Introduction**

Columbia Central University adopts this Satisfactory Academic Progress Policy in accordance with its academic and federal regulations, specifically 34 C.F.R. § 668.34.

### **Applicability**

This policy applies to all students enrolled in CCU, regardless of if they are full-time or part-time students or if they receive federal financial aid, or any other type of aid. The policy does not apply to students enrolled in Continuing Education courses.

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

CCU defines Satisfactory Academic Progress as the required measurement of a student's academic progress towards completing his or her academic program. Satisfactory Academic Progress (SAP) is evaluated with two standards: qualitative (GPA) and quantitative (Credits Successfully Completed). Students must maintain the required cumulative GPA and successfully complete the cumulative required percentage of attempted credits (pace) to ensure they will graduate within the maximum timeframe for their program in order to meet the qualitative and quantitative components of SAP.

In order for the student to complete their academic program within the maximum time frame established for the program (the quantitative component of SAP), the student must successfully complete the required percentage of attempted credits throughout the duration of his/her academic program. An evaluation of SAP is not completed until both the qualitative and quantitative components are reviewed.



If the evaluation shows that a student does not have the required GPA or is not maintaining the required pace, the student becomes ineligible for FSA funds (Federal Student Aid) provided that the student is permitted to receive FSA funds during a single consecutive payment period of Financial Aid Warning status or, after a successful appeal, while on Financial Aid Probation status.

### **Roles and Responsibilities**

Academic Progress Committee	Academic Director and/or Program Coordinator, Registrar, Counselor, and the Director of the Financial Aid Office.
Submission of Appeal Request	The Counselor or equivalent will submit the Satisfactory Academic Progress Appeal request that was prepared and submitted by the student to the Dean of Academic Affairs and/or Chief Academic Officer, who will convene the Appeal Committee for an appropriate evaluation.

## **SATISFACTORY ACADEMIC PROGRESS POLICY REQUIREMENTS**

### **Qualitative Component: Cumulative GPA**

Students need to achieve the minimum cumulative grade point average at each SAP evaluation point. (For more details, please refer to the Satisfactory Academic Progress Evaluation Charts).

A student enrolled in a program of more than two academic years must have a GPA equivalent to his/her program's graduation standards at the end of the student's second academic year to be meeting the qualitative standard of SAP.

### **Quantitative Component: Credits Successfully Completed**

A student must progress through the program at the minimum pace for the specified SAP evaluation points in order to finish the academic program within the allowable maximum timeframe. Students who meet or exceed the minimum pace requirements will complete their program within the maximum time frame as described in the Maximum Timeframe section of this policy.

The quantitative component is measured by dividing the credits successfully completed by the number of credits attempted. Students must successfully complete a minimum percentage of all credits attempted at each evaluation point to meet the minimum SAP standards (Please refer to the

Academic Progress Evaluation Charts).

The chart below provides information about how grades affect the Qualitative (GPA) and Quantitative (credits) components of SAP:

Grade Type	Grade	Included in Cumulative GPA	Included in Cumulative Credits/ Hours Attempted	Included in Cumulative Credits Earned (Successfully Completed)	Included in Maximum Time Frame
Passing Grades	A, B, C, D	Yes	Yes	Yes	Yes
Additional Passing Grades (Pass/Fail courses)	P	No	Yes	Yes	Yes
Failing Grade	F	Yes	Yes	No	Yes
No Pass Grade (Pass/Fail courses)	NP	No	Yes	No	Yes
Incompletes	I	No	Yes	No	Yes
Dropped Course (Withdrawals)	W, WT, WF	No	Yes	No	Yes
Emergency Drop Courses - COVID-19	COVID-19 Grade	No	No	No	No
Repeated courses	As earned for each attempt at the course	Highest grade earned	Yes, all attempts of the course	Yes, all attempts of courses successfully completed	Yes, all attempts of the course
Transferred Credits/Hours from prior programs at CCU accepted towards current program	Refer to grades above	Yes	Yes	Yes	Yes
Credits transferred from other institutions that were accepted towards current program	T	No	Yes	Yes	Yes

CCU does not offer remedial courses; therefore, remedial courses are not discussed in this policy.

### **Maximum Timeframe Criteria**

Students are required to complete their program within a reasonable timeframe. Federal regulations define the maximum timeframe as 150% of the published length of the program of study. The maximum timeframe is based on credits attempted and is determined by multiplying the number of credits required to complete the program by 1.5. For example, a 64-credit program would have a maximum time frame of 96 credits to complete the program.

A student does not meet the maximum timeframe standards when it becomes mathematically impossible to complete the program within 150% of the published length of the program and therefore loses eligibility for federal financial aid for their program. All attempted credits, with the exception of drops due to COVID-19, count towards the maximum timeframe, including transfer credit hours accepted for the student's current program of study.

A student for whom it has become mathematically impossible to complete the program within 150% of the program's length in credits may be allowed to continue for an additional term, if approved by the Academic Progress Committee. This term will not be considered eligible for financial aid and students are not permitted to submit an SAP appeal. If allowed to continue for an additional term, the student enrolls under an Academic Plan.

### **SAP Evaluation Procedure**

Students are expected to meet the cumulative required minimum completion rate and grade point average at the end of each SAP evaluation period (semester).

The Registrar Office will evaluate the academic progress at the end of each academic term.

### **SAP Reevaluation Procedure**

The Registrar Office will reevaluate the Satisfactory Academic Progress for students in rare instances of grade changes or a final grade received late from a faculty member. The Registrar will send a written communication notifying the student of the results of the evaluation if due to the grade change the student is no longer meeting the standards of SAP. CCU will not alter financial

aid already disbursed to students based on SAP evaluations that were accurate at the time they were performed.

If a formerly incomplete course is assigned a grade, that grade will be accounted for in the next regular SAP evaluation.

### **Satisfactory Academic Progress Statuses and Notification Process**

If a student fails to meet Satisfactory Academic Progress standards, the Registrar Office will send written notification indicating the results of the evaluation, the satisfactory academic progress status under which student was placed, and any applicable process that should be followed to maintain or regain financial aid eligibility.

In addition, the Registrar's Office will prepare the list of students who do not comply with the SAP policy and will notify the Financial Aid, Collections, and Counseling offices in writing.

### **Financial Aid Warning**

Financial Aid Warning is a status assigned to a student who fails to comply with the qualitative and/or quantitative component as established in the Satisfactory Academic Progress policy.

Students who are placed under a Financial Aid Warning status will be eligible to receive financial aid for the payment period following the period in which the student failed to meet satisfactory academic progress standards. Students are expected to improve their academic performance during this Financial Aid Warning period. If a student fails to meet the minimum qualitative and quantitative standards described above upon completing the Financial Aid Warning period, the student will be placed on Financial Aid Suspension status and will lose eligibility for FSA programs. If the student successfully appeals their Financial Aid Suspension status, the student will be placed on Financial Aid Probation Status.

## **Financial Aid Suspension**

Students placed on Financial Aid Suspension lose eligibility for financial aid. A student will be placed on Financial Aid Suspension Status if any of the following apply:

- The student fails to meet the cumulative standards of SAP after completing a term on Financial Aid Warning, or
- The student fails to meet the cumulative standards of SAP after completing a term on Financial Aid Probation or fails to adhere to the Academic Plan required for their Financial Aid Probation status (discussed below), or
- It is mathematically impossible for the student to complete the program within the maximum timeframe allowed. As discussed above, students who cannot complete their program within the maximum timeframe are not permitted to submit an SAP appeal.

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

Students may continue studies without the aid of financial aid after suspension if otherwise permitted in accordance with the university's academic standards. If the student continues without financial aid, the student will be responsible for the full cost that may apply during that period of enrollment.

## **Appeal Process**

An appeal is a process where a student on Financial Aid Suspension status asks the institution to reconsider their eligibility to receive financial aid funds. The appeal process applies to students who do not meet the SAP requirements (including the terms of their Academic Plan, if applicable) in the period evaluated.

If a student experienced extenuating circumstances that prevented him/her from complying with the SAP requirements, the student may appeal to regain eligibility for federal financial aid.

The Institution considers the following as examples of extenuating circumstances:

- Student illness
- Family illness
- Distress in the family unit, such as: divorce or death of parents, spouse, or children
- Loss of employment or potentially significant changes in working hours during the term
- Abusive relationships
- Natural disasters
- Financial difficulties such as foreclosure or eviction
- Other situations beyond student's control

To initiate the appeal process, the student must complete and submit a request for Satisfactory Academic Progress Appeal, including supporting documentation, within a period of five (5) business days from the date of receipt of the notification that they were placed on Financial Aid Suspension status. The student must be able to explain what has changed in their situation that will allow them to meet the SAP requirements at the next evaluation. The SAP appeal form is available at the Registrar, Counseling and Academics offices.

The responsibility of the Committee is to evaluate the reasons presented in the Financial Aid Appeal application and determine whether it is possible for the student to meet the standards of academic progress or an Academic Plan at the end of the next term.

The Appeals Committee will evaluate the Request for Appeal of Satisfactory Academic Progress and notify the Academic Director or designee of the decision. This Committee must establish a meeting schedule for each academic term, with a deadline for the student to document his/her case and present it to the Committee via the SAP Appeal form. The Registrar's Office will send the student written notice of the Committee's decision no later than 5 calendar days from the date of the committee's decision.

If the appeal is approved, the student will be eligible for financial assistance during the probation term. At the next evaluation point, in order to maintain eligibility for financial aid, the student must be able to demonstrate that he or she meets the requirements of satisfactory academic progress or is adhering to the terms of his/her Academic Plan. The student has the opportunity to appeal again, if he/she fails to comply with the requirements of SAP or the terms of his/her Academic Plan.

### **Financial Aid Probation**

This status applies to those students who have not been able to meet the SAP requirements and were placed on Financial Aid Suspension status, but subsequently complete the appeal process and their appeal is approved. (Please refer to the Appeal Process section above).

The Financial Aid Probation period is only for an academic term. The approval of an appeal will require that the student be placed on an Academic Plan during the Financial Aid Probation period if the student will be unable to meet satisfactory academic progress standards by the end of the payment period under probation. The purpose of the Academic Plan is to ensure the student is monitored each subsequent payment period to ensure student's ability to graduate with the appropriate GPA and within the maximum time frame.

Students will be eligible for financial aid during the payment period under a Financial Aid Probation status. Once the probation period ends, students must be able to show they meet the requirements of Satisfactory Academic Progress or the Academic Plan to maintain eligibility for financial aid.

### **Academic Plan**

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

If a student successfully appeals and is placed on Financial Aid Probation status with an Academic Plan, the student will retain eligibility for federal financial aid if he/she meets the standards of SAP or is meeting the terms of the Academic Plan at each SAP evaluation period. To continue in the Academic Plan after the initial Financial Aid Probation period, the Academic Counselor will follow up and document that the student is meeting the requirements of the Academic Plan. If a student wants to change their Academic Plan, they must submit an appeal.

## **Reestablishing Eligibility**

A student who has had their financial aid status suspended can reestablish eligibility for federal financial aid by attending courses without the benefit of financial aid and meeting the cumulative qualitative (GPA) and quantitative (Credits) standards. A student who has lost federal financial aid eligibility due to maximum timeframe cannot reestablish eligibility.

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

Section 3509 of the CARES Act allowed institutions to exclude any attempted credits from the calculation of satisfactory academic progress (SAP) that a student has not been able to complete because of a circumstance related to the COVID-19 pandemic.

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
- Inability of continuing with classes through online education

This exception is available to students upon request to the Registrar Office for any terms that included the start and end dates of the COVID-19 national emergency (March 5, 2020, to May 11, 2023). Appropriate documentation must be provided to support permitted circumstances.

For example, the completion rate of a student who has completed 78 of the 120 attempted hours in a bachelor's degree program is 65 percent (78/120), which is below the SAP standards. However, if a student confirmed that the 12 credits, they attempted but were unable to complete in the spring 2020 term were due to a circumstance related to COVID-19, the rate is recalculated to omit the 12 credits resulting in a revised completion rate of 73 percent (79/108), which meets SAP standards. The 12 credits attempted are also excluded from the maximum timeframe and GPA.



**TABLES TO EVALUATE THE STUDENT'S SATISFACTORY ACADEMIC PROGRESS BY LEVEL:**

**CERTIFICATE PROGRAMS**

**Program:** Computer Repairs Technician

**Program Summary:**

<b>Program Credits Required</b>	<b>Maximum Timeframe</b>	<b>Minimum Cumulative GPA</b>	<b>Minimum Cumulative Pace (Credit hours completed / Credit hours attempted)</b>
36	54	2.00	66.67%

**Program:** Veterinary Assistant

**Program Summary:**

<b>Academic Credits in Program</b>	<b>Financial Aid Credits in Program</b>	<b>Maximum Timeframe in Financial Aid Credits</b>
55	36	54

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated at the end of each term. At each evaluation point students must achieve:

- A cumulative GPA of 2.00, and
- A minimum cumulative credit completion rate of 66.67%
  - For example, if 18 credits are attempted by the end of term, at least 12 must have been successfully completed ( $12/18=.6667\%$ )

Academic and financial aid credits are different for this program. Satisfactory Academic Progress evaluation is based on financial aid credits. The table below provides details about required courses and the corresponding academic and financial aid credits.

Course Description	Academic Credits	Financial Aid Credits
Introducción a la Medicina Veterinaria y Bioseguridad Animal	4	2
Destrezas de Comunicación Efectiva en Español	3	1.5
Conceptos Básicos de Ciencias	4	2
Conceptos Matemáticos	3	1.5
Principios Generales de Quirófano Veterinario	2	2
Anatomía y Fisiología de los Animales	5	3
Microbiología Veterinaria	3	1.5
Patología, Toxicología y Farmacología Veterinaria	4	2
Principios de Enfermería Veterinaria	4	2.5
Manejo, Cuidado y Enfermedades de Animales de Granja	4	3
Procedimientos Clínicos Veterinarios	3	3
Principios de Odontología Veterinaria	2	1
Nutrición Animal	2	1
Introducción a la Radiología y Sonografía Veterinaria	4	3
Principios de Psicología Social Comunitaria	2	1
Práctica Clínica Veterinaria	6	6

**Program:** Veterinary Assistant with Pet Grooming

**Program Summary:**

Academic Credits in Program	Financial Aid Credits in Program	Maximum Timeframe in Financial Aid Credits
71	48	72

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated at the end of each term. At each evaluation point students must achieve:

- A cumulative GPA of 2.00, and
- A minimum cumulative credit completion rate of 66.67%
  - For example, if 18 credits are attempted by the end of term, at least 12 must have been successfully completed ( $12/18=.6667\%$ )

Academic and financial aid credits are different for this program. Satisfactory Academic Progress evaluation is based on financial aid credits. The table below provides details about required courses and the corresponding academic and financial aid credits.

Course Description	Academic Credits	Financial Aid Credits
Introducción a la Medicina Veterinaria y Bioseguridad Animal	4	2
Destrezas de Comunicación Efectiva en Español	3	1.5
Conceptos Básicos de Ciencias	4	2
Conceptos Matemáticos	3	1.5
Principios Generales de Quirófano Veterinario	2	2
Anatomía y Fisiología de los Animales	5	3
Microbiología Veterinaria	3	1.5
Patología, Toxicología y Farmacología Veterinaria	4	2
Principios de Enfermería Veterinaria	4	2.5
Manejo, Cuidado y Enfermedades de Animales de Granja	4	3
Procedimientos Clínicos Veterinarios	3	3
Principios de Odontología Veterinaria	2	1
Nutrición Animal	2	1
Introducción a la Radiología y Sonografía Veterinaria	4	3
Principios de Psicología Social Comunitaria	2	1
Introducción a Pet Grooming	2	1
Técnicas Pre-Grooming	3	2.5
Grooming Básico	3	2.5
Empresarial Básico y Mercadeo	2	1
Patrones y Estilos de Recorte	3	2.5
Técnicas Avanzadas de Grooming	3	2.5
Práctica Clínica Veterinaria	3	3
Práctica de Grooming	3	3

**Program:** Medical Secretary with Insurance Billing

**Program Summary:**

Academic Credits in Program	Financial Aid Credits in Program	Maximum Timeframe in Financial Aid Credits
56	36	54

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated at the end of each term. At each evaluation point students must achieve:

- A cumulative GPA of 2.00, and
- A minimum cumulative credit completion rate of 66.67%
  - For example, if 18 credits are attempted by the end of term, at least 12 must have been successfully completed ( $12/18 = .6667\%$ )

Academic and financial aid credits are different for this program. Satisfactory Academic Progress evaluation is based on financial aid credits. The table below provides details about required courses and the corresponding academic and financial aid credits.

Course Description	Academic Credits	Financial Aid Credits
Español Básico	4	2
Basic English	3	1.5
Matemática Comercial	3	1.5
Terminología Médica	8	4
Mecanografía Básica Computarizada	3	3
Crédito y Cobro en Facturación a Planes Médicos I	4	2
Administración de Documentos	4	2
Mecanografía Intermedia y Avanzada	3	3
Relaciones Humanas	2	1
Principios Básicos de Clasificación y Codificación ICD-9-CM y ICD-10CM/PCSyCPT	4	2
Principios de Computadoras	2	2
Español Comercial	2	1
Business English	2	1
Administración de Oficina	2	1
Principios de Récord Medico	2	1
Crédito y Cobro en Facturación a Planes Médico II	3	3
Práctica en Médico Secretarial y Facturación de Planes Médicos	5	5

**Program:** Laboratory Assistant with Electronic Processing

**Program Summary:**

Academic Credits in Program	Financial Aid Credits in Program	Maximum Timeframe in Financial Aid Credits
38	24	36

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated at the end of each term. At each evaluation point students must achieve:

- A cumulative GPA of 2.00, and
- A minimum cumulative credit completion rate of 66.67%
  - For example, if 18 credits are attempted by the end of term, at least 12 must have been successfully completed ( $12/18=.6667\%$ )

Academic and financial aid credits are different for this program. Satisfactory Academic Progress evaluation is based on financial aid credits. The table below provides details about required courses and the corresponding academic and financial aid credits.

Course Description	Academic Credits	Financial Aid Credits
Introduction to the Clinical Laboratory - Laws Regulations and the Assistant Role in Equipment Handling	7	4
General Compendium of Sciences	5	3
Basic Skills in Effective Communication and Customer Service	4	2
Medical Terminology	2	1
Basic Concepts of Microbiology	3	2
General Data Entry Processes and Billing of Laboratory Services	3	2
Management of Laboratory Samples	5	3
Special Procedures	5	3
Clinical Practice	4	4

**Program:** Pre-School Teacher Assistant

**Program Summary:**

Academic Credits in Program	Financial Aid Credits in Program	Maximum Timeframe in Financial Aid Credits
63	36	54

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated at the end of each term. At each evaluation point students must achieve:

- A cumulative GPA of 2.00, and
- A minimum cumulative credit completion rate of 66.67%
  - For example, if 18 credits are attempted by the end of term, at least 12 must have been successfully completed ( $12/18=.6667\%$ )

Academic and financial aid credits are different for this program. Satisfactory Academic Progress evaluation is based on financial aid credits. The table below provides details about required courses and the corresponding academic and financial aid credits.

Course Description	Academic Credits	Financial Aid Credits
Relaciones Humanas	3	1.5
Español Básico	4	2
Principios de Computadora	2	2
Desarrollo del Niño	6	3
Manejo de Disciplina en Niños	3	1.5
Intervención en Crisis	4	2
Administración y Supervisión de Personal	4	2
Conceptos básicos en Salud y Seguridad en Infantes y Niños	5	2.5
Niños con necesidades especiales	5	2.5
Diseño de Actividades	4	2.5
English Applied to Preschool Teaching	2	1
Matemática Comercial	3	1.5
Desarrollo de Programas de servicio y desarrollo de propuesta	4	2
Currículo de infantes y preescolares	4	2
Integración de experiencias de arte, música y literatura en la niñez temprana	4	2
Práctica Supervisada	6	6

**Program:** Professional Pet Groomer

**Program Summary:**

Academic Credits in Program	Financial Aid Credits in Program	Maximum Timeframe in Financial Aid Credits
33	25	37.5

**Satisfactory Academic Progress Requirements:** Satisfactory Academic Progress will be evaluated at the end of each term. At each evaluation point students must achieve:

- A cumulative GPA of 2.00, and
- A minimum cumulative credit completion rate of 66.67%
  - o For example, if 18 credits are attempted by the end of term, at least 12 must have been successfully completed ( $12/18=.6667\%$ )

Academic and financial aid credits are different for this program. Satisfactory Academic Progress evaluation is based on financial aid credits. The table below provides details about required courses and the corresponding academic and financial aid credits.

Course Description	Academic Credits	Financial Aid Credits
Introducción a Pet Grooming	2	1
Anatomía y Zootecnia	3	1.5
Salud, Bienestar y Manejo de Emergencias	3	1.5
Técnicas Pre-Grooming	3	2.5
Principios de Conducta	3	2.5
Grooming Básico	3	2.5
Empresarial Básico y Mercadeo	2	1
Patrones y Estilos de Recorte	3	2.5
Grooming Creativo y Funciones Asiáticas	3	2.5
Técnicas Avanzadas de Grooming	3	2.5
Práctica de Grooming	5	5

#### ASSOCIATE, BACHELOR, AND MASTER DEGREES

Program	Program Credits Required	Maximum Timeframe	Minimum Cumulative GPA	Minimum Cumulative Pace (Credit hours completed / Credit hours attempted)
Associate Degree in Audio	60	90	2.25	66.67%
Associate Degree in Business Administration	72	108	2.25	66.67%
Associate Degree in Cardiac and Vascular Technology	91	136.5	2.25	66.67%
Associate Degree in Cyber Security	71	106.5	2.25	66.67%
Associate Degree in Graphic Design	60	90	2.25	66.67%
Associate Degree in Medical Sonography	84	126	2.25	66.67%
Associate Degree in Nursing Sciences	72	108	2.25	66.67%
Associate Degree in Optical Sciences	79	118.5	2.25	66.67%
Associate Degree in Pharmacy Technician	83	124.5	2.25	66.67%
Associate Degree in Radiological Technology	83	124.5	2.25	66.67%

<b>Program</b>	<b>Program Credits Required</b>	<b>Maximum Timeframe</b>	<b>Minimum Cumulative GPA</b>	<b>Minimum Cumulative Pace (Credit hours completed / Credit hours attempted)</b>
Associate Degree in Therapeutic Massage	63	94.5	2.25	66.67%
Bachelor's Degree in Information Technology, Networking and Security	120	180	2.25	66.67%
Bachelor's Degree in Nursing Sciences	125	187.5	2.25	66.67%
Bachelor Degree of Science in Nursing RN to BSN	52	78	2.25	66.67%
Bachelor's Diagnostic Imaging CT and MRI	135	202.5	2.25	66.67%
Bachelor's Degree in Business Administration	120	180	2.25	66.67%
Master Degree in Business Administration Specialization in Health Organizations Management	39	58.5	3.00	66.67%
Master Degree in Business Administration Specialization in Human Resources	39	58.5	3.00	66.67%
Master Degree in Business Administration Specialization in Management	39	58.5	3.00	66.67%
Master Degree of Sciences in Nursing with Specialization in Adults & The Elderly	41	61.5	3.00	66.67%



# 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 exams, 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) warrant 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:

<b>Symbol</b>	<b>Equivalency</b>
<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:

- a. In the case of consecutive absences for a period of 14 calendar days.
- b. Unsatisfactory academic progress
- c. Improper conduct
- d. Health problems (after completing the Leave of Absence-LOA)
- e. 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.

## GRADING 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 against 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, within 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 for notifying 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 details 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):



## **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 penalties 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**

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 the 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 them 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 of the 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, AND REPRESENTATIONS

# MISREPRESENTATION POLICY AND CONSUMER PROTECTION

## **Introduction**

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.

## **Background**

The Federal Department of Education is responsible for auditing and overseeing that educational institutions that receive federal funds protect consumers and provide integrity. Therefore, they have established regulations aimed at preventing practices that could be construed as misrepresentation or misrepresentation in the information provided to consumers.

## **Applicability**

This institutional policy applies to Columbia Central University (CCU) faculty and staff, both full-time and part-time, as well as any third party acting on behalf of the university.

## **Objectives**

This policy is intended to provide awareness of the scope of federal regulation and the university's responsibility.

## **Legal Basis**

The Department of Education's regulation related to misrepresentation (CFR 668.71 and 668.72) seeks to ensure that educational institutions demonstrate integrity in the information provided to students, prospective students, and the general public.

## Definitions

1. **Misrepresentation** - Any false, misleading, or deceptive statement by the college, or any of its representatives, or persons with whom the college has agreements to offer educational programs, or to provide marketing, advertising, or an accrediting or licensing agency, among others. A misleading statement includes any statement that has the likelihood or tendency to mislead. A statement is any communication made in writing, visually, orally or by other means. Representation includes the dissemination of a student endorsement or testimonial that a student provides under duress or because the university requires the student to make such an endorsement or testimonial in order to participate in an academic program.
2. **Substantial misrepresentation or misinformation** - Causing a person to rely on information provided to him or her, to the detriment of the person.
3. **Misrepresentation of the educational program**- False or misleading statements about a college's accreditation, size, location, facilities or equipment, among other things.
4. **Prospect**- Any person who has contacted the college for the purpose of soliciting information about enrollment at the college or who has been contacted directly by the college or indirectly through advertising about enrolling at the college.

## Federal regulation related to misrepresentation in the college context (CFR 668.71 and 668.72):

### The nature of academic programs.

Misrepresentation regarding the nature of programs includes, but is not limited to, providing false, erroneous, or misleading information to prospects, students, and the general public concerning:

- a. The accreditation of the university and or its academic programs.
- b. Transfers of credits to other institutions or the conditions under which CCU accepts transfer credits.
- c. requirements for successful completion of the degree and whether the degree qualifies the student for:
  - a. Be accepted into a union or similar organization.
  - b. Receive, apply for, or take an examination required to receive any state, federal, or nongovernmental licensure or certification required as a precondition of employment, or to perform certain functions in the United States where the academic program is offered, or to meet additional conditions.

- d. The nature of the tuition charges and the circumstances constituting the basis for termination of the student's enrollment.
- e. Whether academic programs are recommended or are subject to unsolicited testimonials or endorsements by: counselors, schools, colleges, academic organizations, employment agencies, members of particular industries, students, alumni, students, government officials, or others.
- f. The availability of part-time employment or other forms of financial assistance.
- g. The size of the university, location, equipment, and facilities available.
- h. The availability, frequency, and appropriateness of courses and academic programs to employability objectives.
- i. Employability opportunity.
- j. The number, availability and qualifications, including training and experience, of faculty and administration.
- k. The nature and availability of tutoring, counseling, or other supplemental assistance.
- l. The prerequisites established for enrollment in courses.
- m. The subject matter, content of the course of study, or other information related to the degree, diploma, certificate of degree completion, or other document provided to the student upon completion of the academic degree.
- n. The academic degree conferred is authorized by accrediting and licensing agencies. This type of misrepresentation includes any failure on the part of the university to report such data in promotional materials.

### **Nature of Financial Charges**

Misrepresentation related to finance charges includes, but is not limited to, providing erroneous, false, or misleading information to prospects, students, and the general public concerning:

- a. Offering scholarships to pay for the academic degree or part thereof.
- b. There is a particular fee established by the institution for the academic course or degree.
- c. The cost of the program and the refund policy if the student does not complete the program.
- d. The availability or nature of financial aid, including the student's responsibility to repay loans whether or not the student completes the degree or obtains employment.

- e. The student's right to refuse any financial aid or other assistance or to apply for any particular aid.

### **Graduate Employability**

Misrepresentation concerning graduate employability includes, but is not limited to, providing erroneous, false, or misleading information to prospects, students and the general public regarding:

- a. The university's relationship with any organization, employment agency, or other agency that provides employment-directed training.
- b. Having a placement service to graduates or offering assistance in obtaining employment.
- c. To know the current and/or future conditions related to compensation and employment opportunities in the industries or occupation for which the student is being prepared.
- d. To make offers of employment by the university or talent search firm or sweepstakes which include, but are not limited to, the phrases: "Man/Woman wanted to train for...", "Help Wanted", "Employment" or "Business Opportunities".
- e. Provide government statistics related to the employment market in relation to the potential for placing graduates in employment.
- f. Other requirements that are generally necessary for employment in the fields of study, such as, for example, driver's licenses, licenses to carry weapons, and criminal records. Failure to disclose such factors may prevent an applicant for employment from qualifying for employment.

### **Policy Violation**

It is considered a violation of policy when any representative of the university provides incorrect, misrepresented, or omitted relevant information for the purpose of misleading, misleading, or influencing the decision making of students, prospects, or the community at large, whether orally, in writing, on the Internet, or through advertising.

If a complaint is received that any employee has violated the provisions described above regarding offering misleading or misrepresentative information to students, prospects, or the general public, it will be investigated.

If it is found that the person has violated this policy, the severity of the violation will be evaluated, and the corresponding disciplinary procedure described in the Employee Handbook and the Faculty Handbook will be applied. The sanction to be imposed may range from a written memo to termination

of employment and salary, depending on the violation.

In the case of third parties, depending on the severity of the violation, the business agreement or contract may be modified or terminated. Likewise, the continuity of the exclusivity clauses, if any, may be affected.

## 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 at a vocational-technical academic level. Its purpose is to train the students 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. HIPPA 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 to 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. A 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 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 to 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. **CADEMIC 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 they work 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

# SCHOOL OF BUSINESS ADMINISTRATION

# **SCHOOL OF BUSINESS ADMINISTRATION**

## **DESCRIPTION OF THE SCHOOL**

The purpose of the School of Management is to prepare professionals in the fundamental areas of business administration. As part of the academic proposal, the following programs are offered: Master's Degree in Business Administration, with three specialties (Management, Human Resources and Administration in Health Organizations), Bachelor's Degree in Business Administration and Associate's Degree in Business Administration.

The organizational structure of the School of Management is composed of a director. This director oversees the development, implementation and evaluation of the courses offered in each program and academic level, according to their complexity, as well as the teaching-learning process.

## **MISSION**

To form an integral human being, capable of performing optimally in professional technical, administrative, and business areas with the highest sense of ethics and responsibility, as well as with a high degree of professionalism. To this end, we will develop professionals or leaders with values and impart knowledge, skills, abilities, and cutting-edge competencies adapted to the corresponding academic level.

## **VISION**

To be recognized as the School of Management that best contributes to the continuous development of human capital at the professional and business levels in the academic, professional and research fields.

## **GOALS**

1. To develop in the student the knowledge, skills, abilities, and competencies in the areas related to administration.
2. To ensure in the student an effective application of the fundamental concepts and principles in their area of specialty, in order to perform in a responsible and successful way in their

professional life.

3. To promote the formation of a human being with a high sense of social and ethical responsibility.
4. Contribute to the recognition of the brand through our academic programs, providing cutting-edge solutions to communities that are constantly evolving, through the knowledge generated in the administrative and academic fields.
5. To certify a culture of evaluation and continuous improvement in the administrative and academic areas.



## **MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN MANAGEMENT**

**Credits: 39**

**Duration: One year**

**Location: Caguas Main**

**Study Modality: Face to Face and Distance Education**

The Master of Business Administration with a specialization in Management 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. 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 versed in theory. It provides growth opportunities for professionals with knowledge in different disciplines, the skills and competencies necessary to develop their inquisitive capacity in the business field.

### **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 been 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

## 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 SPECIALTY IN MANAGEMENT**

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Face to Face)**

**DURATION: One Year**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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: 9 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
MANA	5108	Business Strategies	ACCO 5104 ECON 5102 MARK 5106	3
QUME	5103	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
FINA	5105	Managerial Finances	----	3
<b>FIFTH TERM: 6 CREDITS</b>				
MANA	5107	Business Ethics and Policies Formulation	----	3
SEMI	6160	Integrative Seminar in Administration	MANA 5108 MANA 6141 QUME 5103 RSCH 5113	3

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN MANAGEMENT

## SUGGESTED STUDY PROGRAM\*\*

(Study Modality: Face to Face)

DURATION: One Year and a Half

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102	Managerial Economics	----	3
MANA	6141	Global Business Operations	----	3
<b>SECOND TERM: 6 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 6 CREDITS</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: 6 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
HUBE	5101	Organizational Behavior	----	3
<b>SIXTH TERM: 6 CREDITS</b>				
FINA	5105	Managerial Finances	----	3
MANA	5107	Business Ethics and Policies Formulation	----	3
<b>SEVENTH TERM: 3 CREDITS</b>				
SEMI	6160	Integrative Seminar in Administration	MANA 5108 MANA 6141 QUME 5103 RSCH 5113	3

\*\*The student does not necessarily have to follow the order of courses suggested, but the order helps to complete the degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows him/her to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student may register for them in the term they are offered.

# MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN MANAGEMENT

## SUGGESTED STUDY PROGRAM\*\*

(Study Modality: Distance Education)

DURATION: One Year

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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: 9 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	3
MANA	5108*	Business Strategies	ACCO 5104 ECON 5102 MARK 5106	3
QUME	5103*	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	3
FINA	5105*	Managerial Finances	----	3
<b>FIFTH TERM: 6 CREDITS</b>				
MANA	5107*	Business Ethics and Policies Formulation	----	3
SEMI	6160*	Integrative Seminar in Administration	MANA 5108 MANA 6141 QUME 5103 RSCH 5113	3

## MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN MANAGEMENT

### SUGGESTED STUDY PROGRAM\*\*

(Study Modality: Distance Education)

DURATION: One Year and a Half

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102*	Managerial Economics	----	3
MANA	6141*	Global Business Operations	----	3
<b>SECOND TERM: 6 CREDITS</b>				
ACCO	5104*	Managerial Accounting	----	3
RSCH	5113*	Research Methodology	----	3
<b>THIRD TERM: 6 CREDITS</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: 6 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	3
HUBE	5101*	Organizational Behavior	----	3
<b>SIXTH TERM: 6 CREDITS</b>				
FINA	5105*	Managerial Finances	----	3
MANA	5107*	Business Ethics and Policies Formulation	----	3
<b>SEVENTH TERM: 3 CREDITS</b>				
SEMI	6160*	Integrative Seminar in Administration	MANA 5108 MANA 6141 QUME 5103 RSCH 5113	3

\* Courses offered entirely online.

\*\*The student does not necessarily have to follow the order of courses suggested, but the order helps to complete the degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows him/her to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student may register for them in the term they are offered.

### MINIMUM GRADING 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 SPECIALTY IN HUMAN  
RESOURCES**

**Credits: 39**

**Duration: One year**

**Location: Caguas Main**

**Study Modality: Face to Face and Distance Education**

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.

**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 been word processor (Word), spreadsheet (Excel), presentations (Power Point), and Adobe Reader.

**GRADUATION REQUIREMENTS:**

All students who:

3. Complete their study program with a 3.00 GPA.
4. Have met their financial obligations.



## 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
HURE	6131	Human Resources Management	45	3
HURE	6152	Labor Legislation	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	6151	Collective Bargaining	45	3
HURE	6153	Supervision and Leadership	45	3
HURE	6154	Compensation Systems and Benefits	45	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 SPECIALTY IN HUMAN  
RESOURCES**

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Face to Face)**

**DURATION: One Year**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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 Behavior	----	3
MARK	5106	Marketing Management	----	3
RSCH	5113	Research Methodology	----	3
<b>THIRD TERM: 9 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
HURE	6152	Labor Legislation	----	3
QUME	5103	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	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
MANA	5107	Business Ethics and Policy Formulation	----	3

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

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Face to Face)**

**DURATION: One Year and a Half**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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 Courses of Specialization	----	3
QUME	5103	Quantitative Methods	----	3
<b>FIFTH TERM: 6 CREDITS</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	HURE 6131 HURE 6152 QUME 5103 RSCH 5113	3

\*\*The student does not necessarily have to follow the order of courses suggested, but the order helps to complete the degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows him/her to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student may register for them in the term they are offered.

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

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Distance Education)**

**DURATION: One Year**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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 Behavior	----	3
MARK	5106*	Marketing Management	----	3
RSCH	5113*	Research Methodology	----	3
<b>THIRD TERM: 9 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	3
HURE	6152*	Labor Legislation	----	3
QUME	5103*	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	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
MANA	5107*	Business Ethics and Policy Formulation	----	3

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

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Distance Education)**

**DURATION: One Year and a Half**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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 Courses of Specialization	----	3
QUME	5103*	Quantitative Methods	----	3
<b>FIFTH TERM: 6 CREDITS</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	HURE 6131 HURE 6152 QUME 5103 RSCH 5113	3

\* Courses offered entirely online.

\*\*The student does not necessarily have to follow the order of courses suggested, but the order helps to complete the degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows him/her to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student may register for them in the term they are offered.

**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 SPECIALTY IN ADMINISTRATION  
OF HEALTH ORGANIZATIONS**

**Credits: 39**

**Duration: One year**

**Location: Caguas Main**

**Study Modality: Face to Face and Distance Education**

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.

**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 been word processor (Word), spreadsheet (Excel), presentations (Power Point), and Adobe Reader.

**GRADUATION REQUIREMENTS:**

All students who:

5. Complete their study program with a 3.00 GPA.
6. Have met their financial obligations.

## 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
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  
180**



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>	39

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN  
ADMINISTRATION OF HEALTH ORGANIZATIONS**

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Face to Face)**

**DURATION: One Year**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<b>FIRST TERM: 9 CREDITS</b>				
ACCO	5104	Managerial Accounting	----	3
ECON	5102	Managerial Economics	----	3
MAHE	6139	Legal and Regulatory Aspects in Health Systems Management	----	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: 9 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	3
MAHE	6140	Planning, Assessment, and Control of Health Systems	----	3
QUME	5103	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE		Elective Courses of Specialization	----	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
MANA	5107	Business Ethics and Policy Formulation	----	3

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN  
ADMINISTRATION OF HEALTH ORGANIZATIONS**

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Face to Face)**

**DURATION: One Year and a Half**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102	Managerial Economics	----	3
MAHE	6139	Legal and Regulatory Aspects 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		Elective Courses of Specialization	----	3
MARK	5106	Marketing Management	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
MAHE	6140	Planning, Assessment, and Control of Health Systems	----	3
QUME	5103	Quantitative Methods	----	3
<b>FIFTH TERM: 6 CREDITS</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	HURE 6131 HURE 6152 QUME 5103 RSCH 5113	3

\*\*The student does not necessarily have to follow the order of courses suggested, but the order helps to complete the degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows him/her to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student may register for them in the term they are offered.

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN  
ADMINISTRATION OF HEALTH ORGANIZATIONS**

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Distance Education)**

**DURATION: One Year**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<b>FIRST TERM: 9 CREDITS</b>				
ACCO	5104*	Managerial Accounting	----	3
ECON	5102*	Managerial Economics	----	3
MAHE	6139*	Legal and Regulatory Aspects in Health Systems Management	----	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: 9 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	3
MAHE	6140*	Planning, Assessment, and Control of Health Systems	----	3
QUME	5103*	Quantitative Methods	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
ELECTIVE*		Elective Courses of Specialization	----	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
MANA	5107*	Business Ethics and Policy Formulation	----	3

**MINIMUM GRADING 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.

**MASTER'S DEGREE IN BUSINESS ADMINISTRATION SPECIALTY IN  
ADMINISTRATION OF HEALTH ORGANIZATIONS**

**SUGGESTED STUDY PROGRAM\*\***

**(Study Modality: Distance Education)**

**DURATION: One Year and a Half**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<b>FIRST TERM: 6 CREDITS</b>				
ECON	5102*	Managerial Economics	----	3
MAHE	6139*	Legal and Regulatory Aspects 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*		Elective Courses of Specialization	----	3
MARK	5106*	Marketing Management	----	3
<b>FOURTH TERM: 6 CREDITS</b>				
MAHE	6140*	Planning, Assessment, and Control of Health Systems	----	3
QUME	5103*	Quantitative Methods	----	3
<b>FIFTH TERM: 6 CREDITS</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	HURE 6131 HURE 6152 QUME 5103 RSCH 5113	3

\* Courses offered entirely online.

\*\*The student does not necessarily have to follow the order of courses suggested, but the order helps to complete the degree in the stipulated time. The student should be aware of taking the courses that have prerequisites in an order that allows him/her to continue taking the other courses without problems. Courses without prerequisites do not have a specific order. The student may register for them in the term they are offered.

## **BACHELOR'S IN BUSINESS ADMINISTRATION**

**Credits: 120**

**Duration: Two Years and eight months**

**Location: Caguas Main**

**Study Modality: Face to Face and Distance Education**

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  
CURRICULAR STRUCTURE**

**GENERAL EDUCATION COURSES**

**Prescribed: 33 credits**

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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

**Sub - total:**

**525 hours**

**33 credits**

**GENERAL EDUCATION ELECTIVES**

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

COURSES	CODE	COURSE NAME	HOURS CONTACTS	CREDITS
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
SOCI	2015	Principles of Sociology	45	3
SPAN	3002	Advanced Spanish	45	3

**Sub - total:**

**90 hours**

**6 credits**

## 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**

## CONCENTRATION 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>HOURS CONTACTS</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>

# BACHELOR'S IN BUSINESS ADMINISTRATION

## SUGGESTED PROGRAM OF STUDIES \*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	PREREQUISITES	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	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	PREREQUISITES	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 Work Mediation	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**

\*\* 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.

# BACHELOR'S IN BUSINESS ADMINISTRATION

## SUGGESTED PROGRAM OF STUDIES \*\*

(Study Modality: Distance Education)

COURSE	CODE	COURSE NAME	PREREQUISITES	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	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	PREREQUISITES	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 Work Mediation	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 offered entirely online.

\*\* 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 GRADING POLICY

Students enrolled in the Bachelor of 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	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			

2. Obtain at least a grade of B to pass the MANA 4014 course (Seminar and Internship in Administration).
3. 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**

**Credits: 60**

**Duration: One year and eight months**

**Location: Caguas Main**

**Study Modality: Face to Face**

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:**

- a. 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.

## CURRICULAR 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**

### 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**

### PROFESSIONAL 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**

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
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**

**ASSOCIATE DEGREE IN BUSINESS  
ADMINISTRATION  
SUGGESTED STUDY PROGRAM \*\***

COURSES	CODE	COURSE NAME	PREREQUISITES	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**

\*\* 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 GRADING 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.

# SCHOOL OF TECHNOLOGY

# **SCHOOL OF TECHNOLOGY**

## **DESCRIPTION OF THE SCHOOL OF TECHNOLOGY**

The purpose of the School of Technology is to prepare professionals in the areas of technology. As part of the academic proposal the following programs are offered: Bachelor's Degrees in: Information Technology, Networking and Security; Associate Degree in Cyber Security. We also have a Certificate as a Computer Repair Technician.

The organizational structure of the School of Technology is composed of a dean and a coordinator for the undergraduate programs. The program coordinators oversee the quality in the development, implementation and evaluation of the teaching and learning process.

## **MISSION**

To form an integral human being capable of performing optimally in technical and business fields with the highest sense of ethics, professionalism, and responsibility. We will achieve this by developing leaders with values and imparting state-of-the-art knowledge, skills and competencies adapted to the relevant academic level.

## **VISION**

To be recognized as the school that best contributes to the continuous development of human capital at the business and technological level in the academic, professional and research fields.

## **PHILOSOPHY**

The school of technology faithfully believes in the formation of leaders and professionals capable of integrating the basic and fundamental knowledge of technology with the principles related to information access and globalization.

Through the acquisition of facilitated knowledge, students in our programs will significantly influence the management and understanding of various scenarios (administrative and technological) at the individual, group, and organizational levels with the purpose of improving the operational and financial results of organizations.

## GOALS

1. To develop in the student the knowledge, skills and competencies in the areas related to technology.
2. To ensure in the student an effective application of the fundamental concepts and principles in their area of specialty in order to perform responsibly and successfully in their professional life.
3. To promote the formation of a human being with a high sense of social and ethical responsibility.
4. Contribute to brand recognition through our programs; providing cutting-edge solutions to our communities through the knowledge generated in continuously evolving teaching environments.
5. To ensure a culture of evaluation and continuous improvement in the administrative and academic areas.

## **BACHELOR'S IN INFORMATION TECHNOLOGY, NETWORKS, AND SECURITY**

**Credits: 120**

**Duration: Three years**

**Location: Caguas Main and Yauco campuses**

**Study Modality: Face to Face and Distance Education**

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.

## CURRICULAR 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
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
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**

## 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 PROGRAM OF STUDY\*\*

(Study Modality: Face to Face)

COURSES	CODE	COURSE NAME	PREREQUISITES	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: 12 CREDITS</b>				
COMP	1504	Fundamentals of Operating Systems	----	3
COMP	2515	Diagnostic and Repair of Electronic Devices	COMP 1205 COMP 1514	6
ENGL	1102	Basic English II	ENGL 1101	3
<b>THIRD TERM: 12 CREDITS</b>				
COMP	2517	Printers	COMP 1205	1
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 1503 COMP 1504 COMP 2515 ENGL 1101	4
<b>FOURTH TERM: 12 CREDITS</b>				
COMP	2423	Installation and Configuration of Servers	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: 15 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
HIST	3004	History of Puerto Rico	----	3
<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

COURSES	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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: 15 CREDITS</b>				
COMP	2424	Server Implementation	COMP 3421	3
COMP	3501	Scripting Languages	COMP 1504	3
COMP	3424	Fundamentals of Wireless, Web, and Forensic Analysis	COMP 1504	3
ELECTIVE		Professional Technical Elective	----	3
ELECTIVE		General Education Elective	----	3
<b>NINTH TERM: 14 CREDITS</b>				
COMP	3423	Advanced Implementation of Infrastructure Servers	COMP 2424	3
COMP	4001	Ethical Hacking in Network Environment	COMP 2423 COMP 2424	4
COMP	4426	Supervised Project	COMP 2423 COMP 2424 COMP 2516	4
COPR	3011	Contemporary Problems	-----	3

**Grand Total of the Bachelor's in Information Technology, Networks, And Security: 120 credits and 2,235 hours**

\*\* 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.

# BACHELOR'S IN INFORMATION TECHNOLOGY, NETWORKS, AND SECURITY

## SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Distance Education in Caguas Main)

COURSES	CODE	COURSE NAME	PREREQUISITES	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: 12 CREDITS</b>				
COMP	1504*	Fundamentals of Operating Systems	----	3
COMP	2515*	Diagnostic and Repair of Electronic Devices	COMP 1205 COMP 1514	6
ENGL	1102*	Basic English II	ENGL 1101	3
<b>THIRD TERM: 12 CREDITS</b>				
COMP	2517*	Printers	COMP 1205	1
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 1503 COMP 1504 COMP 2515 ENGL 1101	4
<b>FOURTH TERM: 12 CREDITS</b>				
COMP	2423*	Installation and Configuration of Servers	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: 15 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
HIST	3004*	History of Puerto Rico	----	3
<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

COURSES	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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: 15 CREDITS</b>				
COMP	2424*	Server Implementation	COMP 3421	3
COMP	3501*	Scripting Languages	COMP 1504	3
COMP	3424*	Fundamentals of Wireless, Web, and Forensic Analysis	COMP 1504	3
ELECTIVE*		Professional Technical Elective	----	3
ELECTIVE*		General Education Elective	----	3
<b>NINTH TERM: 14 CREDITS</b>				
COMP	3423*	Advanced Implementation of Infrastructure Servers	COMP 2424	3
COMP	4001*	Ethical Hacking in Network Environment	COMP 2423 COMP 2424	4
COMP	4426*	Supervised Project	COMP 2423 COMP 2424 COMP 2516	4
COPR	3011*	Contemporary Problems	-----	3

**Grand Total of the Bachelor's in Information Technology, Networks, And Security: 120 credits and 2,235 hours**

\* Courses offered entirely online.

\*\* 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 GRADING 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**

**Credits: 71**

**Duration: One year and eighty months**

**Location: Caguas Main**

**Study Modality: Face to Face**

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.

### **ADDITIONAL PROGRAM REQUIREMENT:**

1. Orientation with the Academic Coordinator

### **GRADUATION REQUIREMENTS:**

1. Completion of 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 higher.

## 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
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,	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**

\*\* 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 GRADING 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**

**Credits: 36**

**Duration: One year**

**Location: Caguas Main and Yauco Campus**

**Study Modality: Face to Face**

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 achieved a minimum GPA of 2.00 or more.

## CURRICULAR 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**

\*\* 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 GRADING 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

# **SCHOOL OF HEALTH SCIENCES**

## **DESCRIPTION OF THE SCHOOL**

The School of Health Sciences provides students with study alternatives that allow them to build knowledge through varied experiences, which will enrich their academic, personal, and professional life. The academic programs attached to the school combine theoretical content with clinical experiences in various health scenarios, which provide the opportunity to develop the competencies of the profession. The school aspires to be recognized as an academic and community leader in the area of health promotion and disease prevention for the Puerto Rican community, as well as abroad, through academic programs of excellence at the undergraduate and graduate levels, which respond to the development of health professionals committed to the spirit of public service and contribute to the improvement of health services and the quality of life of our society.

The School of Health Sciences, integrates the programs of: Master of Science in Nursing with Adult and the Elderly Specialty, role in Management or Education, Bachelor of Science in Nursing RN to BSN, Bachelor of Science in Nursing, Bachelor of Science in Diagnostic Imaging with concentration in CT and MRI, Associate Degree in Nursing Science, Associate Degree in Therapeutic Massage, Associate Degree in Pharmacy Technician, Associate Degree in Medical Sonography, Associate Degree in Cardiac and Vascular Technology, Associate Degree in Radiologic Technology, Associate Degree in Optical Science, and Certificates in Practical Nursing, Pet Groomer Professional, Medical Secretary with Insurance Billing, Veterinary Assistant, Preschool Teacher Assistant, Laboratory Assistant with Electronic Processing, and Veterinary Assistant with Pet Grooming. These programs provide students with the knowledge and competencies necessary to be applied in service during the offering of the experiences (practicum).

## **MISSION OF THE SCHOOL**

The mission of the School of Health Sciences is to prepare professionals in the health sciences with the integral development of the human being, for the creation and utilization of knowledge through research, evidence-based practice, academic excellence, safety, and quality of services. Education is offered at different academic levels, such as: master's, baccalaureate, associate degrees, and certificates. Emphasis is placed on the pursuit of critical thinking, problem solving methods and decision making for the development of knowledge based on ethical values such as: justice, equity,



and respect for human dignity. To enrich teaching, service and promote research, the School of Health Sciences fosters interaction with different educational agencies, state and national accrediting agencies, and health services agencies that provide students with the opportunity to practice their competencies and skills.

## **PHILOSOPHY OF LEARNING**

Columbia Central University believes that all persons possessing a high school diploma can pursue some level of post-secondary education, given the students' desires to do so, the availability of the appropriate program, the effective teaching and learning process, and student support services. Therefore, all who begin should achieve their educational goal.

## **MASTER'S IN NURSING SCIENCES SPECIALIZED IN ADULTS AND THE ELDERLY**

**Credits: 41**

**Duration: Three years**

**Location: Caguas Main**

**Study Modality: Face to Face and Distance Education**

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.

The Master of Science in Nursing with a Specialty in Adults and the Elderly prepares you to exercise your role as a health educator or administrator, while providing quality and comprehensive patient care.

### **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. Negative Criminal record certificate from the Puerto Rico Police Department
2. Current Health Certificate

3. HIPPA certification
4. Hepatitis B vaccines (3 doses) In case of more than 10 years of having received it, a blood test is required to prove immunity.
5. Cardiopulmonary Resuscitation Certification (CPR)
6. Seal and fit test \*
7. Influenza Vaccine \*
8. Varicella Vaccine (2 doses). If you have had chickenpox, blood or varicella titer test is required to prove immunity.
9. Negative certification of Law 300-Credentials and Criminal History Verification Law of Providers to Children, Persons with Disabilities and Health Professionals.
10. Generalist licensure issued by the Board of Nursing Examiners of Puerto Rico in force.
11. Issued license
12. Covid Vaccine
13. Any other requirements by the practice facility

**\*Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

#### **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.

## CURRICULAR 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**

### SPECIALITY 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 hours**

**8 credits**

**ROLE IN MANAGEMENT  
ELECTIVE CORE COURSES**

**Core Electives: The student chooses 6 credits from the courses**

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**

**ROLE IN MANAGEMENT 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**

**ROLE IN EDUCATION  
ELECTIVE CORE COURSES**

**Core Electives: The student chooses 6 credits from the courses**

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 IN EDUCATION COURSES

**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**

The curricular structure of the Master of Science in Nursing with a specialization in Adults and the Elderly with a role in Management or Education includes the following components:

COMPONENT	CREDITS
Core Courses	18
Specialty Courses	8
Elective Core Courses in the Role of Management or Education	6
Courses of the Role in Management or Education	9
<b>Total</b>	<b>41</b>

**MASTER'S IN NURSING SCIENCE SPECIALIZED IN ADULTS AND THE ELDERLY,  
ROLE IN MANAGEMENT**

**SUGGESTED PROGRAM OF STUDY\*\***

**(Study Modality: Face to Face)**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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		Management Role Core Elective Course	----	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	Project for Advanced Research in Nursing	NURS 5111	3
NURS	6149	Management Processes in Nursing Services	MAHE 6140	4
<b>SEVENTH TERM: 5 CREDITS</b>				
ELECTIVE		Management Role Core Elective Course	----	3
NURS	6150	Management Practice in Nursing Services	NURS 6149	2

\*\* 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.

**MASTER'S IN NURSING SCIENCE SPECIALIZED IN ADULTS AND THE ELDERLY,  
ROLE IN MANAGEMENT**

**SUGGESTED PROGRAM OF STUDY\*\***

**(Study Modality: Distance Education)**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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*		Management Role Core Elective Course	----	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*	Project for Advanced Research in Nursing	NURS 5111	3
NURS	6149*	Management Processes in Nursing Services	MAHE 6140	4
<b>SEVENTH TERM: 5 CREDITS</b>				
ELECTIVE*		Management Role Core Elective Course	----	3
NURS	6150^	Management Practice in Nursing Services	NURS 6149	2

\* Courses offered entirely online.

^Courses that are offered on a face-to-face basis.

\*\* 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.



**MASTER'S IN NURSING SCIENCE SPECIALIZED IN ADULTS AND THE ELDERLY,  
ROLE IN EDUCATION**

**SUGGESTED PROGRAM OF STUDY\*\***

**(Study Modality: Face to Face)**

COURSE	CODE	COURSE NAME	PREREQUISITES	CREDITS
<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		Education Role Core Elective Course	----	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>				
NURS	6142	Advanced Thematic Seminar for Adults and the Elderly II	NURS 6141	4
NURS	6151	Curriculum Development in Nursing Education	----	3
<b>SIXTH TERM: 7 CREDITS</b>				
NURS	5112	Project for Advanced Research in Nursing	NURS 5111	3
NURS	6152	Educational Processes in Nursing Teaching	NURS 6151	4
<b>SEVENTH TERM: 5 CREDITS</b>				
ELECTIVE		Education Role Core Elective Course	----	3
NURS	6153	Educational Practice in Nursing Teaching	NURS 6152	2

\*\* 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.

**MASTER'S IN NURSING SCIENCE SPECIALIZED IN ADULTS AND THE ELDERLY,  
ROLE IN EDUCATION**

**SUGGESTED PROGRAM OF STUDY\*\***

**(Study Modality: Distance Education)**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PREREQUISITES</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*		Education Role Core Elective Course	----	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>				
NURS	6142*	Advanced Thematic Seminar for Adults and the Elderly II	NURS 6141	4
NURS	6151*	Curriculum Development in Nursing Education	----	3
<b>SIXTH TERM: 7 CREDITS</b>				
NURS	5112*	Project for Advanced Research in Nursing	NURS 5111	3
NURS	6152*	Educational Processes in Nursing Teaching	NURS 6151	4
<b>SEVENTH TERM: 5 CREDITS</b>				
ELECTIVE*		Education Role Core Elective Course	----	3
NURS	6153^	Educational Practice in Nursing Teaching	NURS 6152	2

\* Courses offered entirely online.

^Courses that are offered on a face-to-face basis.

\*\* 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 GRADING 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 DEGREE OF SCIENCE IN NURSING RN TO BSN**

**Credits: 124**

**Duration: One year and four months**

**Location: Caguas Main and Yauco Campus**

**Study Modality: Face to Face and Distance Education**

The purpose of the Bachelor Degree of Science in Nursing 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 Degree of Science in Nursing RN to BSN program rests on the Associate Degree program.

The Baccalaureate of nursing program at Columbia Central University at the Caguas, Carolina, Bayamon and Yauco campuses is accredited by the: Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000.

The most recent accreditation decision made by the ACEN Board of Commissioners for the Baccalaureate nursing program is Initial Accreditation. View the public information disclosed by the ACEN regarding this program at

<http://www.acenursing.us/accreditedprograms/programSearch.htm>.

**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 for the LMS used 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. Negative Certificate of Criminal Records
2. Health Certificate
3. Hepatitis B Vaccination (3 doses) In case of more than 10 years of having received it, a blood test is required to prove immunity.
4. HIPAA Certificate
5. Cardiopulmonary Resuscitation Certification (CPR).
6. Doping Test \*
7. Seal and fit test \*
8. Influenza Vaccine \*
9. Varicella Vaccine (2 doses). If you have had chickenpox, blood or varicella titer test is required to prove immunity
10. Photo identification
11. Nose, throat, and stool culture\*
12. Birth certificate
13. Negative certification of the Law 300-Credentials and Criminal History Verification Law of

Providers to Children, People with Disabilities and Health Professionals

14. Protective Techniques (CPI)

15. Covid Vaccine

**\*Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

### 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:

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:

- Have achieved an average of 2.75 in professional courses.
- Have achieved an average of 2.25 in related courses.
- Have achieved a minimum GPA of 2.25.

## **ADDITIONAL REQUIREMENTS OF THE BACHELOR DEGREE OF SCIENCE IN NURSING RN TO BSN PROGRAM 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.

### **CURRICULAR STRUCTURE**

#### **GENERAL EDUCATION COURSES**

**Prescribed: 15 credits**

<b>COURSES</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>CONTACT HOURS</b>	<b>CREDITS</b>
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 ELECTIVES

(9 credits to choose from)

Electives: 9 credits

COURSE	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

## RELATED COURSES

Prescribed: 9 credits

COURSE	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**

COURSE	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 DEGREE OF SCIENCE IN NURSING RN TO BSN

## SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Face to Face in Caguas Main and  
Yauco Campus)

COURSE	CODE	COURSE NAME	PREREQUISITES	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: 12 CREDITS</b>				
ELECTIVE		General Education	---	3
CHEM	3501	Fundamentals of Inorganic Chemistry	---	3
HIST	3004	History of Puerto Rico	---	3
NURS	3505	Principles of Research in Health and Nursing	NURS 3503 NURS 3504 STAT 3103	3
<b>THIRD TERM: 13 CREDITS</b>				
ELECTIVE		General Education	---	3
CHEM	3502	Fundamentals of Organic Chemistry	CHEM 3501	3
HUMA	3006	Universal History II	---	3
NURS	4113	Nursing Process with Families and Community	NURS 3503 NURS 3504 NURS 3505 STAT 3103	4
<b>FOURTH TERM: 14 CREDITS</b>				
ELECTIVE		General Education	---	3
COPR	3011	Contemporary Problems	---	3
SOCI	2015	Principles of Sociology	---	3
NURS	4114	Theory and Practice in the Administration of Nursing Services	NURS 3503 NURS 3504 NURS 3505 NURS 4113 STAT 3103	5

**Grand total of the Bachelor of Science in Nursing RN to BSN: 124\*\*\* credits**

\*\* 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.

\*\*\*For students with an Associate of Science Degree in Nursing from CCU, completion of the 52 credits of the Bachelor of Science in Nursing RN to BSN is required for a grand total of 124 credits. Transfer students must pass all 52 credits of the Bachelor of Science in Nursing RN to BSN.

# BACHELOR DEGREE OF SCIENCE IN NURSING RN TO BSN

## SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Distance Education in Caguas Main)

COURSE	CODE	COURSE NAME	PREREQUISITES	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: 12 CREDITS</b>				
ELECTIVE*		General Education	---	3
CHEM	3501+	Fundamentals of Inorganic Chemistry	---	3
HIST	3004*	History of Puerto Rico	---	3
NURS	3505+	Principles of Research in Health and Nursing	NURS 3503 NURS 3504 STAT 3103	3
<b>THIRD TERM: 13 CREDITS</b>				
ELECTIVE*		General Education	---	3
CHEM	3502+	Fundamentals of Organic Chemistry	CHEM 3501	3
HUMA	3006*	Universal History II	---	3
NURS	4113+	Nursing Process with Families and Community	NURS 3503 NURS 3504 NURS 3505 STAT 3103	4
<b>FOURTH TERM: 14 CREDITS</b>				
ELECTIVE*		General Education	---	3
COPR	3011*	Contemporary Problems	---	3
SOCI	2015*	Principles of Sociology	---	3
NURS	4114+	Theory and Practice in the Administration of Nursing Services	NURS 3503 NURS 3504 NURS 3505 NURS 4113 STAT 3103	5

**Grand total of the Bachelor of Science in Nursing RN to BSN: 124\*\*\* credits**

\* Courses offered entirely online.

+ Courses that have a theory component that is offered completely online, and the laboratory or practical component (internship) are offered face-to-face.

\*\* 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.

\*\*\*For students with an Associate of Science Degree in Nursing from CCU, completion of the 52 credits of the Bachelor of Science in Nursing RN to BSN is required for a grand total of 124 credits. Transfer students must pass all 52 credits of the Bachelor of Science in Nursing RN to BSN.

**MINIMUM GRADING 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 DEGREE OF SCIENCE IN NURSING**

**Credits: 125**

**Duration: Three years**

**Location: Caguas Main, Bayamon and Carolina Campuses**

**Study Modality: Face to Face**

The Bachelor Degree of Science in Nursing 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.

The Baccalaureate of nursing program at Columbia Central University at the Caguas, Carolina, Bayamon and Yauco campuses is accredited by the: Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000.

The most recent accreditation decision made by the ACEN Board of Commissioners for the Baccalaureate nursing program is Initial Accreditation. View the public information disclosed by the ACEN regarding this program at

<http://www.acenursing.us/accreditedprograms/programSearch.htm>.

## **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.

## PRACTICUM 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) \*
13. COVID Vaccine

**\* Important Note:** Some practice centers may require additional documents. The student needs to revalidate to practice the profession.

## REQUIREMENTS FOR THE BOARD EXAM

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.
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.

## 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**

### GENERAL EDUCATION ELECTIVES

**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**

## CONCENTRATION COURSES

**Prescribed: 76 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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

**Sub-total:**

**1,770 hours**

**76 credits**

# BACHELOR DEGREE OF SCIENCE IN NURSING

## SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<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	2
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	2
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>EIGHT 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
NINTH TERM: 12 CREDITS				
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
NURS	4100	Practicum: Nursing Management and Leadership: 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



## **Grand total of Bachelor of Science in Nursing: 125 credits and 2,610 hours**

\*\* 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 GRADING 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 DEGREE IN DIAGNOSTIC IMAGING WITH CONCENTRATION IN CT AND MRI**

**Credits: 135**

**Duration: Three years**

**Location: Caguas Main, Bayamon and Carolina Campuses**

**Study Modality: Face to Face**

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 and ARRT.
5. Students will be able to communicate effectively in a variety of methods.

## **PRACTICUM 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 BOARD EXAM

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.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 27 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
SPAN	1101	Basic Spanish I	60	3
SPAN	1102	Basic Spanish II	45	3
ENGL	1101	Basic English I	60	3
ENGL	1102	Basic English II	45	3
MATH	2010	Introductory Algebra	45	3
COMP	1205	Introduction to Computers	60	3
PSYC	2014	Principles of Psychology	45	3
COMU	3010	Effective Communication	45	3
SEMI	1105	College Success and Professional Seminar	45	3

**Sub-total: 450 hours 27 credits**

### RELATED COURSES

**Prescribed: 17 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
ANAT	2030	Sectional Anatomy	60	3
PHSC	2000	Introduction to Physics	45	3
PHSC	2010	Radiological Physics	45	3
MEDT	2000	Medical Terminology	30	2

**Sub-total: 300 hours 17 credits**

## CONCENTRATION COURSES

**Prescribed: 91 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
RADI	2000	Introduction to Radiology	30	2
RADI	2010	Patient Care and Management	45	3
RADI	2020	Radiographic Positioning and Related Anatomy I	30	2
RADI	2020L	Radiographic Positioning and Related Anatomy I: Laboratory	30	1
RADI	2030	Modality and Equipment Knowledge Imaging	30	2
RADI	2040	Integrative 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 Related Anatomy II	30	2
RADI	2070L	Radiographic Positioning and Related Anatomy II: Laboratory	30	1
RADI	2080	Clinical Internship I	135	3
RADI	2170	Radiographic Quality Assurance and Control	30	2
RADI	2100	Radiographic Positioning and Related Anatomy III	30	2
RADI	2100L	Radiographic Positioning and Related Anatomy III: Laboratory	30	1
RADI	2110	Clinical Internship II	135	3
RADI	2200	Pharmacology and Contrast Means in Diagnostic Imaging	45	3
RADI	2130	Radiological Pathology	30	2
RADI	2140	Radiographic Positioning and Related Anatomy IV	30	2

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
RADI	2140L	Radiographic Positioning and Related Anatomy IV: Laboratory	30	1
RADI	2150	Clinical Internship III	135	3
RADI	2500	Advanced Sectional Anatomy	60	4
RADI	3000	Physics - Instrumentation and Images in Computed Tomography	45	3
RADI	3010	Procedures for the Formation of Images by Computed Tomography	45	3
RADI	3020	Pathological Correlation by Computed Tomography	45	3
RADI	3050	Physics - Principles, Parameters, and concepts of Magnetic Resonance	45	3
RADI	3030	Procedures for Obtaining Images by Magnetic Resonance	45	3
RADI	3040	Pathological Correlation by Magnetic Resonance	45	3
RADI	3060	Ethics and Law in the Imaging Sciences	45	3
RADI	3070	Computers in Imaging and Medical Informatics	45	3
RADI	4030	Pre-Board Seminar of Radiological Technology, CT, and MRI	45	3
RADI	4040	Research Methods and Information Literacy	45	3
RADI	4050	Educational principles for technologists	45	3
RADI	4010	Clinical Internship in Computerized Tomography	270	6
RADI	4020	Clinical Internship in Magnetic Resonance	270	6

**Sub-total:**

**2,085 hours**

**91 credits**



**BACHELOR DEGREE IN DIAGNOSTIC IMAGING WITH CONCENTRATION  
IN CT AND MRI**

**SUGGESTED PROGRAM OF STUDY\*\***

**(Study Modality: Face to Face)**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE- REQUIREME</b>	<b>CREDITS</b>
<b>FIRST TERM: 14 CREDITS</b>				
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
RADI	2000	Introduction to Radiology	----	2
<b>SECOND TERM: 17 CREDITS</b>				
ENGL	1102	Basic English II	ENGL 1101	3
PHSC	2000	Introduction to Physics	MATH 2010	3
COMP	1205	Introduction to Computers	----	3
BIOL	1602	Human Anatomy and Physiology II	BIOL 1601	3
RADI	2010	Patient Care and Management	----	3
MEDT	2000	Medical Terminology	----	2
<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 1601, RADI 2000, RADI 2010	2
RADI	2020L	Radiographic Positioning and Related Anatomy I: Laboratory	BIOL 1601, RADI 2000, RADI 2010	1
RADI	2030	Knowledge in Imaging Modalities and Equipment	RADI 2000	2
RADI	2040	Integrating Seminar	RADI 2000, MEDT 2000	2

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FOURTH TERM: 14 CREDITS</b>				
SPAN	1102	Basic Spanish II	SPAN 1101	3
RADI	2050	Principles of Radiographic Exposure	RADI 2000, PHSC 2010	3
RADI	2060	Principles of Radiobiology and Radiological 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 2020, RADI 2020L, RADI 2040	3
<b>FIFTH TERM - 14 CREDITS</b>				
PSYC	2014	Principles of Psychology	-----	3
RADI	2170	Radiographic Quality Assurance and 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	2200	Pharmacology and Contrast Means in Diagnostic Imaging	RADI 2000, RADI 2010	3
<b>SIXTH TERM: 14 CREDITS</b>				
COMU	3010	Effective Communication	-----	3
ANAT	2030	Sectional Anatomy	BIOL 1602	3
RADI	2130	Radiological Pathology	BIOL 1602, RADI 2170	2
RADI	2140	Radiographic Positioning and Related Anatomy IV	RADI 2100, RADI 2100L, RADI 2200	2
RADI	2140L	Radiographic Positioning and Related Anatomy IV: Laboratory	RADI 2100, RADI 2100L, RADI 2200	1
RADI	2150	Clinical Internship III	RADI 2110, RADI 2100, RADI 2100L, RADI 2200, RADI 2170	3

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>SEVENTH TERM: 13 CREDITS</b>				
RADI	3060	Ethics and Law in the Imaging Sciences	----	3
RADI	3070	Computers in Imaging and Medical Informatics	----	3
RADI	4040	Research Methods and Information Literacy	----	3
RADI	2500	Advanced Sectional Anatomy	ANAT 2030	4
<b>EIGHT TERM: 12 CREDITS</b>				
RADI	4050	Educational principles for technologists	----	3
RADI	3000	Physics - Instrumentation and Images in Computed Tomography	RADI 2500	3
RADI	3010	Procedures for the Formation of Images by Computed Tomography	RADI 2500	3
RADI	3020	Pathological Correlation by Computed Tomography	RADI 2500	3
<b>NINETH TERM: 12 CREDITS</b>				
RADI	4030	Pre-Board Seminar of Radiological Technology, CT, and MRI	All concentration courses	3
RADI	3050	Physics - Principles, Parameters, and concepts of Magnetic Resonance	RADI 2500	3
RADI	3030	Procedures for Obtaining Images by Magnetic Resonance	RADI 2500	3
RADI	3040	Pathological Correlation by Magnetic Resonance	RADI 2500	3
<b>TENTH TERM: 12 CREDITS</b>				
RADI	4010	Clinical Internship in Computerized Tomography	RADI 2500, RADI 3000, RADI 3010, RADI 3020	6
RADI	4020	Clinical Internship in Magnetic Resonance	RADI 2500, RADI 3030, RADI 3040, RADI 3050	6

**Grand Total of the Bachelor's Degree in Diagnostic Imaging with a Concentration in CT and MRI: 135 credits and 2,835 hours.**

\*\* 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 GRADING 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:

BIOL 1601	RADI 2020	RADI 2060	RADI 2140
BIOL 1602	RADI 2020L	RADI 2070	RADI 2140L
ANAT 2030	RADI 2030	RADI 2070L	RADI 2170
RADI 2000	RADI 2040	RADI 2100	RADI 2200
RADI 2010	RADI 2050	RADI 2100L	RADI 2500
PHSC 2010	MEDT 2000	RADI 2130	RADI 3000
RADI 3010	RADI 3040	RADI 3070	RADI 4050
RADI 3020	RADI 3050	RADI 4030	
RADI 3030	RADI 3060	RADI 4040	

Students enrolled in the following courses must obtain a minimum grade of "B" (80) to pass the course:

RADI 2080	RADI 2150	RADI 2110	RADI 4010
RADI 4020			

## **ASSOCIATE DEGREE IN NURSING SCIENCES**

**Credits: 72**

**Duration: Two years**

**Location: Caguas Main, and Yauco Campus**

**Study Modality: Face to Face**

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 their 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. Negative Certificate of Criminal Records
  2. Health Certificate
  3. Hepatitis B Vaccination (3 doses) In case of more than 10 years of having received it, a blood test is required to prove immunity.
  4. HIPAA Certificate
  5. Cardiopulmonary Resuscitation Certification (CPR).
  6. Doping Test \*.
-

7. Seal and fit test \*
8. Influenza Vaccine \*
9. Varicella Vaccine (2 doses). If you have had chickenpox, blood or varicella titer test is required to prove immunity.
10. Photo identification
11. Nose, throat, and stool culture\*.
12. Birth certificate
13. Negative certification of the Law 300-Credentials and Criminal History Verification Law of Providers to Children, People with Disabilities and Health Professionals.
14. Protective Techniques (CPI)
15. Covid Vaccine

**\*Important Note:** Some practice sites may require additional documents. The student needs to revalidate to practice the profession.

#### **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.

#### **BOARD EXAM REQUIREMENTS**

The following documents (original and copy) are required to revalidate and practice the profession:

1. Negative Certificate of Criminal Record (less than 3 months from issuance) 2.
2. Health Certificate
3. Birth Certificate and Social Security Card
4. Certification of No Alimony Debt (ASUME)
5. High School Credit Transcript
6. Transcript of Credit or Diploma or Certification of the Associate Degree earned at CCU

7. Completed application in all its parts, including the Affidavit with 2x2 photo and two letter size envelopes with postmark.
8. Payment to the Secretary of the Treasury for the amount of \$25.00 dollars for the revalidation examination fee by money order, bank draft or certified check. Provided that the license application and examination fees shall not be reimbursed to the applicant.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 15 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	60	3
SPAN	1102	Basic Spanish II	45	3

**Sub - total:** **255 hours** **15 credits**

### RELATED COURSES

**Prescribed: 13 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
COMP	1205	Introduction to Computers	60	3

**Sub - total:** **255 horas** **13 credits**

## PROFESSIONAL EDUCATION COURSES

**Prescribed: 44 credits**

COURSE	CODE	COURSE NAME	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	135	5
NURS	2614	Nursing Process of Adults and	135	5
NURS	2615	Nursing Process of Adults and	135	5
NURS	2616	Integrative Seminar	45	3

**Sub - total:**

**1,050 hours**

**44 credits**



## ASSOCIATE DEGREE IN NURSING SCIENCES

### SUGGESTED PROGRAM OF STUDIES \*\*

(Study Modality: Face to Face)

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

### **Grand total of Associate Degree of Science in Nursing: 72 credits and 1,560 hours**

\*\* 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 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**

**Credits: 63**

**Duration: One year and eight months**

**Location: Caguas Main**

**Study Modality: Face to Face**

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.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 15 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

**Sub - total:**

**255 hours**

**15 credits**

### RELATED COURSES

**Prescribed: 4 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	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**

COURSE	CODE	COURSE NAME	CONTACT HOURS	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

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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 PROGRAM OF STUDY\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<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

COURSE	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**

\*\* 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 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**

**Credits: 83**

**Duration: Two years**

**Location: Caguas Main and Carolina Campus**

**Study Modality: Face to Face and Distance Education**

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.

## CURRICULAR STRUCTURE

### EDUCATION COURSES GENERAL

**Prescribed: 15 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	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	30	2

**Sub - total:**

**1,780 hours**

**68 credits**

## ASSOCIATE DEGREE IN PHARMACY TECHNICIAN

### SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
PHAR	1618	Mathematics Pharmaceutical	---	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

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
FIFTH TERM: 13 CREDITS				
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 PHAR 2103 SEMI 1105 SPAN 1101 SPAN 1102	11
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	2

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
SIXTH TERM: 11 CREDITS				
PHAR	2113	Internship 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

\*\* 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.

## ASSOCIATE DEGREE IN PHARMACY TECHNICIAN

### SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Distance Education)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>FIRST TERM: 15 CREDITS</b>				
PHAR	1618*	Mathematics Pharmaceutical	---	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

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
FIFTH TERM: 13 CREDITS				
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 PHAR 2103 SEMI 1105 SPAN 1101 SPAN 1102	11
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	2

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<b>SIXTH TERM: 11 CREDITS</b>				
PHAR	2113 ^	Internship 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 offered entirely online.

^Courses that are offered on a face-to-face basis.

+ Courses that have a theory component that is offered completely online, and the laboratory or practical component (internship) are offered face-to-face.

\*\* 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 GRADING 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**

**Credits: 83**

**Duration: Two years**

**Location: Caguas Main, Bayamon, and Carolina Campuses**

**Study Modality: Face to Face and Distance Education**

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 education 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**

1. 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.
2. 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.
3. 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. 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 take the Board Exam to practice the profession.

## BOARD EXAM REQUIREMENTS

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.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 24 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
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**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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 EDUCATION COURSES

**Prescribed: 42 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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
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**

## ASSOCIATE DEGREE IN TECHNOLOGY RADIATION

### SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	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	COURSE NAME	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	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	COURSE NAME	PRE- REQUIREMENTS	CREDITS
<b>SIXTH TERM 12 CREDITS</b>				
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

\*\* 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.

## ASSOCIATE DEGREE IN TECHNOLOGY RADIATION

### SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Distance Education in Bayamon  
and Carolina Campuses)

COURSE	CODE	COURSE NAME	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	COURSE NAME	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	COURSE NAME	PRE- REQUIREMENTS	CREDITS
<b>SIXTH TERM 12 CREDITS</b>				
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 offered entirely online.

^Courses that are offered on a face-to-face basis.

+ Courses that have a theory component that is offered completely online, and the laboratory or practical component (internship) are offered face-to-face.

\*\* 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 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**

**Credits: 84**

**Duration: Two years**

**Location: Caguas Main, Bayamon, and Carolina Campus**

**Study Modality: Face to Face and Distance Education**

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 education 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.

## **BOARD EXAM 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.
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.



## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 24 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
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**

COURSE	CODE	NAME	HOURS CONTACT	CREDITS
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

**Sub-total**

**300 hours**

**17 credits**

## PROFESSIONAL EDUCATION COURSE

**Prescribed: 43 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	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
SONO	2130 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**

## ASSOCIATE DEGREE IN MEDICAL SONOGRAPHY

### SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<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	MATH 2010	3
SONO	2020	Gynecological Sonography	SONO 2010, SONO 2200	4
SONO	2130	Laboratory of Integration of Clinical Skills in Medical	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

## ASSOCIATE DEGREE IN MEDICAL SONOGRAPHY

### SUGGESTED PROGRAM OF STUDY\*\*

(Study Modality: Distance Education in Bayamon  
and Carolina Campuses)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<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	MATH 2010	3
SONO	2020+	Gynecological Sonography	SONO 2010, SONO 2200	4
SONO	2130^	Laboratory of Integration of Clinical Skills in Medical	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 offered entirely online.

^Courses that are offered on a face-to-face basis.

+ Courses that have a theory component that is offered completely online, and the laboratory or practical component (internship) are offered face-to-face.

\*\* 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 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

## **ASSOCIATE DEGREE IN OPTICAL SCIENCES**

**Credits: 79**

**Duration: Two years**

**Location: Caguas Main and Bayamon Campus**

**Study Modality: Face to Face and Distance Education**

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.

## **BOARD EXAM REQUIREMENTS**

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.
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

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 24 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
HURE	1104	Human Relations	45	3
MATH	2010	Introductory Algebra	45	3
COMP	1205	Introduction to Computers	60	3

**Sub-total**

**405 hours**

**24 credits**

### RELATED COURSES

**Prescribed: 9 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
PHSC	2000	Introduction to Physics	45	3
BIOL	1009	General Biology	45	3
ENTR	1024	Business Development	45	3

**Sub-total**

**135 hours**

**9 credits**

### PROFESSIONAL COURSES

**Prescribed: 46 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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	COURSE NAME	CONTACT HOURS	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**

## ASSOCIATE DEGREE IN OPTICAL SCIENCES

### SUGGESTED PROGRAM OF STUDIES\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	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	COURSE NAME	PRE-REQUIREMENTS	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

\*\* 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.

## ASSOCIATE DEGREE IN OPTICAL SCIENCES

### SUGGESTED PROGRAM OF STUDIES\*\*

(Study Modality: Distance Education in Bayamon  
Campus)

COURSE	CODE	COURSE NAME	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	COURSE NAME	PRE-REQUIREMENTS	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 offered entirely online.

^Courses that are offered on a face-to-face basis.

+ Courses that have a theory component that is offered completely online, and the laboratory or practical component (internship) are offered face-to-face.

\*\* 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 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**

**Credits: 91**

**Duration: Two years**

**Location: Caguas Main, Bayamon and Carolina Campus**

**Study Modality: Face to Face**

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 Certificate of Criminal Records
2. Health Certificate
3. Hepatitis B Vaccination
4. HIPAA Certificate
5. Cardiopulmonary Resuscitation (CPR) Certification
6. Doping Test\*
7. Respiratory Test\*
8. Influenza Vaccine\*
9. Varicella Vaccine\*
10. Covid 19 vaccine\*
11. Particle Setting Test\*
12. Negative certification of Act 300-Credentialing and Criminal History Check Act for Providers to Children, People with Disabilities, and Health Care Professionals.
13. Clinical Practice Cover Letter
14. Practice Authorization Form

**\*Important Note:** Some practice sites may require additional documents. The student needs to revalidate to practice the profession.

## **BOARD EXAM REQUIREMENTS**

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
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.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 24 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
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: 16 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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

**Sub-total**

**270 hours**

**16 credits**

## PROFESSIONAL COURSES

**Prescribed: 46 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	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

**Sub-total**

**1.305 hours**

**51 credits**

## ASSOCIATE DEGREE IN CARDIAC AND VASCULAR TECHNOLOGY

### SUGGESTED PROGRAM OF STUDIES\*\*

(Study Modality: Face to Face)

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	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	3
CARD	2240	Pharmacology and Cardiac Procedures	CARD 2150, SONO	2

COURSE	CODE	COURSE 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**

\*\* 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 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   CARD 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 OF MEDICAL SECRETARY WITH MEDICAL INSURANCE BILLING**

**Credits: 56**

**Duration: One year**

**Location: Caguas Main and Carolina Campus**

**Study Modality: Face to Face**

This curriculum provides the student with the opportunity to prepare for a 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 Secretarial Medical field.
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 of Windows, Microsoft Word, Excel, and 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 Certificate of Criminal Records
2. Health Certificate
3. HIPAA Certificate
4. Hepatitis B Vaccination\*
5. Varicella Vaccines\*
6. Influenza Vaccines\*
7. Negative Certification of Act 300-Credentialing and Criminal History Check Act for Providers to Children, Persons with Disabilities and Health Care Professionals\* 8.
8. COVID-19 Vaccinations

**\*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.

## CURRICULAR STRUCTURE

**Prescribed: 56 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
SPAN	1100	Basic Spanish	60	4
ENGL	1110	Basic English	45	3
MATH	1110	Commercial Mathematics	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 credit**

## MEDICAL SECRETY WITH MEDICAL INSURANCE BILLING

### SUGGESTED PROGRAM OF STUDIES\*\*

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<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	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

\*\* 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 GRADING 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

## **CERTIFICATE OF PRESCHOOL TEACHER ASSISTANT**

**Credits: 63**

**Duration: One year**

**Location: Caguas Main**

**Study Modality: Face to Face**

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.

## CURRICULAR STRUCTURE

**Prescribed: 63 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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**

**SUGGESTED PROGRAM OF STUDY**

COURSE	CODE	NAME OF COURSES	PRE-REQUIREMENTS	CREDITS
<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	----	4
EDUC	1250	Practice Supervised	All courses	6

\*\* 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 GRADING 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

## **CERTIFICATE OF VETERINARY ASSISTANT**

**Credits: 55**

**Duration: One year**

**Location: Caguas Main, Bayamon, and Carolina Campus**

**Study Modality: Face to Face**

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.

## CURRICULAR STRUCTURE

**Prescribed: 55 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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**

**SUGGESTED PROGRAM OF STUDIES**

<b>COURSE</b>	<b>CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUIREMENTS</b>	<b>CREDITS</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	COURSE NAME	PRE-REQUIREMENTS	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

\*\* 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 GRADING 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

# **CERTIFICATE OF VETERINARY ASSISTANT WITH PET GROOMING**

**Credits: 71**

**Duration: One year and four months**

**Location: Yauco Campus**

**Study Modality: Face to Face**

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.

## CURRICULAR STRUCTURE

**Prescribed: 71 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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

### SUGGESTED PROGRAM OF STUDIES

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	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, VETR1241, 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	COURSE NAME	PRE-REQUIREMENTS	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

\*\* 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 GRADING 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

# **CERTIFICATE OF LABORATORY ASSISTANT WITH ELECTRONIC PROCESSING**

**Credits: 38**

**Duration: Eight months**

**Location: Caguas Main, Bayamon, Carolina, Yauco Campus**

**Study Modality: Face to Face**

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.



## CURRICULUM STRUCTURE

**Prescribed: 38 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
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  
SUGGESTED STUDY PROGRAM\*\***

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	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

\*\* 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 GRADING 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

## **CERTIFICATE OF PROFESSIONAL PET GROOMER**

**Credits: 33**

**Duration: Eight months**

**Location: Caguas Main, Bayamon, and Carolina Campus**

**Study Modality: Face to Face**

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. 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.

## CURRICULAR STRUCTURE

**Prescribed: 33 credits**

COURSE	CODE	COURSE NAME	CONTACT HOURS	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

### SUGGESTED PROGRAM OF STUDIES\*\*

COURSE	CODE	COURSE NAME	PRE-REQUIREMENTS	CREDITS
<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

\*\* 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 GRADING 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

# **SCHOOL OF APPLIED ARTS**

## **DESCRIPTION OF THE SCHOOL**

The School of Applied Arts has the purpose of preparing professionals specialized in the disciplines of Audio and Graphic Design. It is directed by an Academic Coordinator whose main responsibility is to ensure the fulfillment of institutional goals and objectives. Primarily, those related to the teaching and learning process of its students. As part of its academic proposal, the school offers associate degrees in Audio and Graphic Design.

The school's graduates will be able to use critical thinking to develop innovative and commercial projects aligned to the demands of the industry. This is a leader with the ability to advise, create, design, and manage proposals in the discipline he/she performs. The school seeks, through creative projects, to effectively integrate the student to the demands and requirements of the labor and business market. To graduate from their respective academic program, students must complete the requirements of the discipline.

## **MISSION**

The School of Applied Arts is an academic division that integrates the disciplines of Audio and Graphic Design. Its mission is to provide students with a quality service and an educational experience of excellence and vanguard that provides them with competencies and encourages their creativity, leadership, and entrepreneurial vision. This is within a framework of innovation, legal, social, and moral responsibility.

The school develops individuals with values and human resources trained in their areas of specialty. So that they respond to the requirements and demands of the labor and industrial market.

## **VISION**

The School of Applied Arts will be recognized and stand out as an academic division that will effectively prepare its student body in the disciplines of Audio and Graphic Design.

## **PHILOSOPHY**

The school is committed to quality student service and to a dynamic and innovative teaching and learning process that is developed through creative projects directly linked to the job market, according to the area of specialty. It values its faculty and students as its most important assets. Promotes among its members a high sense of corporate social responsibility.

## **GOALS**

1. To be the School of Applied Arts that best serves the needs of human resources whose study interests are aligned with the academic programs it offers.
2. To offer an effective education tailored to the trends and needs of its student community.
3. To be a school that appreciates the value of creativity, leadership, and entrepreneurial vision.
4. To ensure that the resources, content, and educational services of its academic programs are aligned with the changes and demands of the labor market.
5. To ensure that students have a successful academic experience, supported by a unique quality service.
6. To be an academic division highly recognized for the quality of the programs it offers.
7. To achieve the optimal development of physical and technological facilities that respond to the needs of the academic community and the reality of the labor field.
8. To be the School of Applied Arts of choice in the region that it serves.
9. To effectively manage and distribute the resources of the school to achieve the educational goals established by the institution.
10. To recruit, develop and retain as many qualified, efficient, and committed students and faculty as possible in their area of specialty.
11. Promote a culture of assessment.
12. To provide faculty with an effective professional development plan that contributes to the updating of their knowledge.

## **ASSOCIATE DEGREE IN AUDIO**

**Credits: 60**

**Duration: One year and eight months**

**Location: Caguas Main Campus**

**Study Modality: Face to Face**

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.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 15 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

**Sub - total:**

**255 hours**

**15 credits**

### PROFESSIONAL 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

COURSES	CODE	COURSE NAME	CONTACT HOURS	CREDITS
AUDIO	2101	Acoustics	60	3
AUDIO	2102	Sound for Cinema	60	3
AUDIO	2103	Audio Restoration	60	3
AUDIO	2104	Audio Seminar	120	3
<b>Sub - total:</b>			<b>960 hours</b>	<b>45 credits</b>

## ASSOCIATE DEGREE IN AUDIO

### 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: 12 CREDITS</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: 12 CREDITS</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: 12CREDIT S</b>				
AUDIO	2103	Audio Restoration	AUDIO 1401 AUDIO 1402 AUDIO 1403 AUDIO 1404 AUDIO 1501 AUDIO 1502 AUDIO 1503 AUDIO1504 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**

\*\* 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 GRADING 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

**Credits: 60**

**Duration: One year and eight months**

**Location: Caguas Main and Yauco Campus**

**Study Modality: Face to Face**

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.

## CURRICULAR STRUCTURE

### GENERAL EDUCATION COURSES

**Prescribed: 18 credits**

COURSE	CODE	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**

366



**GENERAL EDUCATION ELECTIVES**  
(3 credits to choose)

Electives: 3 credits

COURSE	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

COURSE	CODE	COURSE NAME	CONTACT HOURS	CREDITS
ENTR	1024	Business Development	45	3

**Sub - total:** 45 hours      3 credits

**PROFESSIONAL COURSES**

Prescribed: 36 credits

COURSE	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 \*\*

COURSE	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	Digital Image Editing	----	3
GRAD	1602	Digital Photography	----	3
GRAD	1603	Web Design	----	3
GRAD	1604	Three-Dimensional Design	----	3
<b>FOURTH TERM: 12 CREDITS</b>				
ELECTIVE		General Education	----	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 I	SPAN 1101	3

### **Grand total of Associate Degree in Graphic Design: 60 credits and 1,140 hours**

\*\* 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 GRADING 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

# COURSES DESCRIPTIONS

## COURSE DESCRIPTIONS

The course descriptions contained in this catalog and/or any other institutional publication refer 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.

**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.



**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 repertoire. 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.

**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.

**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 listening 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.

**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.

**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.

**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 is 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  
AND VASCULAR SONOGRAPHY****3 CREDITS****45 HOURS**

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  
AND BASIC HOLTER****3 CREDITS****60 HOURS**

*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 is 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      4 CREDITS      90 HOURS**  
**CARDIAC PATHOLOGIES**

*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      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 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 in the 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  
AND CLINICAL APPLICATION****4 CREDITS****90 HOURS***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 in 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  
PROCEDURES****2 CREDITS****30 HOURS***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 in 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. Requires the use of the science lab.

**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.



**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.

## 45 HOURS

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.

## 45 HOURS

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.

## 75 HOURS

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.

## 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.

## 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.

**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 methods. 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 lectures, 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

<b>COMP 2425</b>	<b>SUPPORT TECHNICIAN FOR DESKTOP I</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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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.

*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.

*Pre-requirement: COMP 2425*

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**COMP 2428    REVIEW FOR COMP TIA  
CERTIFICATION NETWORK + TEST**

**3 CREDIT**

**60 HOURS**

*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.

**COMP 2515    DIAGNOSIS AND REPAIR OF  
ELECTRONIC DEVICES**

**6 CREDITS**

**120 HOURS**

*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.

**COMP 2516    TEST REVIEW FOR  
COMPTIA ACERTIFICATION+**

**4 CREDIT**

**75 HOURS**

*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.

**COMP 2517    PRINTERS**

**1 CREDIT**

**15 HOURS**

*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, and 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, 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.

<b>COMP 4001</b>	<b>"ETHICAL HACKING" IN THE NETWORK ENVIRONMENT</b>	<b>4 CREDITS</b>	<b>75 HOURS</b>
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*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.

<b>COMP 4426</b>	<b>SUPERVISED PROJECT</b>	<b>4 CREDITS</b>	<b>75 HOURS</b>
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*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.

<b>COMU 3010</b>	<b>EFFECTIVE COMMUNICATION</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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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.

<b>COPR 3011</b>	<b>CONTEMPORARY PROBLEMS</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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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.

<b>ECON 1204</b>	<b>ECONOMY PRINCIPLES</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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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.

**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.

**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.

**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  
SUPERVISION****4 CREDITS****60 HOURS**

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 on 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 the 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.

**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.

**ENGL 1101 BASIC ENGLISH I****3 CREDITS****60 HOURS**

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.

**ENGL 1102 BASIC ENGLISH II****3 CREDITS****45 HOURS**

*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.

**ENGL 1110 BASIC ENGLISH****3 CREDITS****60 HOURS**

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.

**ENGL 1130 ENGLISH APPLIED TO PRE-SCHOOL  
TEACHING****2 CREDITS****30 HOURS**

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 additional hours of outside work. The student will perform the assigned activities in the component external work.

**ENGL 1220 BUSINESS ENGLISH****2 CREDITS****30 HOURS***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  
AND COMPOSITION****3 CREDITS****45 HOURS**

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.

**ENGL 3002 CONVERSATIONAL ENGLISH  
FOR MANAGERS****3 CREDITS****45 HOURS**

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 the synthesis of means of financing, dividends, and the global valuation of a company. Knowledge is measured through tests, case analyzes, and practice exercises.

**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.

**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.

**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 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 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 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 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, and field visits. You also have an additional 18.75 hours of outside work. The student will carry out 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 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 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 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 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 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.

**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.

**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.

**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.

**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 an 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 the 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.



**HURE 6154    COMPENSATION SYSTEM  
AND BENEFITS**

**3 CREDITS**

**45 HOURS**

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.

**KEBO 1205    KEYBOARDING**

**3 CREDITS**

**60 HOURS**

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 methods 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 laboratories 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 organisms 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 are 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.

**MAHE 6138      HEALTH SYSTEM ORGANIZATION                      3 CREDITS                      45 HOURS**  
**MANAGEMENT**

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    3 CREDITS                      45 HOURS**  
**IN HEALTH SYSTEMS MANAGEMENT**

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                      3 CREDITS                      45 HOURS**  
**CONTROL OF HEALTH SYSTEMS**

*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: discriminating and implementing 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 is included. Methods for determining the financial value of information technology are described. Techniques are presented to guarantee the security and privacy of information. Knowledge is measured through exams, presentations, case analysis, and research.

**MANA 1207 MANAGEMENT PRINCIPLES**

**3 CREDITS**

**45 HOURS**

This course offers students the basic knowledge of management; the basic managerial concepts, such as: planning, organizing, directing, and controlling, as the fundamental basis of management. Interpersonal relationships, leadership, motivation, and teamwork are considered in the managerial decision-making process within an ethical and moral framework. It will be carried out through lectures, case studies, group studies, and exams.

**MANA 2020 CLAIMS PRACTICE OF  
CIVIL LIABILITY**

**3 CREDIT**

**45 HOURS**

The purpose of this course is to study the practices applicable to the handling of commercial, personal and liability insurance claims. It covers the claims adjustment process, from case assignment to final disposition. It includes the analysis of the insurance contract, sample letters and reports, suggested guides on declarations, check sheets, covers, keys and legal concepts. It will be carried out through case studies, oral presentations, exams, short tests, and research work.

**MANA 2303 LEGAL ASPECTS AND ETHICS**

**3 CREDITS**

**45 HOURS**

The purpose of this course is to present the legal aspects of business, ethics, and the local and international legal environment. It emphasizes the laws applicable to electronic commerce, local and international social and ethical issues that are important for the comprehensive study of laws and business ethics. Student knowledge is determined through oral presentations, case analysis, and research.

**MANA 2403 HUMAN RESOURCES MANAGEMENT**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: MANA 1207*

The purpose of this course is to discuss the functions of human resource management, such as: planning, the recruiting process, performance measurement, occupational health and safety, and compensation. In addition, the laws applicable to labor relations are presented and emphasis is placed on the optimal design of compensation plans that promote motivation, organizational commitment, and the achievement of organizational goals. Determines student knowledge through readings, case studies, reports, and tests.

**MANA 2413 INTEGRATED SYSTEMS MANAGEMENT 3 CREDITS 45 HOURS**

*Pre-requirement: COMP 1205*

The purpose of this course is to develop and apply the skills acquired to achieve the integration of computer systems and use them as a management tool. Throughout the course, the different 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.

**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.

**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.

**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).

**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).

**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 to 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.

**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.



**MANA 6142 LEGAL ASPECTS AND  
MANAGEMENT REGULATIONS**

**3 CREDITS**

**45 HOURS**

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.

**MANA 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.

**MANA 6145 RESEARCH METHODS II\***

**3 CREDITS**

**45 HOURS**

*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.

**MANA 6159 OPERATION MANAGEMENT  
& LOGISTICS**

**3 CREDIT**

**45 HOURS**

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.

**MARK 1301 MARKETING PRINCIPLES**

**3 CREDITS**

**45 HOURS**

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 their 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.

**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 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 COMMERCIAL 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.

**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.

**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.

**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 memos, 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 BILLING II 3 CREDITS 90 HOURS**

*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 AND CODING ICD-9 - CM AND ICD-10 CM / PCS AND CPT 4 CREDITS 60 HOURS**

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 WITH INSURANCE BILLING 5 CREDITS 225 HOURS AND**

*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 medical insurance. 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 for commercial medical insurance.

**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 Insurance 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 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                      135 HOURS**  
**PROCESS**

*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.

**NURS 1612    PATHOPHYSIOLOGY OF THE                      3 CREDITS                      60 HOURS**  
**HUMAN BODY**

*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    3 CREDITS    45 HOURS**  
**PROFESSION**

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    3 CREDITS    45 HOURS**  
**PHYSICAL HEALTH EXAM**

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.

**NURS 2551    NURSING ROLE IN DRUG    2 CREDIT    60 HOURS**  
**ADMINISTRATION: LABORATORY**

*Pre-requirement: MATH 2002, NURS 2501, NURS 2561, NURS 2571*

In this course, the student will be able to develop the necessary skills for the execution of the procedures required in the calculation and dosage of medications through the different routes of administration. Ethical and legal aspects in the safe administration of medicines and different medical prescriptions are discussed. The metric, pharmaceutical and home systems are integrated for the conversion and calculation of drugs. Apply the nursing process in the safe administration of medications. This course has an additional 120 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**NURS 2561    FOUNDAMENTALS OF THE NURSING    4 CREDIT    75 HOURS**  
**PROFESSION**

*Pre-requirement: BIOL 1601, NURS 2501*

*Concurrent: NURS 2571*

In this course the student will examine the Nursing Role as a profession and practice. Fundamental nursing concepts such as holistic health, wellness, direct care, critical thinking, nursing process, communication, safety, infection control, and basic care for nursing practice are introduced. It will analyze the nursing process as a strategy for solving the client's health problems. It will value the importance of therapeutic communication in the identification of needs when interacting with the client, family, significant others, and members of the health team. This course has an additional 150 hours of outside work. The student will carry out the activities assigned in the External Work Component.

**NURS 2571    FUNDAMENTALS OF THE NURSING    2 CREDITS    90 HOUR**  
**PROFESSION: PRACTICE**

*Pre-requirement: BIOL 1601, NURS 2501*

*Concurrent: NURS 2561*

This course introduces the student to the basic knowledge and skills of the nursing role in the dependent, independent, and interdependent functions of the practice. The student will apply the nursing process in solving problems related to the basic needs of the client and their safety. It will integrate therapeutic communication skills to establish relationships with clients, families, significant others, and members of the health team. Perform basic direct care skills to assist the client and family in promoting, restoring, and maintaining health. You will use critical thinking skills when performing critical nursing interventions in client and family care. The course consists of 30 hours of skills laboratory and 45 hours of clinical practice. This course has an additional 30 hours of external work corresponding to the laboratory component. The student will carry out the activities assigned in the External Work Component.

**NURS 2612    NURSING PROCESS IN CHILDHOOD    5 CREDITS    135 HOURS**  
**AND ADOLESCENCE**

*Pre-requirements: BIOL 1603, NURS 1612, NURS 2613*

In this course, the student will use the knowledge acquired about the nursing process to intervene with the child and adolescent with common and recurrent conditions in these stages of growth and development, using technology in information management. Diseases that affect the health of the pediatric population and measures for promotion, disease prevention and restoration of health are discussed. Simulated nursing presentations and interventions will be made. It requires clinical experience in various settings.

**NURS 2613    NURSING PROCESS OF THE MENTAL    5 CREDITS                      135 HOURS**  
**AND EMOTIONAL HEALTH OF THE HUMAN BEING**

*Pre-requirements: NURS 1610, NURS 1611*

This course provides the student with knowledge about the historical, ethical-legal, cultural, and spiritual background of the field of mental health, biopsychosocial, spiritual, and family factors. The nursing process is used integrating the different theories to explain the personality and behavior. Prevention levels are applied to restore and maintain mental health in individuals, groups, and families. The student makes oral presentations integrating knowledge and simulation tools in their interventions using technology in information management. It requires clinical experience in various settings. This course is offered face-to-face and not face-to-face.

**NURS 2614    NURSING PROCESS OF ADULTS                      5 CREDITS                      135 HOURS**  
**AND GERIATRICS I**

*Pre-requirements: NURS 1609, NURS 2612*

Nursing Process of Adults and  
Geriatric I

In this course the student acquires knowledge about pathological problems that affect adults and the elderly. They will use nursing skills to assist patients with altered basic needs that require medical or surgical care using information management technology. Assistance to the individual is focused on the pre, intra and post-operative phase, with immunological, cardiovascular, respiratory, hematological, endocrine alterations and in the balance of fluids and electrolytes. The student will demonstrate with oral, written and interventions with the simulation the techniques of assistance with the patient. It requires clinical experience in various settings.

**NURS 2615    NURSING PROCESS OF ADULTS                      5 CREDITS                      135 HOURS**  
**AND GERIATRIC II**

*Pre-requirement: NURS 2614*

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                      75 HOURS  
AND PSYCHIATRY**

*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                      90 HOURS  
AND PSYCHIATRY: PRACTICE**

*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                                      5 CREDITS                      90 HOURS  
OF ADULT AND OLD I**

*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 adults and elderly individuals 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 special work on a topic related to the course.

**NURS 3131    NURSING CARE ROLE IN ADULTS                      2 CREDITS                      90 HOURS  
AND THE ELDERLY I: PRACTICE**

*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 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                    5 CREDITS                    90 HOURS**  
**AND THE ELDERLY II**

*Pre-requirement: NURS 3120, NURS 3131*

*Concurrent: NURS 3150*

In this course, the student focuses on the nursing care and collaborative management of adults and elderly individuals 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                    2 CREDITS                    90 HOURS**  
**AND THE ELDERLY II: PRACTICE**

*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 adult and elderly clients 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    4 CREDITS                    75 HOURS**  
**IN MATERNITY CARE**

*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    2 CREDITS                    90 HOURS**  
**IN MATERNITY CARE: PRACTICE**

*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

<b>NURS 3180</b>	<b>NURSING ROLE IN PEDIATRIC CARE</b>	<b>4 CREDITS</b>	<b>75 HOURS</b>
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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 special work on a topic related to the course.

*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.

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 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

<b>NURS 3505</b>	<b>PRINCIPLES OF INVESTIGATION IN HEALTH AND NURSING</b>	<b>3 CREDITS</b>	<b>60 HOURS</b>
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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.

<b>NURS 4010</b>	<b>NURSING ROLE IN HEALTH INFORMATION SYSTEMS</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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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.

<b>NURS 4030</b>	<b>NURSING ROLE IN NUTRITION</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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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.

<b>NURS 4040</b>	<b>CULTURAL DIVERSITY IN THE NURSING PROFESSION</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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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                      3 CREDITS                      45 HOURS**  
**BASED ON EVIDENCE: INVESTIGATION PROCESS**

*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.

**NURS 4060    NURSING CARE ROLE IN FAMILY                      4 CREDITS                      60 HOURS**  
**AND COMMUNITY**

*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.

**NURS 4070    NURSING CARE ROLE IN FAMILY                      2 CREDITS                      90 HOURS**  
**AND COMMUNITY: PRACTICE**

*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.

**NURS 4080    NURSING SEMINAR    3 CREDITS                      45 HOURS**

*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    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 special work on a topic related to the course.

<b>NURS 4100    PRACTICUM: ADMINISTRATION AND NURSING LEADERSHIP - CLINICAL EXPERIENCE</b>	<b>3 CREDITS</b>	<b>135 HOURS</b>
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*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.

<b>NURS 4113    NURSING PROCESS WITH FAMILIES AND COMMUNITY</b>	<b>4 CREDITS</b>	<b>90 HOURS</b>
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*Pre-requirements: NURS 3503, NURS 3504, NURS 3505, STAT 3103*

This course provides the student with 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.

**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 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.

**NURS 6142    ADVANCED THEMATIC SEMINAR                      4 CREDITS                      90 HOURS**  
**ADULTS AND THE ELDERLY II**

*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.

**NURS 6143    ADVANCED PATHOPHYSIOLOGY                      3 CREDITS                      45 HOURS**

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.

**NURS 6146    TEACHING AND LEARNING                      3 CREDITS                      45 HOURS**  
**METHODS IN NURSING**

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.

**NURS 6149    MANAGEMENT PROCESSES IN  
                  NURSING SERVICES**

**4 CREDITS**

**60 HOURS**

*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.

<b>OPTI 2020L</b>	<b>OPHTHALMIC MATERIALS I: LABORATORY</b>	<b>1 CREDIT</b>	<b>30 HOURS</b>
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*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.

<b>OPTI 2130</b>	<b>CONTACT LENSES I</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*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.

<b>OPTI 2130L</b>	<b>CONTACT LENSES I: LABORATORY</b>	<b>2 CREDITS</b>	<b>60 HOURS</b>
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*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.

<b>OPTI 2040</b>	<b>OPTIMIC MATERIALS II</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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*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.

<b>OPTI 2040L</b>	<b>OPHTHALMIC MATERIALS II: LABORATORY</b>	<b>2 CREDITS</b>	<b>60 HOURS</b>
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*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.

<b>OPTI 2140</b>	<b>CONTACT LENSES II</b>	<b>1 CREDIT</b>	<b>15 HOURS</b>
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*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.

<b>OPTI 2140L</b>	<b>CONTACT LENSES II: LABORATORY</b>	<b>2 CREDITS</b>	<b>60 HOURS</b>
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*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.

<b>OPTI 2060</b>	<b>VISION ANOMALIES</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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*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.

<b>OPTI 2150</b>	<b>PRE - SIZING INTERNSHIP</b>	<b>2 CREDITS</b>	<b>60 HOURS</b>
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*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  
PRACTICE                      2 CREDITS                      30 HOURS**

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*

<b>PHAR 2110</b>	<b>INTERNSHIP II</b>	<b>14 CREDITS</b>	<b>540 HOURS</b>
<i>Pre-requirements: PHAR 1618, PHAR 1619, PHAR 1620, PHAR 1621, PHAR 1622, PHAR 1623, PHAR 1624, PHAR 1625, PHAR 2109, SEMI 1105, SEMI 2507</i>			

**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*

**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*

**PHAR 6150    ADVANCED PHARMACOLOGY                      2 CREDITS                      30 HOURS**

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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 nursing theory. The student will take a practical exam and carry a portfolio of physical exams.

**PHSC 2000 INTRODUCTION TO PHYSICS**

**3 CREDITS**

**45 HOURS**

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.

**PHSC 2030 ULTRASOUND PHYSICS AND  
INSTRUMENTATION I**

**3 CREDITS**

**45 HOURS**

*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 monitoring. 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.

**PHSC 2040 ULTRASOUND PHYSICS AND  
INSTRUMENTATION II**

**3 CREDITS**

**45 HOURS**

*Pre-requirement: PHSC 2030*

This course provides the student with the basic principles of both venous and arterial

<b>POSC 2013</b>	<b>INTRODUCTION TO POLITICAL SCIENCE</b>	<b>3 CREDITS</b>	<b>45 HOURS</b>
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<b>PSCY 1100</b>	<b>PRINCIPLES OF COMMUNITY SOCIAL PSYCHOLOGY</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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**PSYC 2014      PRINCIPLES OF PSYCHOLOGY      3 CREDITS      45 HOURS**

**QUME 5103 QUANTITATIVE METHODS 3 CREDITS 45 HOURS**

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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.

**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  
RELATED ANATOMY I    2 CREDITS    30 HOURS**

*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  
RELATED ANATOMY I: LABORATORY    1 CREDIT    30 HOURS**

*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

<b>RADI 2030</b>	<b>KNOWING MODALITIES AND IMAGING EQUIPMENT</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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<b>RADI 2040</b>	<b>INTEGRATING SEMINAR</b>	<b>2 CREDITS</b>	<b>60 HOURS</b>
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**RADI 2050      PRINCIPLES OF RADIOGRAPHIC EXPOSURE    3 CREDITS    45 HOURS**

<b>RADI 2060</b>	<b>PRINCIPLES OF RADIOBIOLOGY AND RADIOLOGICAL PROTECTION</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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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.

<b>RADI 2170</b>	<b>WARRANTY AND RADIOGRAPHIC QUALITY CONTROL</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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*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.

<b>RADI 2100</b>	<b>RADIOGRAPHIC POSITIONING AND RELATED ANATOMY III</b>	<b>2 CREDITS</b>	<b>30 HOURS</b>
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*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.

<b>RADI 2100L</b>	<b>RADIOGRAPHIC POSITIONING AND RELATED ANATOMY III: LABORATORY</b>	<b>1 CREDIT</b>	<b>30 HOURS</b>
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*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 2140L 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.



**RADI 2200 PHARMACOLOGY AND CONTRAST MEDIA      3 CREDITS   45 HOURS**  
**DIAGNOSTIC IMAGES**

*Pre-requirements: RADI 2000, RADI 2010*

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 2500      ADVANCED SECTIONAL ANATOMY      4 CREDITS      60 HOURS**

*Pre-requirements: ANAT 2030*

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 3000 PHYSICS - INSTRUMENTATION AND IMAGES IN 3 CREDITS 45 HOURS**  
**COMPUTED TOMOGRAPHY**

*Pre-requirements: RADI 2500*

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 3010 PROCEDURES FOR THE FORMATION OF 3 CREDITS 45 HOURS 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 3020 PATHOLOGICAL CORRELATION BY 3 CREDITS 45 HOURS TOMOGRAPHY**

*Pre-requirement: RADI 2500*

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 3050 PHYSICS - PRINCIPLES, PARAMETERS, AND 3 CREDITS 45 HOURS CONCEPTS OF MAGNETIC RESONANCE**

*Pre-requisite: RADI 2500*

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 3030 PROCEDURES FOR OBTAINING 3 CREDITS 45 HOURS IMAGES BY MAGNETIC RESONANCE**

*Pre-requisite: RADI 2500*

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 3040 PATHOLOGICAL CORRELATION BY MAGNETIC RESONANCE      3 CREDITS      45 HOURS**

*Pre-requirement: RADI 2500*

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 4010      CLINICAL INTERNSHIP IN COMPUTED TOMOGRAPHY      6 CREDITS      270 HOURS**

*Pre-requirement: RADI 2500, RADI 3000, RADI 3010, RADI 3020*

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 4020 CLINICAL INTERNSHIP IN MAGNETIC RESONANCE AND COMPUTED TOMOGRAPHY      6 CREDITS      270 HOURS**

*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 4030      PRE-BOARD SEMINAR IN TECHNOLOGY RADIOLOGY, CT, AND MRI      3 CREDITS 45 HOURS**

*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 3060      ETHICS AND LAW IN IMAGE SCIENCES      3 CREDITS    45 HOURS**

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 3070      COMPUTERS IN IMAGING AND INFORMATICS    3 CREDITS    45 HOURS**

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 4040      RESEARCH AND LITERACY      3 CREDITS      45 HOURS**  
**METHODS IN COMPUTER SCIENCE**

*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 4050      EDUCATIONAL PRINCIPLES FOR                      3 CREDITS                      45 HOURS**  
**TECHNOLOGISTS**

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.

**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, formulating 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.

**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 healthy, 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.

**SECU 1040      OSHA SAFETY AND REGULATIONS                              3 CREDITS                      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.

**SEMI 1105      COLLEGE SUCCESS AND 3 CREDITS      45 HOURS**  
**PROFESSIONAL SEMINAR**

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.

**SEMI 2507      INTEGRATION SEMINAR      2 CREDITS      30 HOURS**  
**TO THE ROLE OF THE PHARMACY**  
**TECHNICIAN**

*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.

**SEMI 3008      LIFE REFLECTION SEMINAR      3 CREDITS      45 HOURS**

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.

**SEMI 6160      INTEGRATIVE SEMINAR IN      3 CREDITS      45 HOURS**  
**ADMINISTRATION**

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.

**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.

**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 SONOGRAPHIC IMAGES     3 CREDITS     45 HOURS**

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                      2 CREDITS    60 HOURS**  
**OF CLINICAL SKILLS IN MEDICAL SONOGRAPHY**

*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



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**

**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 simple grammatical sentences. 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.

**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.

**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.

**SPAN 1121 EFFECTIVE SPANISH  
COMMUNICATION SKILLS****3 CREDITS****45 HOURS**

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 special work on a topic related to the course.

**SPAN 1151 BASIC EFFECTIVE COMMUNICATION  
SKILLS, AND CUSTOMER SERVICE****4 CREDITS****60 HOURS**

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.

**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.

**VETR 1211    INTRODUCTION TO VETERINARY  
MEDICINE AND ANIMAL BIOSECURITY**

**4 CREDITS**

**60 HOURS**

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 animals. 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 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 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 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 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 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 studying 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 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 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 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 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 special work on a topic related to the course.

**VETR 1321    CLINICAL VETERINARY                    3 CREDITS            90 HOURS**  
**PROCEDURES**

*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 to 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 special work on a topic related to the course.

**VETR 1331    INTRODUCTION TO VETERINARY            4 CREDITS            90 HOURS**  
**RADIOLOGY AND SONOGRAPHY**

*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 is 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 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.



## 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.

# **COST OF STUDIES**

# TUITION, FEES AND OTHER CHARGES

Effective for Terms starting on or after 07/01/2023

The Tuition, Fees, and Other Charges listed below are applicable to all students enrolled at Columbia Central University (CCU), with the exception of students enrolled in continuing education courses. The institution reserves the right to review costs as needed. These changes are duly notified to students prior to its implementation. Students are encouraged to be attentive for announcements regarding Tuition, Fees and Other Charges, which are published at the following link: <https://columbiacentral.edu/>

## TUITION AND FEES

The Tuition and Fees listed below are costs related to the offering of the courses and are applicable to each academic term for which the student is enrolled. Refer to the Institutional Refund Policy for details regarding how CCU will handle charges when a student cancels their enrollment, adds or deletes courses during the add/drop period, or withdraws before completing a payment period.

## TUITION<sup>1</sup>

### Undergraduate Programs

Term Credits	Cost per Term	
	Health and Technology Programs	Other Programs
12 or more	3,657.00	3,584.00
9-11	2,743.00	2,688.00
6-8	1,829.00	1,792.00
3-5	915.00	896.00
2	610.00	598.00
1	305.00	299.00

## Graduate Programs

Description	Amount
<b>Cost per Credit</b>	
Alumni students	150.00
Non alumni students	165.00

## FEES<sup>2</sup>

Description	Amount
<b>Undergraduate Programs</b>	
Technology Resources and Administrative Services (per term)	370.00
<b>Graduate Programs</b>	
General Fee (per term - 14 credits or more)	250.00
General Fee (per term - 13 credits or less)	150.00

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<sup>1</sup> Costs for audit and non-degree seeking students: Undergraduate Programs - \$175.00 per credit | Graduate Programs - \$80.00 per credit.

<sup>2</sup> Does not apply to audit and non-degree seeking students.

## OTHER CHARGES

The charges listed below are discretionary and are handled at the student's request.

Description	Amount
Academic Evaluation	2.00
Certification of Contact Hours – Continuing Education	10.00
Certifications	15.00
Change of Course(s)	30.00
Collection Agency Fees (up to an additional 30% per balance referred to an	0.30
Copy of Official Enrollment	2.00
Diploma Duplicate	35.00
Duplicate of Student ID	5.00
Evaluation of Experience by Portfolio – Undergraduate Programs (per course)	150.00
Evaluation of Experience by Portfolio – Graduate Programs (per course)	250.00
Evaluation of Foreign Academic Credentials	100.00
Graduation Fee - Alumni students <sup>3</sup>	75.00
Graduation Fee - Non alumni students <sup>3</sup>	100.00
Modules <sup>4</sup>	35.00
Official Credits Transcript	15.00
Parking Stamp (taxes included - Cost: 4.43 + IVU (11.5%): 0.57 = 5.00)	5.00
Proficiency Examination – Undergraduate Programs (per credit)	100.00
Proficiency Examination – Graduate Programs (per credit)	200.00
Program/Concentration Change	30.00
Removal of Incomplete (per course)	50.00
Returned Check “NSF”	15.00
Scrubs Uniform Set (taxes included - Cost: 17.70 + IVU (11.5%): 2.30 = 20.00)	20.00
Transferred Credits <sup>5</sup>	25.00
University Badge (taxes included - Cost: 2.21 + IVU (11.5%): 0.29 = 2.50)	2.50

<sup>3</sup> Only applies to graduate programs.

<sup>4</sup> Only applies to graduate programs. For each module requested. Requirement for students enrolled in a Master Degree in Business Administration that do not have a Bachelor Degree in Administration. Includes: Administration Principles, Marketing Principles, Economy Principles, Introduction to Accounting and Economy.

<sup>5</sup> Only applies to graduate programs. The excess of five (5) accepted transferred credits will have a cost of \$5.00 for each additional credit accepted.

## DESCRIPTION OF TUITION AND FEES

**Tuition** - Supports costs associated with course development and instruction. It include costs related to providing the student with high quality laboratories, including costs associated with, but not limited to the cost of furniture, equipment, software, and special materials used in the laboratory. It also supports the costs associated with creating and maintaining an environment that offers the student the opportunity to learn and practice in a workplace setting. The amount charged is based on the total credits registered for the corresponding period.

**Technology Resources and Administrative Services** - Supports the availability of educational and administrative technology services including, but not limited to, the following: multimedia, access to digital resource data network, library access system enhancements, updating of e-learning systems, accident insurance, degree granting process, technology safety systems, data protection systems, and technologies to support student services.

**General Fee** - Supports the availability of educational and administrative technology services including, but not limited to, the following: multimedia, access to digital resource data network, library access system enhancements, updating of e-learning systems, accident insurance, technology safety systems, data protection systems, and technologies to support student services.