



Undergraduate Catalog 2022-2027



NOTICE

This catalog contains the main terms of the relationship between students and Universidad Central de Bayamón (UCB). The Institution reserves the right to admit, readmit, or enroll each student in each semester or session, separately. The provisions of this Catalog do not constitute an irrevocable contract between any student and the University.

The University will make every reasonable effort to keep the information contained in this Catalog up to date. However, it reserves the right to change regulations, tuition fees, service charges, requirements for completing programs of study, requirements for the awarding of degrees and academic distinctions, course content, and any other provisions that may affect students when it deems necessary or convenient.

Students are responsible for reading, understanding, and complying with the academic, administrative, and disciplinary policies and regulations as well as the general requirements for obtaining the degree to which they aspire from the moment they enroll in the University. If a student decides to change his/her program of studies, he/she will be responsible for complying with the requirements in effect at the time of the change.

Graduation requirements, as well as curricula and academic programs, may change while the student is enrolled at the University. Normally, these changes will not apply retroactively, although the student has the option to complete the new requirements. However, when licensing or professional certification agencies make changes in their licensing requirements, the changes to the curricula or programs will be applicable immediately. It will be the sole responsibility of the student to determine whether to take the new courses.

Universidad Central de Bayamón complies with all Federal Laws and those of the Commonwealth of Puerto Rico, which pertain to the Civil Rights of students and employees. These include, but are not limited to the following:

1. Section 504 of the Rehabilitation Act of 1973, as amended, on Nondiscriminatory Practices Relating to the Handicapped.
2. ADA "Americans with Disability Act of 1990", to eliminate discrimination based on handicaps, and architectural barriers and to facilitate necessary reasonable accommodation.
3. Title IX of the Education Amendments of 1972, on Gender Nondiscriminatory Practices.
4. Civil Rights Laws regarding nondiscrimination based on race, color, creed, or national origin.
5. Student Rights to Privacy Act of 1974.
6. Title 38, U.S.C., on Veterans' benefits.
7. Policy of non-discrimination based on gender and of maintaining an environment free of harassment.
8. Acts of the Congress of the United States of America No. 100-690 of November 18, 1988, and 101-226 of December 12, 1989, and Puerto Rico Controlled Substances Act No. 4 of June 23, 1991, as well as the Policy on the Use and Abuse of Drugs and Alcohol.
9. Executive Order ADM 18-01 - Institutional Policy and Process to comply with the provisions of the law prohibiting sexual harassment and discrimination.

It is the policy of Universidad Central de Bayamón to guarantee equal opportunities in all educational programs and student services.

"The Institution does not discriminate, exclude or deny benefits to any person based on race, gender, age, disability, color, birth, origin or social condition, or because of political, religious, social or union ideas.

<http://www.ucb.edu.pr>

Phone: 787-786-3030
www.ucb.edu.pr



EDIFICIO DE ADMINISTRACIÓN
PADRE VICENTE VAX NODOL C.B.

Physical Address

**Avenida Zaya Verde
Reperto La Milagrosa**

Mail

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Bayamón PR 00960-1725**

MESSAGE FROM THE INTERIM PRESIDENT



At our Universidad Central de Bayamón, we provide a comprehensive education of academic excellence with the knowledge and skills necessary in the different professions. In addition, we seek the integration of values and attitudes inspired by a humanistic and Christian vision and philosophy that make reality and practice ethically and humanely what is learned academically.

These values and attitudes become the driving force, inspiration, and constant motivation that lead us to succeed, amidst challenges and opportunities, for the realization of our goals and life projects, making us excellent professionals and better human beings.

As a graduate of this institution, I am proud to have studied here. Now, as Interim President, I thank God for the opportunity to serve the university community that I love. I invite you, too, to allow yourself to respond to your vocation to love and serve our people and the world by preparing yourself well at our Universidad Central de Bayamón.

We put in your hands this catalog, and with it, the facilities of our large and beautiful campus so that by making the best use of them you can achieve what you have proposed in your career.

May the grace of Our Lord Jesus Christ and the intercession of his Blessed Mother, the Virgin Mary, bless and accompany you in your studies and always.

A handwritten signature in blue ink, reading "Fray Oscar Morales Cruz, O.P.".

Fray Oscar Morales Cruz, O.P.

Oscar Morales Cruz, O.P.

Interim President

COAT OF ARMS OF THE UNIVERSIDAD CENTRAL DE BAYAMÓN



As Saint Dominic de Guzmán founded the Order of Preachers in the south of medieval France, the Universidad Central de Bayamón, as a Dominican university in Puerto Rico, assumes traditional symbology of French culture in general, of Christianity, and Dominican heraldry in particular.

The BLASÓN, of the old French type arched at the top, has a purple background with a gold border, thus displaying the traditional colors of the Universidad Central de Bayamón.

The color purple, in the French academic system, symbolizes theology as the mother of all knowledge. Our University, as a Catholic university, wants to symbolize in the color purple, the preeminence of the truth that comes from Jesus Christ and his Gospel as the illuminator of all knowledge.

The golden color has always symbolized the radiance of the deity, as in the haloes of the saints or the solar halos exhibited by other Egyptian or Hindu deities. Our university wants its graduates to be a glimpse of God's presence in the world.

At the center of the coat of arms, in its point of honor, stands out the **ANSATA CROSS** in golden color. The ansata cross, with ancient Egyptian origins, signified the human being's search for lasting life, a life that the first Christian communities of North Africa understood to be in Christ, crucified and resurrected. For the Universidad Central de Bayamón, Jesus Christ is the beginning and the end of true life and, his values, those that achieve true life in our society.

HIMNO DE LA UNIVERSIDAD

*¡Vibren hoy nuestras canciones!
Resuene un himno triunfal.
Ensalcemos los colores
de nuestra Universidad.*

*Son tus aulas como templos
abiertos a la verdad,
donde ciencia y humanismo
abren surcos a la paz.*

*Mentes y brazos abiertos
al abrazo fraternal.
¡A Puerto Rico sirvamos,
y a toda la humanidad!*

*Para que hoy nuestro mensaje
se difunda allende el mar...
¡Formación, Vida y Trabajo,
es nuestro lema ideal!*

*¡Alma Máter, gloria nuestra
Universidad Central!
Bayamón es un lucero
en el cielo tropical.*

*Que guía nuestros anhelos
hacia la inmortalidad.
¡Dios en nuestros corazones,
y en los labios un cantar!*

*Jóvenes somos y amamos
con la anchura del gran mar,
a todos nuestros hermanos,
sin distinción, por igual.*

*¡Juventud...para el mañana,
promesa primavera!...
¡Formación, Vida y Trabajo,
en nuestro lema ideal!...*

Dr. Ángel Sanz Marco

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ACCREDITATIONS, LICENSING, AND AFFILIATIONS

Accreditations: MSCHE, ATS, CCNE, CSWE

	<p>The Middle States Commission on Higher Education (MSCHE) accredited Universidad Central de Bayamón (UCB) in 1971. This accreditation is reaffirmed until the next Self Study Evaluation in 2023. For related information, please visit www.msche.org or call 1-267-284-5000 or fax 1-215-662-5501.</p>
Accreditaton by Programs	
	<p>The Association of Theological Schools accredited the programs of the Graduate School of Theology and Ministry for five years until July 31, 2024.</p>
	<p>The Bachelor of Science in Nursing is accredited by the Commission on Collegiate Nursing Education from September 2016 through June 2032.</p>
	<p>The Bachelor of Arts with a concentration in Social Work is accredited by the Council on Social Work Education from June 2016 through June 2028.</p>



Licensing

The Board of Post-Secondary Institutions authorized Universidad Central de Bayamón to operate as an Institution of Higher Education in Puerto Rico until November 19, 2025.

Affiliations

Universidad Central de Bayamón is affiliated with the following entities:

- Association of Private Colleges and Universities (ACUP)
- College Entrance Examination Board (CEEB)
- National Association of Student Financial Aid Administrators (NASFAA)
- Eastern Association of Student Financial Aid Administrators (EASFAA)
- Pontifical University of St. Thomas Aquinas in Rome (for the Master of Divinity program)
- Organization of Catholic Universities of Latin America and the Caribbean (ODUCAL).
- Puerto Rican Association of Student Financial Aid Administrators (PRASFAA)
- Puerto Rican Association Registrars of Collegiate and Admissions Officer (PRACRAO)
- American Association of Collegiate Registrars and Admissions Officers (AACRAO)
- American Association of Colleges of Nursing (AACN)

Approved for military and veteran service members to use their educational benefits.

Approved for students with educational benefits in the various GI Bill® programs.

Government and its officials

The Council of Founders, which is composed of five (5) members belonging to the Friars of the Order of Preachers governs the Institution. This body delegates power to a Board of Trustees, which is composed of up to seventeen (17) members at most, of which five (5) are the Dominican Friars of the Council of Founders. The Master General of the Order of Preachers *de jure* serves as Grand Chancellor of the University, under whose responsibility the University seeks to fulfill its Catholic and Dominican Mission. The Master General through the Major Superior of the Dominican Order in Puerto Rico, and the other members of the Council of Founders usually exercised this responsibility.

COUNCIL OF FOUNDERS

Fray Rafael González Padró, O.P., President
James V. Marchionda, O.P., Prior Provincial
Friar José M. Santiago Román, O.P.
Friar Vicent Dávila Bernabé

BOARD OF TRUSTEES

Dr. Maritza Soto García, President
Dr. Angelo P. Sanfilippo Riminucci, Vice-Chairman
Ing. Lourdes Figueroa Cruz, Secretary
Mr. Luis I. García López
Ms. Carmen I. Mulero Serrano
Ms. Irene Reyes Diez

ADMINISTRATOR AND OFFICERS

Presidency

Fray Oscar Morales Cruz, O.P., Interim President
Mr. Ángel Valentín Román, M.Div., Executive Assistant

Deanship of Academic Affairs

Dr. Maritza Del Valle Guzmán, Dean

Deanship of Student Affairs

Prof. Niza E. Zayas Marrero, Dean

Deanship of Administration and Finance

Dr. Ismael Vélez de la Rosa, Dean
Ms. Enid M. Rivera Díaz, Budget Director

Licensing and Accreditation Office

Associate Dean

Informatics and Telecommunications Office

Mr. Rodny Diaz, Director

Strategic Planning and Institutional Assessment Office

Ms. Vivian Padilla Rivera, Director

College of Liberal Arts, Humanities and Education

Dr. Luz E. Robles Bermúdez, Director

College of Sciences and Health Professions

Dr. Pedro Robles Centeno, Director

College of Business Development and Technology

Director

Compliance Office

Ms. Sheila Rivas, Officer

Admissions Office

Mrs. Wanda Aponte Luciano, Director

Registrar's Office

Dr. Kendra M. Ortiz Rivera, Registrar

Financial Aid Office

Ms. Elaine Nuñez Arce, Director

International Affairs Office

Mr. Juan A. Figueroa, Coordinator

Center for the Strengthening of Teaching and Distance Education

Mr. Hugo Meléndez, Coordinator

Child Care Center and Preschool

Ms. Marielba Arias Santiago, Director

Center for the Enhancement of Learning and Student Success (CFAEE)

Mrs. Myrna del S. Pérez Robles, Coordinator

Guidance and Counseling Center

Mr. César López, Director

Learning and Research Support Resource Center

Ms. Yanit Delgado, Director

Athletic Department

Mr. Juan A. Figueroa Acevedo, Director

General Services

Ms. Enid M. Rivera Díaz, Interim Director

UNIVERSIDAD CENTRAL DE BAYAMÓN
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DIRECTORY

Admissions.....	2101; 2102; 2103
Financial Aid	2116; 2117; 2118
International Affairs.....	2265
Centro de Recursos de Apoyo al Aprendizaje y la Investigación, Dra. Margot Arce de Vázquez (Library)	2136; 2142; 2147
Technological Support Center (CAT).....	2162; 2164
Child Care Center and Preschool.....	2325;2326
Center for Strengthening Student Learning and Success (CFAEE)...	2511; 2517
Center for the Strengthening of Teaching and Distance Education	2023
Guidance and Counseling Center.....	2541; 2546
College of Liberal Arts, Humanities and Education	2227; 2031;2527
College of Health Sciences and Professions	2224; 2226;2578
College of Business Development and Technology	2520; 2521
<i>Rafael Pont Flores Sports Complex</i>	2261;2265
Dean of Academic Affairs.....	2019; 2020;2021
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<i>El Halcón Store</i>	

CAMPUS

Universidad Central de Bayamón is located in the city of Bayamón, Puerto Rico, one of the largest and most important cities on the island. Although this location is part of the San Juan Metropolitan Area, it has an atmosphere of tranquility - typical of a rural area - that invites study and quiet life.

Because of its excellent location nine miles from downtown San Juan, its students can take advantage of the intellectual and social benefits of the area's museums, theaters, art galleries, and music centers, as well as its social and recreational centers. Among the most important buildings on the campus are the following:

Dr. Margot Arce de Vázquez Building

The building currently houses the Support Resource Center and Research, which includes the services of Library and its collections, facilities, assistance equipment technology for people with disabilities, equipment audiovisual equipment, as well as cubicles with equipment for facilitating self-instruction and other kinds of electronic equipment for the development, enrichment, and strengthening of both the student body, as well as the faculty.



San Alberto Magno Building



The building houses the College of Sciences and Health Professions, Natural Sciences and its modern laboratories of General and Organic Chemistry, Instrumental Analysis, Physical and Analytical Chemistry, Microbiology, General Biology, Botany, Ecology, Physics, Human Biology, Neurosciences, and Nursing, among others. It also has offices for professors, six classrooms, an amphitheater with videoconferencing, and a Research Room.

Nélida Meléndez Building

The College of Liberal Arts Humanities and Education, the Graduate School of Theology and Ministry (CEDOC) and the College of Development Business and Technology are located in this building. The building has rooms classrooms and computer labs.



Entrepreneurial Center-Business Incubator

In 2016, the Entrepreneurial Center-Business Incubator was inaugurated, located in the Annex of the Nélida Meléndez Building. This space serves as a laboratory for the Innovation and Business Management program for the development of entrepreneurial skills. It has technological equipment and provides common areas such as a creativity lab, mentoring area, conference room and spaces for the business projects of each student.



Isabel Gutiérrez del Arroyo Building

The Isabel Gutiérrez del Arroyo building has Natural Sciences classrooms and modern high-tech Computer Science laboratories.

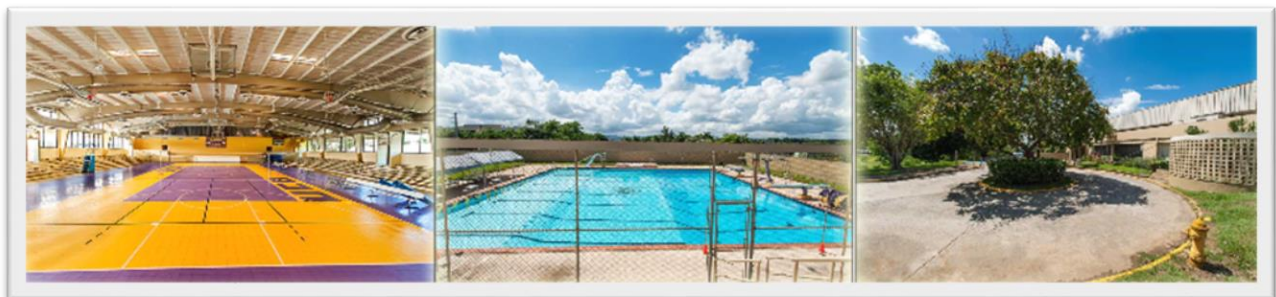


Rafael Pont Flores" Sports Complex

This complex consists of a building that houses: a gymnasium, two indoor courts for basketball, volleyball, and tennis, classrooms for athletics and the Physical Education concentration and activity areas recreational facilities. It also has a swimming pool and a running track.



These facilities are available to the university community duly identified and within the established schedule each semester. The educational institutions and the community, in general, may request the use of the facilities by contacting the Sports Center Administrator's office. Users must comply with the Regulations for the Use of Facilities.



Padre Vicente Van Roig Building

The Administration Offices are located in the Padre Vicente Van Roig building. They are Admissions, Registrar, Financial Aid, Treasury, Dean of Administration and Finance, Human Resources, Dean of Academic Affairs, Strategic Planning and Institutional Assessment, and Presidency.



Child Care Center and Preschool

It's located next to the Administration building, Fr. Vicente A.M. van Rooij, O.P. The Center offers not only childcare but tutoring services during the day and evening hours.



Building Padre José Valentín Guevara, O.P.

The Padre José Valentín Guevara Building houses the Student Center, the Dean of Students, the Guidance and Counseling Center, the Halcón Store, First Aid, the Center for the Strengthening of Learning and Student Success, the Title V Proposal, the Laura Gallego Theater with a capacity for 350 people, the Santo Domingo de Guzmán Chapel and the Cafeteria.

Cafeteria

The University offers cafeteria services Monday through Saturday through a concessionaire.

Hours: Monday to Thursday - 6:00 am to 6:00 pm
Friday and Saturday - 7:00 am to 2:00 pm

PARKING



The University has parking areas available on campus. All motor vehicles must be registered with the General Services Office. An access permit is issued for each registration session, although a parking space is not guaranteed. Parking on campus is a privilege, not a right, and all students, in making use of these facilities, will comply with internal traffic regulations as established.



LEARNING SUPPORT RESOURCE CENTER AND RESEARCH DR. MARGOT ARCE DE VÁZQUEZ

The Center for Learning and Research Support Resources, Dr. Margot Arce de Vázquez (CRAAI) is a unit attached to the Dean's Office of Academic Affairs. It has at the disposal of the university community, students, and faculty various information resources to contribute to the teaching and learning process. This building houses the Distance Education offices, the Research Rooms, the Videoconference Room and the Multidisciplinary Institute of Community Services (IMSERCO). The building has three (3) floors and an elevator for easy access. It was founded in 1978 and houses the Reference, Circulation and Audiovisual collections. Currently, the CRAAI has the Reserve Area, the Reference Collection, the Concha Meléndez Puerto Rican Collection, the Circulation Room, the Theological Collection, the Electronic Information Center with access to the Virtual Library, and the Technology Assistance Room that provides a variety of assistive equipment for students with special needs, a multifunctional area, Special Collections, and the Information Skills Room. The bibliographic resources of the CRAAI can be located through our electronic catalog, either by remote or face-to-face access because the collection is automated through the OASIS System (Mandarin).

Consistent with UCB's mission, the Dr. Margot Arce de Vázquez Learning and Research Support Resource Center has the mission to support the institution's academic programs by offering alternatives for educators to strengthen the teaching-learning process and meet the information needs and interests of students and the community by the institutional mission, goals, and objectives. It provides information competencies and free access in a diverse environment in learning activities that promote academic excellence and respect for intellectual freedom. In this way, the student will manage information effectively, forming professionals and lifelong learners who can function in today's society with the values of Christian humanism.

Services

The CRAAI maintains the following service schedule:

- Information and Circulation Room - Monday to Friday - 8:00 am to 5:00 pm
- Theological Collection Fr. Martin J. Bernsten, O.P. - Monday to Thursday - 11:00 am to 8:00 pm
Fridays and Saturdays - 8:00 am to 5:00 pm

The services to the university community are varied and to use them it is necessary to present the Validated Identification Card or the class program.

Reservation

The Reserve area is located in the Information Room on the third level of the CRAAI. In this area are located the bibliographic resources and materials that the professors consider relevant to be used in the development of the courses. The resources located in this area are books, readings or material of the professors and the textbooks of the various courses. The resources kept in this area are for the exclusive use of UCB students. These materials are loaned for a period of one hour and cannot be circulated outside the CRAAI.

Reference

The Reference Collection is located on the third floor. Its purpose is to provide information resources for the intellectual development of our users and to support the academic objectives of the Institution. This room collects a wide variety of encyclopedias, dictionaries, yearbooks and atlases, among others. The services are not limited to locating resources; students receive orientation to identify, locate and access resources that meet their information needs. In addition, to motivate them to their intellectual development and knowledge creation.

Concha Meléndez Puerto Rican Collection

The Concha Meléndez Puerto Rican Collection is located on the third floor and contains a variety of valuable works that document Puerto Rican history and culture, including books, magazines, newspapers, and documents on the history, literature, geography, economy, and politics of Puerto Rico. This collection is located next to the Reference Collection in the Information Room. The function of this collection is to safeguard and provide information on Puerto Rican culture. These resources do not circulate outside the room.

Special Collections Room

The Special Collections are located on the first level of the Learning and Research Support Resource Center. It consists of four rooms containing books, manuscripts, documents and works of art. The personal collections of Dr. Manuel Zeno Gandía and Dr. Cesáreo Rosa Nieves contain documentation and primary sources of information of incalculable value for Puerto Rican historians and researchers. Many of these documents are unique and personal to the aforementioned historical figures. On the other hand, the Religious Art Room and the Historical Archive of the Universidad Central de Bayamón demonstrate the humanistic philosophy of the Institution by providing historical and research resources. The Isabel Gutiérrez de Arroyo Room is located on the third level of this facility. This room is of incalculable value to the institution because of her Dominican education and her valuable historical, cultural and intellectual contribution. The institution recognizes her merits and prestige, in her professional and moral caliber, and grants her the highest recognition: the degree of Doctor Honoris et Scientiae Causa in History of Culture. This room is made up of books, manuscripts, documents, personal objects, some of his furniture and works of art. Many of these documents are unique and personal to the figure of Isabel Gutiérrez de Arroyo that were donated to the Dominican Fathers and will be represented in this room. Like the other special rooms, this room contains valuable information of incalculable value for Puerto Rican historians and researchers.

Information Competence Room

The purpose of the Information Competencies Room is to offer orientations, conferences, and skills workshops that promote the development of information competencies that foster the mastery of skills in the access and use of information, elaboration of documents, citations, and bibliographic references, contributing to the information competencies program. The room has twenty computers and innovative audiovisual equipment to meet the academic needs of the students. In addition to teaching the Information Literacy Program, this room is used for conferences, workshops, and other professional improvement activities for library staff, and at the same time the room is used by faculty and students for special presentations.

Circulation

The Circulation Room is located on the third level of the CRAAI. It is the largest collection within our facilities and is used to locate all the thematic contents of the academic programs and/or complementary topics that enrich the cultural and intellectual heritage of the student, faculty, and community. These resources may be borrowed for use outside the Institution for a period of fifteen (15) days. It has several individual and group study rooms. It is required to present the identification card duly validated and fill out the application form to receive the services,.

Theological Collection Fr. Martin J. Berntsen, O.P.

The collection is one of the most important components of the Graduate School of Theology and Ministry (CEDOC). It is located on the second floor of the Learning and Research Support Resource Center and emphasizes the area of theology, ensuring that it maintains a graduate or research level. The Theological Collection is attended by a Professional Librarian who will offer individual and group orientation to any user who requests it.

Electronic Information Center

The Electronic Information Center (CEI) is staffed by an Assistant Librarian and its purpose is to strengthen the services and collections of the CRAAI. It is equipped with twenty high-tech computers that provide access to: the Virtual Library, online catalog, university website, online newspapers, New Day digital archive, electronic dictionary and encyclopedias, Internet search engines, and directories, e-mail and different links. The purpose of these tools is to facilitate the development of the teaching, educational and intellectual process of the student. In the CEI, research work, assignments, oral presentations, information search in databases and virtual references, among others, are developed.

As part of the services offered by the CRAAI is the COBIMET Consortium, which is a cooperative arrangement among educational institutions created to collectively address the challenges presented by the new digital era for libraries. Among the services offered by COBIMET are the acquisition of electronic resources, easy access to the catalogs of the aforementioned universities, inter-library loans, access to the information skills modules and databases provided by the consortium.

Technology Assistance Room

Martin J. Berntsen, O.P. This room offers services to students with special needs such as: visual, hearing, learning and communication problems, among others. The equipment and software available for these users are: computers, adjustable tables, scanner to convert documents into editable text on the computer, printer, magnifying glass and the following programs: Desktop Zoom, Power Talk, Thunder Screen Reader, Read Please, Microsoft Windows and Windows Accessibility Tools.

Multifunctional Area

This service consists of multifunctional equipment that offers printing, digitalization, color and black and white photocopying services in various sizes.

These services are offered through the smart card, which is not limited to the exclusive use of the multifunctional equipment, nor an identification card. It is used to access the parking lot, borrow books at the center and for various services at the Institution. Each card has a balance of \$20.00 included in the tuition payment. Once the student has used up his or her copies, the card can be recharged at the Treasurer's Office or the Halcón.

COMMUNICATIONS OFFICE

Technology Support Center (CAT)

The main objective of the Technology Support Center is to offer the university community technological resources to improve the teaching and learning process by integrating technology and support to administrative processes. The service is extended to: Administrative Staff, Faculty, Students, participants of proposals or programs sponsored by UCB and the external community. The CAT houses the following areas: Audiovisual, Reproduction Area and Graphic Design.

Audiovisual Area

This area is in charge of the circulation of technological equipment and it is available to students, faculty, administrative staff and external community in the provision of audiovisual equipment, we provide technical support, we install sound equipment, projection equipment in institutional activities, video recording and photography. It is also in charge of the technical part of the Laura Gallego Theater, involving specialized management of lighting equipment, sound, projection and videoconferencing rooms.

Reproduction Area

This area offers reproduction services of printed materials for academic, institutional and external community purposes. Traditional graphic art works such as the creation of signs, street crosses, bindings, among others, are carried out.

Digital Graphic Arts

This area is in charge of the creation of computer artwork for the creation of banners, signs, etc. We also create brochures, loose sheets, business cards, among many other materials.

*The Reproduction and Digital Graphic Arts Areas involve costs.

Another of CAT's functions is to support all the Academic Programs, with special emphasis on Communications. In the Technology Support Center are located the audio laboratories and video recording studio, where students are exposed to a real work experience. The laboratories have digital audio equipment, computerized post-production, closed circuit television and reception for video conferences.

ADMISSIONS

The Admissions Office provides information about the academic offerings and services offered by the Institution to applicants. The Admissions policy is based on the humanistic and Christian philosophy, providing access to all prospective students through different admission alternatives that respond to the needs of the applicants.

Entry Dates:

First Academic Semester:

- August-October - the application must have been submitted before the term in which you are interested in joining.
- October-December - the application must have been submitted before the term in which you are interested in entering.

Second Academic Semester:

- January-March - the application must have been submitted before the term in which you are interested in entering.
- March-May - the application must have been submitted before the term in which you are interested in joining.
- June - the application must have been submitted before the term in which it is interested in entering.

Requirements and Documents

New Student

A returning student is a student who has completed the twelfth grade (12^{mo}) and has no college experience.

1. Complete the application for admission.
2. Have fourth year of high school or its equivalent (12^{mo} Grade).
3. Official transcript of credits from a school or agency duly licensed or authorized by the Department of Education of Puerto Rico or the United States (as applicable).
 - a. High School
 - b. Examinations, Diplomas and Certifications Unit of the Department of Education
 - c. Certification of the person who provided the home study (home learning).
4. University Admission and Evaluation Test (PEAU), Academic Aptitude Test (PAA) or Scholastic Aptitude Test (SAT) results, if under 21 years of age.
5. Original Immunization Certificate (Form P-VAC 3), if under 21 years of age.
6. Meet the required admission GPA for the program of study to which you are applying. The minimum GPA to be considered for regular admission is 2.00 (on a 4.00 scale), with the exception of some programs (*Refer to specific requirements area*).

Disclosure: UCB will not admit students who have passed the fourth year through Ability-to-Benefit (ATB).

Transfer Student

A transfer student is one who has previous college experience at another institution. The minimum GPA considered for regular admission is 2.00 (on a 4.00 scale) from the home university, with the exception of some programs (*Refer to the Specific Requirements area*).

The general admission requirements are as follows:

1. Complete the Application for Admission.
2. Transcript of credits from the institution of origin.
3. Original Immunization Certificate (Form P-VAC 3), if under 21 years of age.
4. Letter of Recommendation from the Dean of Students of the institution of origin.

Students without credits to validate or do not meet the minimum required average, must comply with the requirements of the New Student.

Students interested in credit validation must comply with the provisions of the Transfer Credit Policy (*refer to the current Transfer Credit Policy*).

International Student

An international student is one who is a non-permanent resident or non-citizen of the United States. United States of America with study permit in accordance with the Immigration laws.

Applicants to Universidad Central de Bayamón from other countries will comply with the same admission requirements as new or transfer applicants. The documents must be duly legalized and legitimized through diplomatic channels or by a private organization that evaluates international studies and is a member of the National Association Credential Evaluation Services (NACES).

The general admission requirements are as follows:

1. Complete the Application for Admission.
2. Transcript of high school credit or its equivalency.
3. Certification of graduation or other evidence issued by a duly accredited agency.
4. Original Immunization Certificate from the country of origin, if under 21 years of age.
5. Present original high school equivalency certification issued by the Puerto Rico Department of Education.

All reference documents must be legalized by the Ministry of Education of the student's country and the Office of Foreign Affairs.

In the event that the international applicant requires a student visa for entry into the United States, the following documents must be submitted:

1. Copy of the birth certificate of the student, his/her dependents and spouse legalized by the Ministry of Health of the country of origin.

2. Copy of valid passport.
3. Submit an affidavit certifying your economic capacity or that of your sponsor who will pay the expenses in Puerto Rico. In the case of athletes, a copy of the letter of commitment from UCB will be required.
4. Certified evidence of financial support from the sponsor for the entire term of the program.

The Admissions Office will process the Immigration Form I-20 with all the documentation required for the application.

Students with special classification

Permission from other institutions - A student who requests permission from the home university to study one or more courses during a specific academic period with the commitment that the student will return to the home university, where the approved credits will be validated. The following documentation must be submitted:

1. Complete the Application for Admission.
2. Special Permit issued by the institution of origin.

Special Student - A student who is not a degree candidate and wishes to earn academic credit. Must possess as a minimum grade, a fourth year diploma (12^{mo} grade). The following will be required the following requirements:

1. Complete the Application for Admission.
2. Transcript of credits, diploma or degree certification of the last degree conferred.
3. Original Immunization Certification (Form P-VAC 3), if under 21 years of age.

Student Auditing (Listener)

The student is one who wishes to take university courses without credit or qualification for it. This type of admission is not eligible to receive financial assistance from Title IV, state or institutional funds. You will be required to submit the following documentation:

1. Complete the Application for Admission.
2. Original Immunization Certification (Form P-VAC 3), if under 21 years of age.

A student who wishes to change his or her status from Special, Hearing or Permitted Student to a status that carries a degree or diploma must complete all requirements according to his or her type of admission.

Important notes:

- UCB in compliance with Act 171, "Extended Admission, Reasonable Accommodation, and Retention for Students with Disabilities or Functional Diversity in Transition from High School to Postsecondary Grades Act", allows extended admission. All interested candidates must confirm their intention to use the extended admission process; this admission does not eliminate or

replace the regular admission process. The result of the decision will be notified to the candidate, once the application for regular admission and the documents required for it have been evaluated.

- The UCB is working with the U.S. government and the *Dream Act* to support the initiative of certain groups of undocumented students so that they can fulfill their goal of obtaining a college degree. Undocumented students who meet UCB's admission requirements can complete documentation and submit evidence to Immigration of their study permit.

Conditional Admission

Applicants who do not meet the academic requirements may apply to the Director of the Admissions Office for a reconsideration of their case. The Director of the Admissions Office will evaluate the applicant's file and may require the applicant's presence for an interview. The interview will examine the possible reasons why the applicant has not met the requirements and whether the applicant demonstrates interest and motivation to begin university studies. If the case is considered meritorious, it will be submitted to the Admissions Committee for final evaluation and determination of admission or denial.

The Admissions Committee is composed of:

- Director of Admissions
- Registrar
- Director of the Academic College to which admission is sought
- Licensed Professional Counselor
- Coordinator of the Center for the Strengthening of Learning and Student Success (CFAEE)

Conditional admission is the acceptance status provided to a student who has not completed all academic requirements, institutional documents and state requirements required by the Office of Admissions.

1. Students who do not meet the academic requirements may request that the Admissions Committee give special consideration to their case.
2. The Committee will examine the applicant's record and application, and may require the presence of the student for a personal interview to help determine motivation, interest, academic potential and possible reasons for not meeting the minimum admission requirements.
3. The final decision of the Committee will be communicated to the applicant by the Admissions Office.
4. The Admissions Committee will be composed of the Director of Admissions, the Registrar, the Director of Academic College and the Licensed Professional Counselor.
5. These students may be considered for "conditional admission". It is at the discretion of Universidad Central de Bayamón to require these students to take special courses designed to help them overcome such academic deficiencies.

Specific requirements by Academic Program

In addition to meeting the general requirements, the student must meet the particular conditions required by some academic programs, such as: cumulative average, interviews, pre-requisite letters of recommendation, in others. UCB reserves the right to establish these cumulative averages in consultation with the school principals. Specific averages by academic program are presented below.

College and Academic Programs	Minimum Grade Point Average	Additional Requirements
College of Health Sciences and Professions		
Associate of Science in Nursing	2.30	
Bachelor of Science in Nursing	2.50	
Applied Computer Science	2.50	
Computer Science with a concentration in Geographic Information Systems	2.75	
Binary Program General Sciences/Pharmacy	3.00	<ul style="list-style-type: none"> • Completion of one year of high school courses in Biology, Physics, Chemistry and three Mathematics. • PEAU or PAA with no less than 500 points per part. In the case of PAA or SAT scores, the Concordance Table between PAA and PEAU scores, established by the College Board, in effect on the date of admission, will be used. • Start the Ideal Summer Program or in the August semester and pass with A's and B's. • Approval of interview with Academic Dean of NOVA University
General Sciences/Binary Program in Medicine	3.50	<ul style="list-style-type: none"> • Official transcript of credit that has been approved for one year in the following courses: Biology, Chemistry, Physics and three mathematics. • University Admission and Evaluation Tests (PEAU), Academic Aptitude Test (PAA) or its equivalent of 570 points in each part. • Interview with UCB personnel. <p>After admission, students must meet UCB and PHSU standards during the BACHELOR to continue to be part of the binary program.</p>
Neurosciences	3.00	

College and Academic Programs	Minimum Academic Average	Additional Requirements
College of Liberal Arts, Humanities and Education		
Social Work	2.30	<ul style="list-style-type: none"> • At the end of the first academic year, they must have completed a minimum of 21 credits of the general education component and have a minimum entrance index of 2.30. • The student must complete the Application for Evaluation to begin the Concentration Courses in the Program accompanied by a letter of recommendation from one of the general education professors. • The student will go through an interview process with a faculty member who will make recommendations to the Evaluation Committee will evaluate and make the final decision about the student's admission to the Program.
BACHELORS in Elementary and Secondary Education	3.00	
Philosophy, Religious Studies and English Programs	2.00	-Interview with the Director of the College of Liberal Arts.

*Student will sign and certify that he/she agrees with the criteria established in the Orientation Document for Students Admitted to Undergraduate Programs with Specific Requirements.

Declaration of Concentration

All students declare their concentration at the time of admission to the institution. This does not necessarily imply acceptance to some programs. Some academic programs establish specific admission requirements aligned with current regulations to practice the profession. In some cases, it is necessary to pass a previous interview with the Director or a delegate of the same.

The Admissions Office will consider the application only after all documents and the required fee have been received. All documents and records received will become the permanent property of the University. Admission will be valid for a period not to exceed one academic year. If the student does not enroll within this period, he/she must submit the documents and the Application for Admission again.

REGISTRAR'S OFFICE

The Registrar's Office is responsible for safeguarding and protecting the privacy of students' academic records. It provides direct service to students, alumni, faculty and administration. It oversees compliance with the academic policies established by the Institution, responding to federal and state laws and regulations.

Academic Year and Sessions

The academic year consists of two semesters and a summer session. It is divided into a First Semester beginning in August and ending in December and a Second Semester beginning in January and ending in May. In addition, the summer session is offered during the months of June and/or July. In the academic calendar for each term, you will find the deadlines for each of these sessions.

Within the regular semesters, there are two inserted course sessions that allow the student to accommodate additional courses because the schedule does not conflict with that established in the day and night semesters. These are the "Part of term" of eight weeks, two each semester.

Regular Schedule: The daytime schedule extends five days a week, Monday through Friday, from 7:15 a.m. to 5:00 p.m.

Evening Schedule: The schedule extends five days a week, Monday through Friday, from 5:30 p.m. to 10:30 p.m.

Saturday Schedule: The schedule extends from 8:00 a.m. to 5:25 p.m.

Summer Sessions: Classes meet Monday through Friday during the hours of 8:00 a.m. to 10:30 p.m.

Hours/Credits

One credit hour is awarded for the amount of work represented and attempted with a learning outcome that evidences student achievement. UCB uses the Carnegie system for assigning credit hours. One credit hour is the equivalent of 15 hours of direct classroom work, one class hour per week, for a semester of 15 to 17 weeks.

Academic Load

A regular academic load consists of 12 to 18 credits per term at the Undergraduate level. In order to take more than the allowed number of credits, students must obtain written authorization from their College Directors.

Students on academic probation may enroll in a maximum of 12 credits at the undergraduate level per academic term. During the summer session, students may enroll in a maximum of two courses as long as the number of credits does not exceed 7 per session.

Student Classification

Students are classified as full-time or part-time students according to the number of credits in which they are enrolled, at the corresponding level:

- a. Full-time student: Any student enrolled in a minimum of 12 credits per academic term.
- b. Part-time student: Any student enrolled in less than 12 credits per academic term.
- c. Student with less than 6 credits: "Less than half-time".
- d. Full-time summer student: Any student with 6 or more credits.
- e. Part-time summer student: Any student with 5 credits or less.
- f. Listening students: Those who attend class without receiving credit.
- g. Special students: Those students who do not aspire to an academic degree, but who do aspire to obtain university credits with or without official permission from other institutions of Higher Education.

Registration

Enrollment dates are established in the academic calendars and the process is led by the enrollment management, which establishes an enrollment calendar with schedules. The Registrar's Office sends a notification to the students of the dates stipulated for the beginning of enrollment.

Late Enrollment

The enrollment process provides an opportunity for all students who have not completed their course selection process during the regular enrollment period. The dates for late enrollment are contemplated in the academic calendar.

Add and Drop

The student may make changes in his/her class schedule during the period stipulated in the Academic Calendar. All course changes in the student's class schedule must complete the drop/add form and have the approval of the Director of Academic College in which the student is enrolled. Course changes will not be allowed after the period stipulated in the Academic Calendar has passed. There will be a charge for each course or section change.

Readmission

Any student who has discontinued his/her studies for one academic term or more and has not been suspended for disciplinary or academic reasons and is interested in resuming his/her studies must apply for readmission to the Registrar's Office. The application will be evaluated by the Registrar's Office and the College. If he/she has spent more than one year outside the institution, and is readmitted, he/she will be governed by the Catalog in effect at that time.

All students who have discontinued their studies for more than ten years and request readmission must agree to have their records evaluated. The Director of College shall have the authority to require the student to

repeat those courses which, in his/her judgment, have substantially changed in content and it is necessary for the student to be updated in said subject.

Readmission Requirements:

1. Complete the Readmission Application.
2. Comply with the grade point average and requirements of the program you are applying for.
3. To have the approval of:
 - a. Registrar
 - b. Dean of Student Affairs
 - c. Director of Academic College
 - d. Director of Financial Assistance
 - e. Director of the Guidance and Counseling Center
 - f. Treasury Officer
4. If the student interrupted his/her university studies due to reasons related to satisfactory academic progress or academic performance, the student must comply with the requirements established in the Financial Aid Satisfactory Academic Progress Policy and the Academic Standing Policy.

Change of address

All students are required to register their permanent residence and local residence with the Registrar's Office at the time of enrollment. Any changes should be reported immediately to the Registrar's Office. If these addresses are not kept up to date, the University is not responsible for problems in notifying the student of changes in requirements, tuition costs, fees, procedures, and others.

Class Attendance

Regular class attendance is required. Class attendance will not be permitted without completing the registration process.

Withdraw

The University has an institutional commitment to improve the quality of services and student retention. The Institutional Policy and Procedure for Withdrawals establishes the participation of all the institution's personnel in the development of the processes that are directly related to the control and management of attendance and certification of active student participation in the institution.

Withdrawal is the mechanism available to the student to officially discontinue his or her studies at the institution, either partially or totally. The student has the right to withdraw from one or more courses (partial withdrawal) or from the entire class program (total withdrawal) by completing the form for partial or total withdrawal.

Any student who stops presenting academic activity in the course and does not process the withdrawal request may be withdrawn by the professor. This can be:

Never Attended (WA) - When the student officially enrolls and does not attend the course during the first meetings. In the case of online courses, the student who does not perform academic activity in the course from the first day of classes until the deadline for reporting WA. The deadline for reporting WA is established in the academic calendar.

Administrative Drop (WU) - The student initially attends classes and stops attending, without notifying and/or making an official withdrawal. The professor, upon noting that the student has no evidence of academic activity in the course and has not been able to communicate with the student, assigns an administrative withdrawal. This withdrawal is identified in the system as WU. In addition, this type of withdrawal is granted for extraordinary or meritorious reasons, such as death, expulsion, and other circumstances beyond the student's control.

Reclassification

The student has the right to request reclassification of a program within the same academic level. The reclassification is made when the student wishes to change concentration, major or program. The granting of such request is conditioned to the student complying with the requirements established for such program. The student must go to his or her school for the pertinent orientation.

Minor Concentration

Beginning in their second academic year, students may combine courses of a minor concentration in order to complete them simultaneously with the major concentration they wish to obtain. In order to declare a second concentration, the student must seek guidance from the College to which he/she is affiliated.

Changes in the Federal Department of Education requirements as of May 2015 state that the minor concentration cannot be funded with Title IV funds (PELL grant or Direct Loans). If a student declares a minor concentration, he or she may choose to pay privately. Financial aid cannot be awarded to students who are ineligible for federal funds and who enroll in courses that are not in their program of study.

Examinations and Reports

In all courses the student must be evaluated with a minimum of three grades. These grades may respond to exams or any other evaluation criteria duly developed by the professor. In addition to exams, other evaluation instruments may be used, such as: monographs, reports and assignments that the professor deems pertinent to evidence the student's academic progress and learning. At all times the student must know how he/she will be evaluated in the course. It is the professor's responsibility to inform the student about the evaluation and assessment process that will be used in the course.

Final Exams

The final exam schedule is issued and distributed by the Registrar's Office.

The grades obtained by the students during the term are sent by e-mail and can be accessed by the student through the Self-Service platform. All claims for corrections or changes in grades must be made within the first thirty days of the next term at the Registrar's Office.

Grading System

The grades obtained in courses serve to indicate the degree of achievement of students in a given course. The University has established a grading system for the purpose of computing the student's grade point average.

This system serves to determine the minimum degree of overall student achievement for graduation purposes, for continuation in the program, and for the awarding of honor points.

Grades/special grades	Description	Scale	Honor Points
A	Excellent	100-90	4.0
B	Good	89-80	3.0
C	Average	79-70	2.0
D	Poor	69-60	1.0
F	Failure	59-0	0.0
W	Withdraw	None	None
WU	Administrative Drop	None	None
WM	Military Withdraw	None	None
I	Incomplete	None	None
P	Pass	None	None
N/P	Not Pass	None	None

1. The honors points gained in each course are added to calculate GPA. The final result is divided by the total number of course credits you attempted to arrive at your GPA. All courses with academic credit require the administration of tests or assessment instruments, including a final examination or equivalent evaluation.
2. Evaluation criteria must be provided so that the student is aware of his/her academic progress.
3. Professor will indicate in the academic record/Gradebook how they determined the course evaluation (assignment scoring).

Incomplete Grade

The incomplete grade is a non-punitive grade, which is granted to a student who requests it because he/she was absent from the final exam or did not submit the final paper for a justified cause, of a course in a specific academic term. The incomplete grade may be granted along with the grade that the student had in the course. If the student does not present to remove the incomplete on the stipulated date, that grade becomes the final grade. The deadline for removal of incomplete is established in the Academic Calendar and has a cost. At the time of requesting the removal, the student must contact the professor and make the payment established by the Institution.

Course Repetition

Any student who has obtained D, F, W will have the right to repeat a course. The highest grade and the corresponding credits will prevail in the computation of the average and courses with lower grades will remain in the transcript of credits and will be identified as "R" (repeated course) and will not be considered for the computation of the average. Universidad Central de Bayamón has established a Course Repetition Policy in accordance with the Federal Regulation that governs financial aid funds, where it indicates that students are allowed to repeat courses under the following conditions:

- A student may repeat courses he/she has not passed (F, W) pay for with federal funds twice.
- A student may repeat a previously approved course (D, C, B) once and pay for it with federal funds.

In the case of the Veterans Administration will not pay veteran students and/or their dependents for any repeats of previously passed courses, only failed courses or courses in which a minimum passing grade is required within their program of study.

Course Reactivation

Any student who is reported as an administrative withdrawal for not having had academic activity may request the professor to remove the withdrawal. The professor will be responsible for evaluating the case. The deadline for course reactivation is stipulated in the Academic Calendar.

Listener (Auditing) Course

Any student interested in attending a course as a listener may enroll with the permission of the Registrar and the professor. The student who attends the course as a listener will not receive credit. For cost, see table of costs.

Grades Claim

The student who understands that the final grade received in the course does not meet the results of the evaluation criteria of the course has the opportunity to request a claim in the Registrar's Office. The professor will review the case and the Registrar's Office will notify the student.

Transfer Credit

Universidad Central de Bayamón provides the service of validation of credits to students transferring to the Institution from duly accredited institutions of higher education. Transfer credits will be accepted for courses that demonstrate sufficient academic rigor, content, and depth regardless of the teaching-learning method or format. Assignment of credit hours will be consistent with UCB's credit-hour policy, and U.S. Department of Education regulations. UCB reserves the right to validate courses from other post-secondary institutions in Puerto Rico or abroad.

High school students taking courses at the university level must submit a certification or transcript from the institution indicating the name of the course, description, number of credits, and grade. Must have passed the course with a grade of C or better and must be equivalent in content and credits.

a. Validation of credits for studies in another accredited institution.

Those courses that are equivalent in content, of equal or greater credit and approved with a grade of "C" or higher that are required in the program of studies to which the student was admitted will be validated. The courses that are validated go to the academic transcript with the notation of "T" of transferred course and are not taken into consideration when calculating the student's average.

In Associate Degrees, a maximum of 60% of the credits of the academic program will be validated. In Bachelor's Degrees, up to a maximum of 75% of the total credits of the academic program will be validated. The 75% will include concentration courses. The maximum for validation in the concentration component shall not exceed 50% of the total number of concentration credits.

i. Residency credits for the degree

a. Students must complete a minimum of 30 credits at UCB.

ii. Awarding of Honors

a. Associate Degree students must have passed a minimum of 45 credits at UCB to be eligible for the corresponding academic honors.

b. Bachelor Degree students must have passed a minimum of 24 credits at UCB to be eligible for the corresponding academic honors.

Note: Courses at the post-secondary non-university level will not be validated.

b. College Board's Advanced Placement Program

The Advanced Placement tests offered by the College Board consist of tests in four subjects required in the first year of college: Spanish, English, General College Mathematics, and Pre-Calculus. UCB will recognize credit for advanced placement testing with a score of three (3) or higher on a scale of 5.

The validation criteria are as follows:

Tests	Score	Maximum Credits Granted
Spanish	3	Basic Spanish (3 créditos)
	4-5	Basic Spanish (6 créditos)
English	3	Basic English (3 créditos)
	4-5	Basic English (6 créditos)
Precalculus	3	Precalculus 1 (3 créditos)
	4-5	Precalculus 2 (6 créditos)
Calculus	4-5	Precalculus 1 y 2 y Cálculo 1 (10 créditos)
General College Mathematics	3	Basic Mathematics (3 créditos)
	4-5	Basic Mathematics (6 créditos)

c. Validation for military service

In compliance with federal regulations, the learning acquired by active, retired or disabled military personnel is recognized and validated. The student must present an official transcript of credits issued by the United States Armed Forces or Puerto Rico National Guard.

d. Expiration

Courses that do not exceed 10 years of having been approved may be validated. Those courses that exceed 10 years of having been approved, may be considered under strict evaluation of the Director of the College and the Registrar.

For more details, please refer to the Transfer Credit Policy.

Permission to take courses at other institutions

The University will accept credits taken by its students at other institutions if the Director of the College and the Registrar have previously granted official written permission to that effect. If the course was previously taken at UCB, the student may only retake it here; courses that require repetition taken at other institutions will not be accepted.

Permission to take courses at other institutions will only be issued to students who need to enroll in them in order to graduate and that at that moment, the courses are not being offered at the Institution. If the course is scheduled in our academic offerings for the year, the student must take it at the Institution.

Permission to take courses at other institutions will only be granted to students with satisfactory academic progress.

Credits are not included in the cumulative grade point average (GPA), but are considered as completed courses and maximum equivalent time.

Reserve Officers' Training Corps (R.O.T.C.)

The Universidad Central de Bayamón has an agreement with the University of Puerto Rico, the Department of the Air Force, and the University of Puerto Rico.

Department of the Air Force and the Department of the Army, so that students of the Universidad Central de Bayamón can enroll in the programs offered by the R.O.T.C. at the University of Puerto Rico (UPR).

Those students interested in any of the programs may contact the Department of Aerospace Studies or the Department of Military Sciences of the University of Puerto Rico. The courses offered by these Departments are listed in the University of Puerto Rico Catalog. Those courses approved by the student at the University of Puerto Rico will be registered in his/her academic record at the University of Central Bayamón, once the student submits an official transcript of credits from the UPR.

Transcripts of Credits and Grade Certificates

Transcripts and grade certificates are issued only upon request and authorization of the student, or for official use by Institution officials. The student has the opportunity to request the transcript of credits by visiting the Registrar's Office or through the web page: www.ucb.edu.pr in the Registrar's Office page.

An official transcript is one that bears the seal indicating so and is sent directly to the institutions or persons indicated by the student.

An unofficial student copy transcript is one that is given to the student and bears a stamp indicating so; it is sent or given to the student. The University accepts no responsibility for the accuracy of the unofficial transcript after it has been issued and delivered to the person requesting it.

Transcripts will not be issued to students who are in debt to the University. All requests for transcripts must be submitted to the Registrar's Office at least two weeks prior to the date they are needed. There is a fee for each transcript. (See cost table in the Treasurer's Office).

The University issues a degree certificate, certifying that the student has completed his/her academic degree. The first degree certificate will be issued to the student free of charge. If an additional degree certificate is required, there is a fee. (See cost table in the Treasury area).

Academic Standing

Universidad Central de Bayamón requires that all students demonstrate good academic standing in their program of studies. At the end of each academic year, the Registrar's Office will determine if the student has met the required index within his/her completed credits. The student must demonstrate academic performance with an overall academic index of 2.00 or higher on a 4.00 scale to be classified as "good standing". Any student who does not meet the established academic index will go through the following warnings:

Academic Warning - Any student who fails for the first time to meet the required academic index will be placed on Academic Warning.

Academic Probation - Any student who fails to pass the Academic Warning during the academic year will be placed on Academic Probation.

Academic Suspension - Any student who fails to pass Academic Probation during the academic year will be placed on Academic Suspension.

Graduation Candidates

All candidates for graduation must comply with the requirements established by the Institution for the granting of the Degree. For such purposes, in the semester prior to the one in which the completion of the degree is projected, the student will make arrangements with his/her College Director to evaluate his/her academic record in order to complete the Application for Petition for Degree. The Application for Petition for Degree does not guarantee completion of studies and, therefore, Graduation. Likewise, the Application for Degree Petition does not guarantee that the courses required for Graduation will be scheduled. The student will be responsible for knowing and following his/her academic sequence, and registering the courses of his/her program when the College schedules them. Universidad Central de Bayamón does not guarantee that courses will be scheduled outside the established academic sequence.

Students who meet the graduation requirements will receive a certification of having completed their studies at the end of the academic term in which their requirements are completed and will be conferred the degree at the next graduation ceremony, corresponding to the academic year in which they concluded their studies.

The dates of the commencement ceremonies are announced by the institution and all graduates are expected to attend the graduation ceremonies on time.

Graduation Candidates

All candidates for graduation must comply with the requirements established by the Institution for the granting of the Degree. For such purposes, in the semester prior to the one in which the completion of the degree is projected, the student will make arrangements with his/her College Director to evaluate his/her academic

record in order to complete the Graduation Application. The Graduation Application does not guarantee completion of studies and, therefore, Graduation. Likewise, the Graduation Application does not guarantee that the courses required for Graduation will be scheduled. The student will be responsible for knowing and following his/her academic sequence, and registering the courses of his/her program when the College schedules them. Universidad Central de Bayamón does not guarantee that courses will be scheduled outside the established academic sequence.

Students who meet the graduation requirements will receive a certification of having completed their studies at the end of the academic term in which their requirements are completed and will be conferred the degree at the next graduation ceremony, corresponding to the academic year in which they concluded their studies.

The dates of the graduation ceremonies are announced by the institution and all graduates are expected to attend the graduation ceremonies on time.

Graduation Requirements

1. Complete the graduation application.
2. Complete all requirements of the academic program in which he/she is enrolled.
3. Meet the general academic and concentration index required for the academic program in which he/she is enrolled.
4. Have achieved a minimum overall academic index of 2.00 or higher; except in the Bachelor's Degrees in Education*, Neurosciences, Geographic Information Systems (GIS) which must be 3.00 or higher and in the Bachelor's Degree in Applied Computer Science which must be 2.50 or higher.

**Subject to change, according to the requirements of the Puerto Rico Department of Education.*

Major GPA

An major grade point average of 2.50 or higher is required in the area of major, except for the bachelor's degree in Neuroscience, Geographic Information Systems and Applied Computer Science which must be 3.00 or higher.

Each College of the University reserves the right to require a higher index in the various concentrations. In order to comply with this requirement, the College Director may request the student to repeat one or more courses of his/her concentration, general or core, in which he/she has passed with a "D", in order to improve his/her average or with the intention of preparing him/her adequately for the corresponding professional certifications or revalidations.

Graduation Honor

Associate degrees are awarded with honorable mention to those students who have completed a minimum of 45 credits, with honor points at this University.

BACHELOR degrees are awarded with honorable mention to those students who have completed a minimum of 75 credits, with honor points at this University.

The overall grade point average requirements with honors on a 4.00 point scale are:

Summa Cum Laude.....	3.90 – 4.00
Magna Cum Laude.....	3.65 – 3.89
Cum Laude.....	3.50 – 3.64

FERPA LAW

The Family Educational Rights and Privacy Act (FERPA), also known as the Buckley Amendment, was passed by the U.S. Congress in 1974. Its purpose is to protect the privacy of student education records.

The Act provides students with four rights:

- The right to inspect and review his or her academic record within 45 days of the date the Institution receives the request.
- The right to have any information in the record that the student believes to be inaccurate amended.
- The right to consent or authorize the release of information in the file.
- The right to complain or file a complaint with the FERPA Offices for noncompliance with the Act.

INFORMATION DIRECTORY

Universidad Central de Bayamón in compliance with the provisions of the FERPA Act has the purpose of protecting the privacy of student academic records. The information included in the directory will be offered to third parties that request it and that are identified within the provisions established in this law.

The Student Information Directory includes the following: student's name, address, telephone number, e-mail address, date and place of birth, major, date of study and highest degree earned.

The student will determine if he/she authorizes or does not authorize the release of his/her information by completing the form in the Registrar's Office. The student must submit the document to the Registrar's Office to be included in the student's academic record; otherwise the Institution will provide the information as permitted by law.

VETERANS

Universidad Central de Bayamón is authorized to enroll veteran students and their dependents. The Veterans Administration establishes that it will only pay for courses taken during the time established for each program of study (example: Associate Degree 2 years; Bachelor's Degree 4 years, among others). The Veterans Administration the Veterans Administration will not pay veteran students and/or their dependents for any repetition of previously approved courses, only failed courses or courses in which a minimum grade is

required to pass the course within their program of studies. The certifying officer orients students on the academic programs, admission processes, enrollment and documents that must be completed to receive benefits.

Compliance with Title 38, Section 3679(e) of the United States Code.

In compliance with the Veterans Benefits and Transition Act of 2018, Title 38, Section 3679 as amended, the University Central Bayamon (UCB) signed the compliance form where it confirms its commitment to the requirements outlined in said law.

STATEMENT OF STUDENT SOCIAL SECURITY UTILIZATION

Act 186 of September 1, 2006 prohibits the use of a student's Social Security number as a routine method of identification in public and private educational institutions from elementary to postgraduate level. This Act establishes specific rules on the use of this data in educational institutions; empowers the Puerto Rico Council of Education to impose administrative fines for violation of such rules and set a deadline for compliance.

UCB, in response to this regulation, declares that the social security number of the students will be used only for internal purposes such as: to verify the identity of the students in their application for Admission, for eligibility and allocation of financial aid from federal, state, local and institutional funds or any other.

UCB commits that the use of the student's social security number will be for legitimate official use and will handle the information within customary standards of confidentiality to protect the identity of students.

FINANCIAL AID OFFICE

The mission of the Financial Aid Office is to provide students in need with the financial aid available, in accordance with the regulations and norms established by the federal, state and institutional governments to support the achievement of their academic goals.

Eligibility requirements for Financial Assistance

- a. Be enrolled in at least one (1) credit toward a degree to receive PELL, for additional aid must be enrolled in at least six (6) credits or more.
- b. Be a U.S. citizen or legal resident.
- c. Have and maintain a term and cumulative GPA of 2.00 or better.
- d. Not be delinquent or in default on student loan payments at any institution.
- e. Not be in default of any Federal Pell Grant reimbursement, F.S.E.O.G., or other Title IV programs at any institution.
- f. Not be a member of a religious society or order.
- g. Have financial needs in accordance with the need criteria established by the Federal Department of Education.

Procedure to apply for financial assistance:

- a. File the Free Application for Federal Student Aid (FAFSA) and submit it with all required documents, completed and signed, by the deadline (usually the third week of May).
- b. For those students interested in applying for student loans: complete the Student Loan Application, Entrance Interview, and Promissory Note (MPN) process with the Federal Department of Education through the Direct Loans website.
- c. Complete the official UCB Loan Application and submit confirmation of entrance interview and MPN by the date indicated.
- d. The loan renewal student will go to the Financial Aid Office to indicate the amount he/she wishes to apply for and complete the required forms.

Description of Financial Aid:

FINANCIAL ASSISTANCE PROGRAMS PROVIDED BY THE FEDERAL GOVERNMENT OF THE UNITED STATES OF AMERICA

Federal Pell Grant (Federal Pell Grant)

The Federal Pell Grant, established by the Higher Education Act of 1965, as amended (Public Law 92-318), provides aid to undergraduate college students with financial needs based on family income, educational costs, and the student's enrollment load. It is limited to 150% of the time required to earn a BACHELOR degree.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The Higher Educational Act of 1965, as amended, in 1992 authorized this financial aid program for undergraduate college students with exceptional financial needs to assist them in completing their postsecondary education. The amount of financial aid depends on available funds.

Federal Work-Study Program (FWSP)

Under this program of the U.S. Department of Education, Universidad Central de Bayamón can offer part-time employment to students in various parts of the University, particularly those from low-income families who need to earn some income to continue their studies. In addition, arrangements can be made to work off-campus with local government and social service agencies. Seven percent of the funds are designated for Community Service.

Federal Direct Loan Program - Subsidized and Unsubsidized (Direct Loans - Subsidized and Unsubsidized)

Loan The Higher Education Act of 1965, as amended, created Guaranteed Student Loan Programs. The Higher Education Amendments of 1992 renamed the program as it is known today. The student who needs the funds to pursue undergraduate studies applies for the loan directly with the Department of Higher Education, which in turn serves as the guaranty agent for the loan, through the Direct website. The University must certify the student's academic standing and recommend the amount to be borrowed for college expenses. The borrower will have to start repaying the loan six months after graduation if he/she leaves the Institution or when his/her enrollment is less than half-time.

The interest rate is variable, not to exceed 8.25%. Students who do not qualify for the subsidized loan may apply for the unsubsidized loan. In this loan, the student is responsible for the payment of interest from the time the loan is granted, or it may be capitalized. There may be a combination of both loans.

FINANCIAL ASSISTANCE PROGRAMS OF THE COMMONWEALTH OF PUERTO RICO

Supplemental Educational Assistance Program (PAE)

The Government of the Commonwealth of Puerto Rico signed Act 170 of August 11, 2002, as amended, also known as the Scholarship and Educational Assistance Program Act. The Scholarship Program for Academically Talented Students and other financial aid initiatives for postsecondary students provide scholarships for students enrolled in postsecondary institutions, who demonstrate financial need, are U.S. citizens, and maintain a minimum grade point average of 3.00 points. This aid is supplemental to any other financial aid for which the student has qualified. The amount to be awarded varies each year, depending on the funds allocated to the institution.

Athletic Scholarship

It consists of granting incentives to those students who qualify to receive them due to their athletic ability and achievement. The purpose of this scholarship is to help student-athlete in their study expenses. Any student interested in obtaining this scholarship should contact the Athletic Director of the Institution.

Institutional Scholarship

It is granted by the Institution for its employees or dependents at the undergraduate level. For additional information, please refer to the Human Resources Office.

Presidential Scholarship

The President of the Institution awards this scholarship to students who meet the requirements established for this program. For additional information, please refer to the Dean of Students Office.

The aid described is a privilege and not a right; therefore, its granting is subject to the existence of the corresponding federal, state, or institutional funds allocated. It is the student's responsibility to take the necessary steps to obtain this aid.

All scholarship checks issued by Universidad Central de Bayamón, Inc. for funds from the Federal Government (U.S.), Government of Puerto Rico (E.L.A.), and other external sources, will be canceled six months after they have been issued and not claimed. The proceeds from the cancellation of such checks will be returned to the corresponding funds or redistributed in accordance with the rules and regulations of the donors and our Institution.

Course repetition

In accordance with the Federal Regulations governing financial aid funds, the Course Repetition Policy of Universidad Central de Bayamón is established.

UCB allows students to repeat courses under the following conditions:

- A student may repeat courses he/she has not passed (F, W) and pay for them with federal funds twice.

A student may repeat a previously approved course (D, C, B) once and pay for it with federal funds.

Satisfactory Academic Progress

Universidad Central de Bayamón requires that all students demonstrate satisfactory academic progress through the number of academic credits attempted and/or satisfactorily completed and the general academic index maintained. Said progress is framed within the federal norm of time and a half (150%) maximum for a student to complete his/her degree.

The purpose of this policy is to establish the evaluation criteria to determine the student's satisfactory academic progress.

Definitions:

1. Attempted credits - credits for courses in which the student enrolls and earns A, B, C, D, F, P, NP, W, WU, and T grades.
2. Successful completion - credits for courses in which grades of A, B, C, D, P, and transfer credits (T) from other institutions are earned.
3. Unsatisfactory completion - credits for courses in which grades of F, and NP are earned.
4. Overall grade point average - is the measure of student achievement. It is determined by dividing the total number of honor points (A, B, C, D, or F grade points multiplied by course credits) by the total credits accumulated in the courses.
5. Federal time and a half policy - the Federal Department of Education states that all students must complete graduation requirements in a maximum time equivalent to 1.5 times (150%) the credits of their program of study. Students who have completed the maximum time do not qualify for Financial Aid.
6. Academic "Warning" - warning received by a student, who at the end of an academic term does not meet the standards of academic progress.
7. Academic Plan - a document prepared between the professional counselor and the student that commits the student to meet satisfactory academic progress within a specified period.
8. Appeals Committee - a task force composed of the Dean of Academic Affairs, the College Director, the Director of the Guidance and Counseling Center, the Registrar, and the Director of Financial Aid. This committee will hear academic suspension appeal requests.
9. Academic probation - status assigned to a student who fails to make satisfactory academic progress. Academic probation will be granted for one academic year unless the academic plan has provided that the student needs more time.
10. Academic suspension - interruption of studies determined for a student who has not made satisfactory academic progress after academic probation.

Procedure:

The student must satisfactorily complete a minimum number of credits according to the number of credits attempted during the year. The student must also maintain a minimum academic grade point average (GPA), according to the number of credits attempted and satisfactorily completed. Attempted credits are understood as all those in which grades of A, B, C, D, F, F, P, P, NP, W, or WU; and credits satisfactorily completed those completed with grades of A, B, C, D, and P.

The University will apply the satisfactory academic progress standard during the first summer session. The evaluation will include all terms the student has taken. The student must demonstrate satisfactory academic progress according to the requirements set forth in the following table:

**Table I – Grade Point Average required in programs of study at the BACHELOR level
and whose required grade point average is 2.00**

Number of credits completed	GPA	Classification according to the number of credits	Number of minimum credits satisfactorily completed (successfully completed)	Minimum percentage required
3 - 12 credits	1.30	1st year	8	67%
13 - 24 credits	1.40	1st year	16	67%
25 - 36 credits	1.50	2nd year	24	67%
37 - 48 credits	1.60	2nd year	32	67%
49 - 60 credits	1.70	2nd year	40	67%
61 - 72 credits	1.80	3rd year	48	67%
73 - 84 credits	1.90	3rd year	56	67%
85 - 96 credits	2.00	4th year	64	67%
96 credits or more	2.00	4th year	64 or more	67%

**Table II – Grade Point Average required in the Teacher Preparation programs whose
average graduation rate is 3.00**

Number of credits attempted	GPA	Classification according to the number of credits	Number of credits successfully completed	Minimum percentage required
3 - 12 credits	2.00	1st year	9	70%
13 - 24 credits	2.20	1st year	17	70%
25 - 36 credits	2.30	2nd year	26	70%
37 - 48 credits	2.40	2nd year	34	70%
49 - 60 credits	2.50	2nd year	42	70%
61 - 72 credits	2.60	3rd year	51	70%
73 - 84 credits	2.70	3rd year	59	70%
85 - 96 credits	2.90	4th year	68	70%
96 credits or more	3.00	4th year	68 or more	70%

Any student who fails to satisfy any of these requirements contained in the Grade Average Point Tables required in a program of study will undergo the following warnings:

1. "Academic Warning:

- Any student who fails to make academic progress, as stipulated in this policy, will receive an academic warning and will be classified as first academic probation during the next academic term in which he/she enrolls.

2. Academic Probation:

- a. All students on academic probation will be referred to the Guidance and Counseling Center and will prepare an academic plan that will allow them to achieve satisfactory academic progress within the next two terms.
- b. The academic probation period will provide students with the opportunity and time necessary to review their academic progress and receive guidance and academic counseling in order to overcome their academic deficiencies.
- c. The academic load of students on academic probation will be limited to a maximum of 12 credits per academic term.
- d. Students who satisfactorily meet the minimum number of credits satisfactorily completed and the General Average will be classified in Satisfactory Academic Progress (Good Standing) and will continue to receive follow-up on their study plan by the Guidance and Counseling Center.
- e. Students on academic probation who do not reach the minimum number of credits satisfactorily completed or who do not meet the minimum GPA for their credit level will receive an academic suspension for one academic term. The student may submit an-appeal.

3. Academic Appeal before the Appeals Committee:

- a. A student interested in submitting an academic appeal to the Appeals Committee shall submit the appeal form contained in this policy.
- b. The Appeals Committee is composed of the Director of the College, the Registrar, the Director of the Guidance and Counseling Center, the Director of Financial Aid and the Dean of Academic Affairs.
- c. The student must base his/her appeal on a meritorious cause and must present evidence to justify his/her request. Some of the justified causes are:
 - serious illness of the student
 - death of a family member
 - military activation
- d. The student should indicate how his or her situation has changed and how he or she is committed to making academic progress.
- e. If the Appeals Committee concludes that the student can make academic progress, the student is granted extended probation for one academic term. The student may enroll as stipulated in the academic plan.
- f. If at the end of the academic term, the student fails to achieve satisfactory academic progress, he/she will be academically suspended for six months.

4. First Academic Suspension:

- The Registrar will notify the student by letter of the academic suspension for six months.
- A student with a first academic suspension may request an appeal to the Appeals Committee.
- If the committee considers the appeal of the academic suspension favorable, the student will remain enrolled with a second academic probation of one year.
- If the committee does not find in favor of the appeal submitted by the student, the student continues to be suspended for six months.
- After this period the student may apply for readmission.

5. Second Academic Suspension:

- A student readmitted after a second academic suspension will be placed on second probation for one year and may not appeal the determination of the Appeals Committee.
- In the event that the student does not make academic progress in the year of the second academic suspension, he/she will be suspended for a third time and will not be able to appeal the determination.
- Any student who has been academically suspended three times may not be readmitted to the university.

6. Readmission of suspended students:

- Any suspended student who is readmitted will be required to complete a plan of study in the Guidance and Counseling Center and maintain satisfactory academic progress.
- If during the period of academic suspension, the student carries out, on his/her own, studies in another institution of higher education, these credits will not be accepted at UCB.

FINANCE

Tuition, Fees, and Costs

 UNIVERSIDAD CENTRAL DE BAYAMÓN DEAN OF FINANCE AND ADMINISTRATIVE AFFAIRS		TUITION, FEES AND OTHER COSTS UNDERGRADUATE LEVEL ACADEMIC YEAR 2023 - 2024	
TUITION AND FEES		OTHER FEES	
DESCRIPTION		DESCRIPTION	
Admission Fee		Transcripts	
Candidate for degree	\$25.00	Transcripts in English and Spanish	\$8.00
Audit Student (No credit)	\$25.00	Degree Certificate	\$5.00
Readmission	\$30.00	Note: Additional cost for "Clearinghouse" E-transcript	\$2.50
Basic Fee (Each Semester or YRP Summer Session)		Change of Concentration	
Each Session	\$220.00		\$20.00
Construction Fee	\$180.00	Professional Experience Test	
Technology Fee	\$170.00		\$298.50
Library Fee	\$35.00	ID Card (First Attempt)	
			\$10.00
Summer Session or Weekend Period Fee (One Session)	\$74.50	Lost ID Card	
Construction Fee (Summer Session)	\$56.00		\$15.00
Technology Fee (Each Quarter or Summer Session)	\$85.00	Student File Documents Copies (Each copy)	
Library Fee (Each Quarter or Summer Session)	\$20.00		\$3.00
		Additional Charges	
Special Summer	\$142.00	Late Registration	\$50.00
Construction Fee	\$90.00	Class Schedule Change (per form)	\$10.00
Technology Fee	\$170.00	Remove Incomplete Fee (per course)	\$30.00
Library Fee	\$35.00	Payment Plan (extended)	\$15.00
		(for each payment due)	
General Fee		Study Program Duplicate	
Cost per credit	\$199.00		\$5.00
Cost per audit student credit (50% from credit cost)	\$99.50	Registration Cancellation	
Cost per credit for GIS Program	\$200.00		\$100.00
Cost per audit student credit (50% from credit cost)	\$100.00	Charges for Checks Returned for Insufficient Funds	
Cost per credit for NeuroSciences Program	\$199.00	"Stop Payment"	\$25.00
Cost per audit student credit (50% from credit cost)	\$99.50	Childcare for Active Students (Monthly) - Optional	
Extra Hours Regular Credits	\$99.50	Annual Pre-School Registration Fee	\$130.00
Extra Hours GIS Credits	\$100.00	Pre-School (Monthly)	\$90.00
Extra Hours NeuroSciences Credits	\$99.50	Childcare Service (Monthly)	\$50.00
Programs Fees		Assignments Tracking Classes and Tutoring Services	\$80.00
College of Liberal Arts, Humanities and Education		Summer Session	\$130.00
Languages and Communications Laboratory	\$50.00	Childcare Service (Each evening)	\$60.00
Insertion Laboratory	\$100.00	Alumni (Monthly)	
Skills and Practices	\$180.00	Annual Pre-School Registration Fee	\$230.00
Education Practices	\$150.00	Pre-School (Monthly)	\$225.00
Educational Technology Laboratory	\$60.00	Assignments Tracking Classes and Tutoring Services	\$135.00
Technology Practices	\$100.00	Childcare Service (Each evening)	\$15.00
Social Work and Social Service Practices	\$100.00	Summer Session	\$230.00
Programs Fees: College of Sciences and Professionals of Health		External Community (Monthly)	
Science Laboratory	\$100.00	Annual Pre-School Registration Fee	\$230.00
Nurse Laboratory	\$105.00	Pre-School (Monthly)	\$250.00
Skills and Practices	\$200.00	Assignments Tracking Classes and Tutoring Services	\$155.00
GIS Program Lab Fee	\$255.00	Childcare Service (Each evening)	\$15.00
Rescue Training (Subject to the agency rate price)	\$	Summer Session	\$250.00
Programs Fees: College of Business Development and Technology		Stay active in a Program Fee	
Administrative Assistant and Networking Laboratory	\$50.00		\$30.00
Practices	\$100.00	Graduation Fee	
Photography	\$60.00	Associate and Bachelor Degrees (Not included Gown)	\$150.00
		Minor or Certificate	\$60.00
*Subject to change		Graduation Gown (Cost depending on market rates)	
		Payment Certification / Care Center (by period)	
			\$10.00
		Payment Plan Fee (By Term)	
			\$25.00
		Vaccination Records (each)	
			\$10.00
		Costs Certificate (per year)	
			\$10.00
		Ease Past	
			\$20.00

Payment of Tuition and Fees

1. All tuition and fees are payable on the day of registration.
2. Payment may be made in cash, ATH, VISA, Money Order, Traveler's Check, or Official Check by visiting the Treasury Office. Alternatively, you can access the Online Payment platform through <https://www.ucb.edu.pr/> and make your payment electronically.
3. Tuition, degrees, diplomas, dismissals, honorable and credit transcripts, and others will not be available to students who have not satisfied all their financial obligations to the University.

Deferred payment plan

UCB grants students the privilege of taking advantage of a payment plan in case they do not have the financial resources to pay any balance owed to the institution for tuition.

1. If the student is under 21 years of age, his/her parent or guardian will be required to complete and sign, together with the student, the Single Payment Commitment form at the Bursar's Office.
 - a. All students with outstanding balances have until the course start date to process their Payment Plan Enrollment through the Online Payment Platform.
 1. Students enrolled per semester will be granted a total of four (4) installments per academic period to cover their tuition costs.
 2. Students enrolled per term will be granted a total of two (2) installments per academic period to cover the tuition cost.
 3. Students enrolled for the summer term will be granted a total of two (2) installments to cover their tuition costs.
 - b. All students must apply for the FAFSA and complete their Financial Aid file on or before June 30 of each year.
 - c. Failure to apply for the FAFSA and complete your Financial Aid file by the due date will result in the student being required to enroll in a payment plan and will be responsible for complying with the plan. The student will be responsible for enrollment fees and late fees.
 - d. If the student does not comply with the terms of the obligation, the University may withhold grades, enrollment authorization, credit transcripts, or any other official documents as determined by the institution.
 - e. The student will have five (5) days after the due date to make the payment without surcharges. After this date, there will be a surcharge of \$10 for non-payment of the fee or the difference not covered by the payment.

- f. All students whose tuition is covered by an outside agency must submit evidence of the corresponding authorization.
- g. Any student who has not fulfilled his or her payment commitments for the previous term will not be eligible for enrollment.
- h. The initial debt transfer fee to the collection agency is \$25.
- i. If the University uses the services of a collection agency or a law firm to enforce compliance with this obligation, the student agrees to pay, in addition, 35% of the total unpaid in the concept of collection costs that will be capitalized to form part of the unpaid principal. Likewise, in the event of a judicial claim, the student agrees to pay, in addition to the above, the legal costs and expenses and attorney's fees incurred by the University, in the amount fixed in advance and without the need for further calculation, equivalent to 35% of the total amount due.
- j. Universidad Central de Bayamón reserves the right to submit to Credit Bureau the delinquent history of this obligation, if applicable.

Institutional and Federal reimbursement for recipients of Federal Aid, Title IV, as amended by the HEOA of 2008.

Universidad Central de Bayamón establishes the Institutional and Federal Reimbursement Policy for students participating in Title IV Financial Aid Programs, in accordance with the HEOA amendment of August 14, 2008. This policy applies to both undergraduate and graduate students. It excludes auditing students, transient students, and any other students whose studies do not lead to a degree, certificate, or professional certificate.

Student Responsibility

It is the student's responsibility to notify the Financial Aid Office and Registrar's Office if he/she is a recipient of financial aid and if he/she processed a total drop or stopped attending during the academic term. The Financial Aid Office will determine the relevant aid that the student is eligible for, according to the percentage of time consumed.

Institutional Reimbursement

The adjustment of tuition fees that the student is entitled to after processing his or her total withdrawal is independent of the refund of **Title IV** funds.

UCB's refund policy provides for an adjustment in tuition charges to the student who processes a total withdrawal, according to the time at which the withdrawal is submitted. In addition, a **5% administrative fee** is added to the charges below:

BACHELOR Program (semester)

Tuition Cancellation -15 days before the first day of class		\$100.00
During the first week	10%	
During the second week	20%	
During the third week	40%	
During the fourth week	60%	
During the fifth week	75%	
During the sixth week	100%	

Master's Program - "Part of Term".

Tuition Cancellation -15 days before the first day of class		\$100.00
From 1 to 3 days of classes	10%	
4 to 6 days of classes	20%	
7 to 9 days of classes	50%	
10 and over	100%	

Regular Summer Program and Summer Master's Program

Tuition Cancellation -15 days before the first day of class		\$100.00
First Day	10%	
Second Day	20%	
Third-Day	40%	
Fourth Day	60%	
Fifth Day	75%	
Sixth Day	100%	

A student who processes enrollment and never attends

Any student who processes their registration and does not show up for classes will be dropped in the second week and will be charged 20% of their original tuition. This student does not qualify for federal funds. The tuition cancellation fee will be the responsibility of the student.

Procedure for Reimbursement of Federal Financial Assistance Programs Title IV

1. The Institution calculates the portion of Economic Assistance funds that it must reimburse to the Federal Government for a total withdrawal.
 - 1.1 The date of withdrawal shall be considered as the date on which the student was withdrawn from the electronic registration system (Gradebook).
 - 1.2 If the student stops attending before 60% of the class time has elapsed without providing official notification to the Institution of his/her intention to withdraw, the Institution will consider the last day of class attendance as the date of withdrawal.
 - 1.3 If the Institution determines that the student did not initiate the withdrawal process or was unable to provide official notification (including to third parties authorized by the student) of his/her intention to withdraw, due to illness, accident, personal loss, or other

circumstance beyond the student's control, the date to be considered as the date of withdrawal shall be established as the date of the event or circumstance that occurred.

- 1.4 An academic event or activity is defined as, but not limited to, attending classes, taking an exam, tutoring or academic activity of the Institution through computer use, academic counseling, submitting an assignment, or attending a study group assigned by the Institution.
- 1.5 The Institution may allow a student to withdraw his or her request for withdrawal if he or she submits a signed statement certifying that he or she can continue to participate in academic activities and intends to complete the period of studies enrolled.
- 1.6 If after this event the student stops attending classes, the Institution may take as the date of withdrawal the last day of class attendance or academic event occurred, the Institution must evidence the student's attendance or participation in such event.
- 1.7 The student must submit the official notice of withdrawal to the Registrar's Office.

2. Determination of percent of study period completed:

This percentage is calculated by dividing the total number of calendar days completed (including weekends) in the enrollment period up to the student's withdrawal date by the total number of calendar days in the academic term.

$$\frac{\text{Total calendar days completed.}}{\text{Total calendar days of the semester/quarter/quarterly period}}$$

The total number of calendar days in an enrollment period includes all days within that period, except for academic recess times involving five (5) consecutive days (Easter), within that semester/trimester or quarter.

3. The amount of financial aid consumed by the student is calculated:

Determining what percentage of financial aid or loan the student consumed at the time of disenrollment. This amount is determined by multiplying the percentage of studies completed by the amount of Title IV funds disbursed or eligible for disbursement.

Percentage of Completed studies	X	Title IV Amount of Title IV funds period disbursed or eligible for disbursement.
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If this withdrawal occurs on or before sixty percent (60%) of the academic term, the percentage earned and consumed will be equal to the percentage of the academic term the student completed as of the date of withdrawal.

If the withdrawal occurs after sixty percent (60%) of the academic term has elapsed, 100% of the Title IV funds granted will be considered consumed.

4. The amount of financial aid not consumed by the student is calculated:

By taking the total amount of Financial Assistance disbursed or eligible for disbursement and subtracting the amount of Financial Assistance consumed by the student.

5. Return of funds when the student has received a refund:

If a student withdraws after receiving a refund of excess Title IV funds, the student is obligated to repay up to 50% of the amount of the excess refund. The institution must notify the student of the overpayment within 45 days. The student is responsible for remitting the payment to the Federal Department of Education.

A student subject to the overpayment condition will maintain eligibility to Title IV Programs when:

1. Repays the overpayment in full to the Institution, or 2.
2. Signs a payment agreement with the Federal Secretary of Education.

The administration of Universidad Central de Bayamón reserves the right to make changes in the cost of tuition and fees without prior notice. The enrollment and admission procedures are essential steps to establish a relationship between the student and the institution. However, it is with the payment of the corresponding fees that this relationship is formalized, semester by semester or session by session. All these requirements must be fulfilled in order for the student to be considered a "bona fide" student of the Institution.

***UCB reserves the right to make changes in tuition fees and charges.**

STUDENT LIFE AND SUPPORT SERVICES

Universidad Central de Bayamón offers activities that contribute to the development of the student as an individual and as a member of the community in general. For this purpose, it has the facilities and specialized personnel, who combine their efforts to meet the academic, spiritual, social, human and vocational needs of the students. With these services, the University aspires to direct each student towards the full realization of his or her potential and the achievement of the goals that have been established.

Deanship of Student Affairs and Community Service

The Dean of Students provides services and activities designed to foster the integral development of each student throughout their studies at UCB. It supports them in the transition to and from university life. In addition, it enables them to become active participants and leaders in university life with humanistic and Christian values, respect for cultural and human differences both individually and globally, within a framework of understanding, appreciation of student rights and responsibilities.

Services

- Distribute and disseminate to the University Community the Student Regulations; Institutional Policy on Prevention of Drug and Alcohol Use and Abuse, Institutional Policy on Sexual Harassment, Student Affairs Policies and Procedures.
- Coordinate Student Assemblies, Student Council Elections, Certification and follow-up to Student Organizations.
- To promote and coordinate social, cultural, educational and recreational activities for the enjoyment of the entire university community.
- Process and investigate complaints or grievances from students, administrators and faculty regarding discipline or any violation of the Student Regulations or other policy, as stipulated in Executive Order ADM 16-01 - Policy for Handling Student Grievances.
- Channel the Protection or Stalking Orders through the Security and Physical Facilities Offices, thus ensuring the safety of the student and the University Community.
- Provide information about lodging facilities authorized by the Department of Consumer Affairs (DACO) for student use.
- Manage or channel everything related to internal communication.
- Coordinate and work with everything related to the Graduation Ceremonies (Mass, Academic Awards and Graduation) and Achievement Night for regular students.
- Coordinate the work of the Retention Committee.
- Reproduce and safeguard the identification cards at the Institutional level.
- Effectively communicate messages of prevention of high-risk behaviors related to the use and abuse of alcohol, other drugs, violence, suicide and sexuality, as well as the promotion of healthy lifestyles, through attractive literature, music, plays, sports, educational, experiential and spiritual activities.
- To prepare and publish the Biennial Report on the efforts made in the institution's Alcohol and Other Drug Prevention Program.
- UCB is part of the Consortium of University Resources Sembrando Alianza de Alerta a las Drogas, el Alcohol y la Violencia en Puerto Rico (C.R.U.S.A.D.A.).

Office hours:

The Deanship of Student Affairs offers services Monday through Friday from 8:00 a.m. to 5:00 p.m. The office is located on the second floor of the Padre José Valentín Guevara, O.P. building. You may call (787) 786-3030, extensions 2506 or 2500. Evening and Saturday hours are served by the Onestop Coordinator, located on the second floor of the Father Vicente A.M. van Roij Building (Administration) or by calling (787) 786-3030 extension 2085.

Campus Ministry

The University Pastoral has as its mission and objective, for its particular genre, to ensure that each member of the community is and lives aware of their own equality with others; creating an environment of respect and harmony where the seed of Christian doctrine can germinate. Through its Office, it offers the means for the growth of the student and the community in the Faith; and the development of spiritual values.

The center of the Pastoral are the members of the university community, especially the young university students, who will be able to be formed until they achieve the profession of their choice; and to live from now on as active members in the Christian religion of their preference, for the good of the Puerto Rican and international society, in a participative, supportive and co-responsible way in the tasks they perform.

The Pastoral has the following goals:

- To guarantee the Christian presence in the University Community by giving special attention to each member of the university community, inviting them to Christian reflection on the fundamental elements of faith in Jesus Christ, the Church and fidelity and to the evangelical doctrine as presented in the New Evangelization.
- To promote ecumenical dialogue with the participation of people recognized for their respect for the freedom of each person in the search for God according to their own knowledge and experiences and their desire for religious improvement.
- To create a solid nucleus of people truly committed to the Christian and Catholic faith so that they may participate in solidarity and co-responsibility in the organization of academic, social and religious activities in tune with the needs of the university and Puerto Rican society.
- Encourage the participation of those governing bodies, internal and external, local, national and international, that make the Central University of Bayamon a center of encounter and dialogue on current religious topics.

The Pastoral develops liturgical celebrations, catechesis for preparation for the sacraments of Christian initiation, prayer and reflection groups, spiritual retreats, evangelization days, and spiritual accompaniment. In addition, respecting the diversity of religions professed by the students, interreligious spaces for prayer and community reflection are encouraged. The University Pastoral Office has a Student Organization - Youth Community with whom all activities are developed.

Student Council

The Student Council is composed of 10 representatives elected by the student body. The Council is the official representative of the students of the University and is governed by the Student Regulations. It is the entity that cooperates with the faculty and administration to achieve the goals of the University. Students are represented on all committees and bodies of the University.

Athletic Department

Universidad Central de Bayamón recognizes the value of sports and physical activity as a means of education and as a complement in the integral formation of the human being. The athletic program promotes knowledge, the practice of sports and its values in the Puerto Rican community. In addition, it coordinates the participation of student-athletes in the sports program of the Intercollegiate Athletic League (LAI), of which the Institution is a member. UCB competes in the sports of basketball, volleyball, tennis, table tennis, swimming, weightlifting, track and field, and track and field relays, cross country, beach volleyball and taekwondo. Participation in these sports disciplines may vary according to the formation of the teams.

The Athletic Department offers the following services to the external and university community:

- Swimming Lessons
- Intramural Tournaments
- Summer Camp
- Sports clinics

The offices are located at the Rafael Pont Flores Sports Complex from 8:00 a.m. to 10:00 p.m. Monday through Friday. You may call (787)786-3030 ext. 2261 or 2265.

Onestop Coordinator and Night/Saturday Services

Evening and Saturday student and academic services are offered through the Onestop Coordinator. He is the liaison between students, professors and University officials providing guidance, information and services to the community in general. The service hours are Monday through Thursday from 10:00 a.m. to 7:00 p.m. and Saturdays from 8:00 a.m. to 5:00 p.m. It is located on the second floor of the Administration Building- Father Vincent A.M. van Rooij, O.P.

First Year Students

The University is aware that first year students begin university life with great expectations and illusions, entering a different world that will demand adaptive skills and changes in their lifestyle. It is important that these students feel welcomed in an institution that recognizes their needs and, in tune with these needs, allows them to acquire socializing experiences and integration into university life.

To achieve this goal, the Universidad Central de Bayamón designs and offers a variety of services and activities. In order to achieve the integration of first year students to university life, a program of services has been developed to meet their needs.

When first-year students are admitted, they are required to participate in the UCB General Orientation Activity and Enrollment Process. This includes faculty, administrative staff and student counselors. In addition, parents or guardians of first-year students participate in this orientation process. Each College prepares the program of classes, according to what was previously identified in the application for admission and the results of the College Board tests.

First year students receive the services of the Guidance and Counseling Center and the Center for the Strengthening of Learning and Student Success (CFAEE) in the process of transition and adjustment to college life. In addition, the College's Academic Advisors assist in the planning of studies to be followed in order to achieve the academic goal.

The main interest is that first year students relate with all the services and internal resources provided by the Institution, enrich university life and persistence to the second year of studies with a good academic achievement; always supported by the professional work team integrated by the Academic Colleges, the Guidance and Counseling Center, and CFAEE.

Guidance and Counseling Center

Licensed professional counselors staff the Guidance and Counseling Center and its mission is to provide professional assistance to the student population and contribute to their integral development. The Center has the responsibility to develop activities that facilitate the appropriate adjustment to university life, and provide the opportunities, experiences and resources necessary for them to successfully face and solve the situations that affect them. In addition, it facilitates the development of personal, educational and occupational plans for each student. The counseling process is offered in a safe, professional and confidential environment.

Personal, academic-educational and occupational orientation and counseling services support students from the beginning of their university life to the achievement of their academic goals. In addition, they help students identify their personal needs, develop decision-making skills, and learn, acquire, and practice the attitudes necessary to face the competitive world of work. In addition, the Center provides reasonable accommodation services to all students with disabilities who request it.

In addition, the Center has a Career Area, which provides students with the necessary preparation for the job search. The main purpose is to place graduating students in jobs, according to their academic preparation. It also provides occupational information and employment referrals to those students interested in working during their free time. The employment service is complemented by a collaborative agreement with the Bayamon Department of Labor and Employment Services. The Guidance and Counseling Center staff serves as a liaison with the Placement Officer of that agency and is responsible for maintaining continuous and effective communication.

The Center provides the service of Clinical Psychologists in Practice of the Doctoral Program of Carlos Albizu University, with whom the Institution has a collaboration agreement. The purpose of offering psychological services is to provide assistance and emotional support to students through individual and family therapy. In this way, they can learn to handle the diverse situations they face on a daily basis under the guidance of the Clinical Psychologists in Practice.

In addition, the Center offers the opportunity to participate in the Forjadores Aliados con la Esperanza y la Superación (FACES) Student Orientation Group. The primary objective is to provide orientation to new students in different areas. It is developed through a peer-facilitator model, as student-to-student communication is easier and more effective. Student counselors serve as a liaison between the student population and the Licensed Professional Counselors.

The Center supports the academic work by serving as a consultant to the faculty and developing personal and professional growth workshops for students and the university community. Licensed professional counselors possess a broad mastery of both the theory and practice of guidance and counseling.

The Guidance and Counseling Center's services can be requested and received on a voluntary basis, by referral or by appointment. The Center is located on the second floor of the Padre José Valentín Rivera Guevara, OP building (Building 5000). The hours of service are Monday through Thursday from 8:00 am to 6:00 pm, and Friday from 8:00 am to 12:00 noon and from 1:00 pm to 5:00 pm.

Center for Strengthening Student Learning and Success

The Center for the Strengthening of Learning and Student Success (CFAEE) is attached to the Dean of Academic Affairs and its mission is to offer first-year students **integrated services** aimed at supporting and facilitating the process of transition to university life, monitoring academic progress, and providing tutoring services in order to contribute to personal and professional development. Among its objectives are:

1. Provide integrated services to incoming students until they complete the first 24 credits.
2. Contribute to student development by offering tutoring services in core subjects with the purpose of helping students improve and master skills.
3. To help students with conditional admission to overcome academic lags, integrate into core courses and improve their academic achievement.
4. Contribute to the retention of students in the Institution, monitoring their academic progress until they obtain their university degree.

CFAEE works with the following components:

- Freshman Services - Offers integrated services and referrals to the different offices and Colleges, as well as academic progress monitoring.
- Tutoring - Provides student support in the areas of General Education (English, Spanish, mathematics, philosophy, humanities, science and technology) to clarify material discussed in class. Tutoring services are directed to all undergraduate (associate and BACHELOR) level students.

The CFAEE Office is located on the second floor of the Nélida Meléndez Building. Service hours are: Monday through Thursday from 8:00 a.m. to 6:00 p.m., Fridays from 8:00 a.m. to 12:00 m. and from 1:00 p.m. to 5:00 p.m.

Social and Cultural Programs

The University promotes and sponsors numerous social and cultural events for the development and enjoyment of the student body, faculty and community. Musical recitals, poetry readings, films, exhibitions, dances and plays are organized throughout the year.

In addition to these events, students may belong to social, cultural and/or educational groups and organizations at the Institution. Both the Dean of Student Affairs and the Director of the Academic Colleges provide guidance to students on existing organizations and the requirements for membership.

Each of the Student Organizations sponsors a variety of activities that include field trips, visits to the island's historical and cultural monuments, conferences and lectures of an educational and sports nature.

Student Responsibilities

By enrolling and receiving University benefits, the student acknowledges and accepts these rules and the University's authority to exercise its disciplinary power, including suspension and expulsion, as stipulated in the Student Regulations and other applicable institutional policies.

In particular, the University has an obligation to protect the procedures from any act that attempts to impede, obstruct or threaten its normal operations. While this authority is inherent, the University attempts to delineate its expectations as clearly as possible and publishes regulations. The student, in an individual capacity and as a member of a University community, is responsible for self-evaluation and for maintaining conduct in accordance with regulations, handbooks, and administrative orders existing or promulgated subsequent to his or her admission to the Institution.

It is also the student's responsibility to keep informed of all rules that affect the student's status as a student. In this sense, students should regularly consult the documents provided upon entering the Institution, bulletin boards, institutional e-mails, institutional web page, social networks, newsletters and weekly publications.

Ignorance of the regulations will not be accepted as an excuse for non-compliance with University rules.

First Aid Office

The main responsibility of the First Aid Office is to offer first aid services in emergency situations, sudden illness or condition prescribed by a physician to students, administrative personnel, faculty, and visitors of the institution during day and night hours. Graduate Nurses duly qualified by the College of Nursing Professionals of Puerto Rico, trained in First Aid, offer the service.

Additional services:

- Drug evaluation and administration (OTC).
- Monitoring of blood sugar, temperature and blood pressure levels for people with a diagnosed medical condition that warrants it.
- Weight monitoring.
- Healing of wounds, lacerations and abrasions.

- Evaluation of P-Vac-3 (immunization paper) and exemptions. Follows up with the student regarding compliance with ACA Policy 14-06 - Immunization Implementation.
- Facilitates the respiratory therapy machine where the student must bring his/her personal mask and medications prescribed by his/her physician.
- Provide sexually transmitted disease (STD) and other informational brochures.
- Refer students to alternate offices if necessary.
- Provides area for nursing mothers.
- Conduct free health clinics, such as: Covid19 tests, HIV, syphilis, mammograms, vaccinations, among others.
- Perform preventive service activities for diseases and conditions in general.

Child Care and Preschool Center

The Child Care and Preschool Center has been established to provide support for the children of UCB students and employees. The Center is licensed by the Department of Family Services and serves children between the ages of 3-13 years old. It promotes a healthy, educational, Christian environment close to their parents. It promotes through educational actions and activities, the values of the Universidad Central de Bayamón.

The Center has teachers certified by the Puerto Rico Department of Education and the Food Program sponsored by the State Food Agency.

There are different services that meet the needs of the students and the external community, depending on the age and time of the participants' visits. Likewise, we comply with the requirements established by the Department of the Family.

1. Preschool

- For children from 3 to 4 years old
 - Integrated Curriculum
- Hours: Monday through Friday from 7:00 a.m.-5:00 p.m.

2. Supervised tasks

- Participants 5 years and older
 - Reviewing subjects, preparing for review and reinforcing skills
- Hours: Monday to Thursday from 2:00 p.m. to 5:00 p.m.

3. Night and Saturday care

- For participants from 3 to 13 years old
 - Recreational activities
- Hours: Monday to Thursday from 5:00 p.m. to 10:00 p.m.
Saturdays from 7:00 a.m. to 4:00 p.m.

4. Summer in Action - Children from 3-13 years old

ACADEMIC STANDARDS

General Education

The General Education component is comprised of 48 credits which constitutes approximately 40 percent of the total credits required for the Bachelor's degree. These courses are considered essential to achieve the institutional mission. Through the General Education Component courses, the Universidad Central de Bayamón aims to develop in its students four areas of competencies that seek to form an integral human being who is responsible for himself, society and the environment around him, all based on the values of the Gospel and the tradition of Thomistic thought.

The following is a breakdown of the four areas of competencies:

Development of human values and philosophical sensitization

ESCO 103; EDF 106; EREL 113, o 205, o 215, o 238; FIL 201 y FIL 302

Mastery of cultural, social and economic knowledge and criteria.

ADM 111; CSOC 110; HUM 119 y HUM 120; HIST 350

Language development and proficiency

ESP 107 y 108; o varias opciones
ING 105 e ING 106; o varias opciones

Development of quantitative and scientific reasoning

CS 103; MATE 106 o MATE105 o MATE 140

EDUCATION GENERAL COURSES

ADM 111	Introduction to Entrepreneurship	3
CS 103 ¹	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106 ²	Lifestyles & Wellness	3
EREL_____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103 ⁴	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammar Skills through Reading	

	and the Editorial Office	
FIL201	Principles of Philosophy	3
FIL302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106 ³	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

NOTES:

1. Students in academic programs in the College of Health Sciences and Professions do not take CS 103.
2. Students in the Bachelor of Arts in Education with major in Education Physics will take the EDF 110 course.
3. Students in the health professions will take MATE 105 and students in the Education programs will take MATE 140.
4. This course must be approved during the first semester of studies. This course is not valid for transfer students from other institutions.
5. Placement of Spanish, English and Math courses, according to the PAA test score offered by the College Board.

Subject	Score PAA ≤ 449	Score PAA ≥ 450
Spanish (Reading and Writing)	ESP 107 (include virtual lab)	**ESP 108 (include virtual lab)

Subject	Score PAA ≤449	Score PAA ≥ 450-574	Score PAA ≥575
English	ING 100*	ING 105	6 crs. Advance Course

Subject	Score PAA ≤450	Score PAA ≥ 450-574
Mathematics***	MAT 100*	MATE 106 o MATE 105 o MATE 140

* ING 100 and MAT 100 courses must be taken during the first year of study and be passed with a C or better. These courses are considered remedial and are not part of your program of study.

** College of Liberal Arts or Secondary Education in English students who pass advanced courses in English as their core courses will be required to take other advanced elective courses in ING or LITE for their core or concentration requirements.

*** Students in the BA in Education program will take MATE 140 instead of MATE 106, and students in the Nursing and Emergency Medicine programs will take MATE 105 instead of MATE 106.

Core Requirements

These are supplemental foundation or prerequisite courses for the concentration. They may be common to all programs in a college.

Concentration Requirements

They consist of electives and the concentration courses themselves. The major generally corresponds to the professional requirements and/or professional accrediting agencies that regulate the profession.

Free or Suggested Electives

The free electives respond to the principle of flexibility to accommodate the particular interests of the student. The Universidad Central de Bayamón determines the number of possible electives within each program of studies, but it is the student who chooses the elective course to be taken, according to his/her particular interest.

Suggested electives give students the opportunity to deepen their knowledge of their profession by selecting from a menu of courses in their academic program.

Academic Advising

All students enrolled in the Institution will receive orientation and academic counseling taking into consideration their program of studies, academic progress and internal or external academic alternatives that facilitate the achievement of their academic goals within the stipulated time. This process will be carried out in all Academic Colleges with the collaboration of the faculty and program coordinators.

Center for the Strengthening of Teaching and Distance Education

The Center for the Strengthening of Teaching and Distance Education, reports to the Dean of Academic Affairs, is committed to the continuous improvement of our teaching and administrative staff, with the intention to reach greater and better results characteristic of higher education. The improvement, professional development, technological integration and distance learning modality are framed within the principles and values that characterize the vision, goals and academic offerings of the institution.

It is responsible for developing and training the institution's teaching and administrative staff in technological innovation and integration processes. It is intended to achieve the required technological competencies that allow faculty and non-teaching staff to manage, control, understand, design and integrate technology in the teaching and learning processes or in the various service activities. In order to achieve the aforementioned processes, each academic period a training program is designed and programmed where new technologies are presented, follow-up is offered to clarify existing doubts or advice is given on technological integration processes and activities. The Center is located on the second floor of the Learning and Research Resources Center Building (CRAAI), Dr. Margot Arce de Vázquez.

Technological skills required for online studies:

1. Basic computer proficiency.
2. Handling of microphone, headphones and camera.
3. Proficiency in word processing and presentation creation (e.g. MS Word and Powerpoint).
4. Information search skills in databases and internet.
5. Basic use of synchronous and asynchronous communication tools.
6. Ability to download and upload documents in cyber platforms.

Core technical requirements for online studies:

1. Computer with camera, microphone and speakers (the teacher will ask you to turn it on periodically).
2. Broadband internet connection (minimum 10 Mbps recommended).
3. Access account to UCB platforms (credentials).
4. Headphones (preferably wired)
5. Recent version of Microsoft 365 (free for UCB students).
6. Computer with recent version of the operating system: Windows or Mac.
7. Computer with processor of 2Gh or more speed.
8. Computer with 160 MB hard disk as a minimum requirement.

Plagiarism

UCB, committed to its high values of integrity and ethics, institutes regulations that develop positive values and attitudes and encourages honesty. The Institution establishes that it does not approve of plagiarism or appropriation of intellectual authorship, so it will be considered a major offense, according to the Student Regulations. It is considered plagiarism to copy or appropriate exactly or partially any writing, visual or sound, without identifying the author or owner of it, is to present as original a document derived from one that exists. The Institution provides guidance to students on academic honesty.

COLLEGE OF LIBERAL ARTS, HUMANITIES AND EDUCATION



COLLEGE OF LIBERAL ARTS, HUMANITIES AND EDUCATION

Dr. Luz E. Robles Bermudez
Director

The College of Liberal Arts, Humanities and Education is considered the very heart of the educational and formative mission of the Central University of Bayamon as a Catholic and Dominican institution of higher education. This academic unit of our University is the direct heir of the historical mission of the Dominican friars in Puerto Rico since 1532 when the Convent of St. Thomas Aquinas in Old San Juan received from Pope Clement VII the brief *In splendide die* document through which that convent was empowered to be *Studium Generale* of the Order of Preachers with chairs in philosophy and theology.

Through its academic offerings to the entire student population with its general education humanistic courses, as well as its undergraduate and graduate academic programs, the College of Liberal Arts, Humanities and Education seeks to cultivate in students the development of their capacities in what is most characteristic of the human being: philosophical and theological reasoning, oral and written communication in various languages, spiritual interiority, relationship with others in society and with one's own cultural tradition, as well as artistic expression in its many forms: literature, plastic arts, music, film, theater, dance, among others. Likewise, the College of Liberal Arts, Humanities and Education strives to promote these same humanistic-Christian values throughout the university community and the surrounding population.

Following the centuries-old educational tradition of the Order of Preachers and the Thomistic paradigm of thought, our academic unit wants to be the bearer of "joy and hope" for the Central University of Bayamon and the community in general.

Mission

To prepare, in their respective disciplines, the students of the Universidad Central de Bayamón, as professionals who demonstrate ethical, political, social, cultural, literary, historical, religious, educational, logical and critical reasoning sensibility, in the exercise of their professional competencies. Likewise, to develop research, conceptualization, communication and social action competencies, framed in Catholic and Dominican values and tradition.

Vision

The College of Liberal Arts, Humanities and Education is projected as the center and a dynamic academic unit of the Central University of Bayamon that increasingly provides the student body and the rest of the university community opportunities for cultural development and humanistic cultivation of the person through cutting-edge academic programs in the field of humanities as well as an education that projects a path of study whose purpose is to provide a conglomerate of experiences that promote and encourage the integral development of the human being and a community and professional spiritual transformation. That the acquired competencies foster in the student a continuous reflection, research, clinical experiences, problem solving in different contexts, solidarity among peers, humanistic and pedagogical modeling and be at the forefront in the use of technological tools.

General Objectives

1. To promote the study of the liberal arts from an interdisciplinary and multidisciplinary approach.
2. To enhance the integral vision of the human being in accordance with the teachings of the Gospel and the tradition of the Magisterium of the Catholic Church.
3. To foster the appreciation and practice of Christian values as the basis for the integral formation of the human person.
4. Cultivate the capacity of understanding, analysis and criticism in the members of our institution.
5. To foster interest in the study of the problems that characterize the Puerto Rican reality.
6. Promote the effective use of languages to develop good oral and written communication skills.
7. To stimulate appreciation for the artistic heritage of humanity and to develop the aesthetic sensitivity of the human being.
8. Promote humanistic research to develop critical thinking and intellectual contribution for the benefit of the university community.
9. Encourage the study of humanistic disciplines not only for their intrinsic value, but also as a training tool for analytical thinking conducive to face all aspects of society.
10. To affirm a conception of human freedom that promotes responsible action by individuals in society.
11. To impart knowledge of the subject matter, techniques and essential skills of teaching at the preschool, elementary and secondary levels on the basis of Christian humanism.
12. Contribute to the development of a critical and reflective attitude aware of social changes and their effects on the labor field.
13. To offer academic experiences that result in a broad professional, social, historical and cultural education.
14. To contribute to the development of a professional committed to his or her professional improvement and who sees his or her practice as a constant process of improvement, thus becoming an agent of change in society.
15. Apply critical thinking skills in problem solving and professional intervention.
16. Promote the social and interpersonal factors that affect human behavior.

Academic Offerings

1. Bachelor of Arts with concentration in Spanish
2. Bachelor of Arts with concentration in Philosophy
3. Bachelor of Arts with concentration in English
4. Bachelor of Arts in Elementary Education with a concentration in Preschool
5. Bachelor of Arts with a concentration in Elementary Education Elementary Level K-III
6. Bachelor of Arts with a concentration in Elementary Education IV-VI
7. Bachelor of Arts in Elementary Education with concentration in English
8. Bachelor of Arts in Elementary Education with concentration in Special Education
9. Bachelor of Arts in Elementary Education with concentration in Physical Education (K-6th)
10. Bachelor of Arts in Secondary Education with a concentration in Physical Education (7th-12th grade)
11. Bachelor of Arts in Secondary Education with English concentration
12. Bachelor of Arts with concentration in Psychology
13. Bachelor of Arts with a concentration in Social Work

BACHELOR OF ARTS WITH MAJOR IN SPANISH

The Bachelor of Arts program with major in Spanish trains professionals in the area of Hispanic language and literature written in Spanish who are capable of critically understanding and creatively transmitting their knowledge, as well as applying it in literary production.

To complete the requirements of the Bachelor of Arts program with a concentration in Spanish, the student must satisfactorily pass 120 credits. Of which 48 are from the general education component, 24 credits of core requirements, 36 credits of concentration requirements and 12 credits of electives.

Program Mission

The Spanish program at the Universidad Central de Bayamón aspires to provide students with a mastery of the Spanish language through a panoramic vision of grammatical skills and Hispanic American literature with the repercussion of historical, cultural, political, and social aspects. In order to analyze, through critical sense, representative works of various authors, genres and literary trends. Likewise, to identify in works and authors, the values that have forged the personality of the Hispanic American people.

Program Objectives

The objectives of the Bachelor of Arts program with a concentration in Spanish are:

1. To know the evolution of the Spanish language and the literary history of Hispanic countries.
2. Manage the Spanish language in its Latin American and Puerto Rican specificity through knowledge of lexicon, grammar, syntax, as well as correct oral and written expression.
3. To master literary theory and its genres, as well as aesthetic appreciation in its comprehension and application for the analysis of texts and literary creation.
4. Understand the cultural currents of the Hispanic tradition and its contemporary manifestations in the world, especially in Puerto Rico and its diasporas.

BACHELOR OF ARTS WITH A MAJOR IN SPANISH

General Education Requirements	48
Core Requirements	24
Concentration Requirements	36
Free Electives	<u>12</u>
Total Credits	120 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammar Skills through Reading and the Editorial Office	
FIL201	Principles of Philosophy	3
FIL302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
Literature	(ESP, ENG, LITE)	9
	ESP 221: Spanish Literature	
	ESP 230: Literature for children	
	ESP 341: Spanish American Literature I	
	ESP 346: Contemporary Spanish-American Fiction	
	ESP 365: Puerto Rican Literature I	
	ESP 360: Caribbean Literature	

Foreign Languages	ESP 430: The Puerto Rican Short Story	6
	ING 365: United States Literature	
	ING 380: British Literature	
	(ALEM, FRAN, ITAL, PORT)	
	ALEM 211: Elementary German I	
	ALEM 212: Elementary German II	
	FRAN 211: Elementary French I	
	FRAN 212: Elementary French II	
	ITAL 211: Elementary Italian I	
	ITAL 212: Elementary Italian II	
Fine Arts	PORT 211: Elementary Portuguese I	6
	PORT 212: Elementary Portuguese II	
	(ART, MUSI, TEAT, COMU)	
	ART 210: Visual Arts Appreciation	
	ART 223: History of Art I	
	ART 240: Fundamentals of Drawing	
	ART 348: Introduction to Graphic Arts	
	COMU 306: Photojournalism and Video	
	MUSI 201: Music Appreciation	
	MUSI 204: Introduction to Guitar	
	MUSI 211: Basic Choral Performance	
	TEAT 201: Basic Acting	
	TEAT 240: Puerto Rican Theater Workshop	
EREL 340	History of Christianity in Puerto Rico	<u>3</u>
Total Credits		24 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
LATIN 211	Elementary Latin I	3
LATIN 212	Elementary Latin II	3
ESP 217	Introduction to Literary Genres	3
ESP 235	Introduction to Linguistics	3
ESP 301	Advanced Grammar and Writing	3
ESP 327	Spanish Literature of the Golden Age	3
ESP 328	Contemporary Spanish Literature	3
ESP 342	Spanish American Literature II	3
ESP 366	Puerto Rican Literature II	3
LITE 440	Topics in Comparative Literature	3
LITE 441	Literary Theory	3
HUM 490	Research Seminar	<u>3</u>
Total Credits		36 crs.

FREE ELECTIVES **12 crs**

BACHELOR OF ARTS WITH A MAJOR IN PHILOSOPHY

The Bachelor of Arts with a major in Philosophy enables students to engage in reflective processes in the main areas of knowledge, while considering the great traditions of Western thought, with emphasis on the Thomistic tradition.

To complete the requirements of the Bachelor of Arts program with a concentration in Philosophy, the student must satisfactorily pass 120 credits. Of which 48 are in the general education component, 24 credits in core requirements, 36 credits in concentration requirements and 12 credits in electives.

Program Mission

Its mission is to enable its students to achieve the processes of reflection and ethical, political, social, cultural, literary, historical, religious, educational, logical and critical reasoning, in the main areas of knowledge, while handling the great traditions of Western thought, with emphasis on the Thomistic tradition.

General Objectives of the Program

The general objectives of the Bachelor of Arts program with a concentration in Philosophy are:

1. To value the capacity of reason, its autonomy and its potential to regulate human knowledge and action.
2. To demonstrate the need to understand the thought of the main referents of the History of Philosophy.
3. Develop research tasks within their specialty or philosophical inclination in order to put into practice the capacity for analysis and argumentation.
4. To situate the importance of philosophy as an experience that implies the possibility of a process of understanding, interpretation and transformation of reality.
5. Acquire mastery of the fundamental concepts of the discipline so that they can apply them properly.
6. Encourage the integration of the diversity of knowledge and values acquired in order to adopt an attitude of searching for truth as opposed to dogmatism or extreme skepticism.

BACHELOR OF ARTS WITH A MAJOR IN PHILOSOPHY

General Education Requirements	48
Core Requirements	24
Concentration Requirements	36
Free Electives	<u>12</u>
Total Credits	120 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
Literature	(ESP, ENG, LITE)	9
	ESP 221: Spanish Literature	
	ESP 230: Literature for children	
	ESP 341: Spanish American Literature I	
	ESP 346: Contemporary Spanish-American Fiction	
	ESP 365: Puerto Rican Literature I	
	ESP 360: Caribbean Literature	
	ESP 430: The Puerto Rican Short Story	

	ING 365: United States Literature ING 380: British Literature LITE 440: Topics in Comparative Literature LITE 441: Literary Theory	
Foreign Languages	(ALEM, FRAN, ITAL, PORT)	6
	ALEM 211: Elementary German I ALEM 212: Elementary German II FRAN 211: Elementary French I FRAN 212: Elementary French II ITAL 211: Elementary Italian I ITAL 212: Elementary Italian II LATIN 211: Elementary Latin I LATIN 212: Elementary Latin II PORT 211: Elementary Portuguese I PORT 212: Elementary Portuguese II	
Fine Arts	(ART, MUSI, TEAT, COMU)	6
	ART 210: Visual Arts Appreciation ART 223: History of Art I ART 240: Fundamentals of Drawing ART 348: Introduction to Graphic Arts COMU 306: Photojournalism and Video MUSI 201: Music Appreciation MUSI 204: Introduction to Guitar MUSI 211: Basic Choral Performance TEAT 201: Basic Acting TEAT 240: Puerto Rican Theater Workshop	
EREL 340	History of Christianity in Puerto Rico	<u>3</u>
Total Credits		24 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
FIL 374	Metaphysics-Ontology	3
FIL 375	History of Ancient Philosophy	3
FIL 376	History of Medieval Philosophy	3
FIL 378	Philosophy of Nature	3
FIL 380	History of Puerto Rican Thought	3
FIL 381	History of Latin American Philosophy	3
FIL 472	Epistemology	3
FIL 474	Philosophy of Religion	3
FIL 475	History of Modern Philosophy	3
FIL 476	History of Contemporary Philosophy	3

FIL 483	Moral and Political Philosophy	3
HUM 490	Research Seminar	<u>3</u>
Total Credits		36 crs.
FREE ELECTIVES		12 crs.

BACHELOR OF ARTS WITH A MAJOR IN ENGLISH

The Bachelor of Arts program with a major in English trains professionals in the area of English language and literature written in English capable of critically understanding and creatively transmitting their knowledge and applying it in literary production and translation of texts.

Program Objectives

The English concentration curriculum is designed to develop and deepen the following skills and knowledge:

1. English language skills in its American specificity through knowledge of lexicon, grammar, syntax, as well as correct oral and written expression.
2. Mastery of literary theory and its genres, as well as of aesthetic appreciation in its comprehension and application for the analysis and translation of texts.
3. Knowledge of the cultural and literary development of English-speaking countries.
4. Understanding of the cultural currents of the Anglophone tradition and its contemporary manifestations in the world, especially in the United States and the Caribbean.

BACHELOR OF ARTS WITH A MAJOR IN ENGLISH

General Education Requirements	48
Core Requirements	24
Concentration Requirements	36
Electives	<u>12</u>
Total Credits	120 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
Literature	(ESP, ENG, LITE)	9
	ESP 221: Spanish Literature	
	ESP 230: Literature for children	
	ESP 341: Spanish American Literature I	
	ESP 346: Contemporary Spanish-American Fiction	
	ESP 365: Puerto Rican Literature I	
	ESP 360: Caribbean Literature	
	ESP 430: The Puerto Rican Short Story	

	LITE 440: Topics in Comparative Literature LITE 441: Literary Theory	
Foreign Languages	(ALEM, FRAN, ITAL, PORT) ALEM 211: Elementary German I ALEM 212: Elementary German II FRAN 211: Elementary French I FRAN 212: Elementary French II ITAL 211: Elementary Italian I ITAL 212: Elementary Italian II LATIN 211: Elementary Latin I LATIN 212: Elementary Latin II PORT 211: Elementary Portuguese I PORT 212: Elementary Portuguese II	6
Fine Arts	(ART, MUSI, TEAT, COMU) ART 210: Visual Arts Appreciation ART 223: History of Art I ART 240: Fundamentals of Drawing ART 348: Introduction to Graphic Arts COMU 306: Photojournalism and Video MUSI 201: Music Appreciation MUSI 204: Introduction to Guitar MUSI 211: Basic Choral Performance TEAT 201: Basic Acting TEAT 240: Puerto Rican Theater Workshop	6
EREL 340	History of Christianity in Puerto Rico	<u>3</u>
Total Credits		24 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ING 225	Advanced Conversational English	3
ING 246	Introduction to Literary Genres	3
ING 301	Modern English I: Elementary English Grammatical Structures	3
ING 302	Modern English II: Application of grammatical structures in reading. English	3
ING 365	Literature of the United States	3
ING 380	British Literature	3
LITE 440	Topics in Comparative Literature	3
LITE 441	Literary Theory	3
ING 421	Phonetics	3
ING 423	Introduction to Linguistics I	3
ING 425	Comparative Analysis of English and Spanish	3
HUM 490	Research Seminar	<u>3</u>
Total Credits		36 crs.
FREE ELECTIVES		12 crs.

TEACHER PREPARATION PROGRAM

This program trains the future teacher with the skills and competencies required to be a highly qualified professional. The graduate will demonstrate social skills, critical thinking, with technological attitudes and be a researcher in action within the classroom in the educational process. They will be qualified to practice the profession of elementary and secondary school teacher, both in the public and private systems. They will diversify their career by aspiring to educational positions in the private sector, governmental entities and agencies.

The Teacher Preparation Program of the College of Liberal Arts, Humanities and Education of the Central University of Bayamon, currently offers eight (8) majors as follows:

- Bachelor of Arts in Elementary Education with a concentration in Preschool
- Bachelor of Arts in Elementary Education Elementary Level Kindergarten through Third Grade
- Bachelor of Arts in Elementary Education Level IV - VI
- Bachelor of Arts in Elementary Education with concentration in Special Education
- Bachelor of Arts with a concentration in Elementary Physical Education
- Bachelor of Arts in Secondary Education with a concentration in Spanish
- Bachelor of Arts in Secondary Education with English concentration
- Bachelor of Arts in Secondary Education with a concentration in Physical Education.

The College prepares its students to comply with the requirements established by the Regulations for the Certification of Teaching Personnel of the Department of Education in each of its specialties under Act No. 94 of June 21, 195), as amended, better known as the "*Teacher Certification Act*", as amended. Act 85 of March 18, 2018, known as the "*Puerto Rico Education Reform Act*", as amended and the current Circular Letter "*Public Policy on Teacher Certification Tests (PCMAS)*". The student will have to comply with the graduation averages contemplated in the Circular Letter in effect at the time of concluding his/her studies and with the fulfillment of other requirements for certification.

Alumni profile and alignment with the
Teacher Professional Standards (2008) promulgated by the DEPR

Standard No. 1- Subject Matter Knowledge

1. Develop knowledge of the subject he/she teaches through processes, skills, concepts, attitudes and professional dispositions that allow him/her to reflect critically and reflectively on the human being.
2. Demonstrate knowledge and technical mastery of the professional standards, expectations and competencies of the teacher in accordance with the level and area of instruction.
3. Promote action research in students in the classroom.
4. Relate the contributions of the discipline that underlies the subject he/she teaches to the social, ethical and moral aspects of today's society.

Standard No. 2 - Pedagogical Knowledge

5. Possess fundamental knowledge, cognitive, procedural and attitudinal skills, as well as competencies related to sociological, psychological and philosophical aspects of educational practice.
6. Distinguish the different styles and creativity of the human being as a resource to apply learning theories, thus enriching the educational practice in the classroom.
7. Plan and develop activities that form a learning community where diversity is respected and valued.

Standard No. 3- Instructional Strategies

8. Understand the importance of recognizing and activating students' prior knowledge in order to achieve meaningful learning.
9. You will be trained in how to plan instruction based on the individual needs of your learners.
10. Identify strategies for designing learning experiences that are meaningful to students and conducive to the pursuit and construction of knowledge.
11. Plan according to the strategies, methods and teaching and learning techniques that facilitate the acquisition of cognitive and psychosocial skills to achieve the holistic development of the student.

Standard No. 4- Learning Environments

12. Develop a learning environment that favors the activation of knowledge and its participatory construction, considering the learning styles, respecting the significance and diversity of each one of them.
13. Encourage self-motivation and the importance of active student participation as a primary factor in their learning.
14. Value your students' input as fundamental information for the improvement of your practice.

Standard No. 5-Diversity and Special Needs

15. You will identify the ways in which students learn in different environments, the neurobiological processes associated with learning, the various reasonable accommodations needed, and how to motivate students to learn.

16. Be aware of available resources related to educational strategies that make it possible to accommodate individual differences.
17. It will support the idea that all children and adolescents with functional diversity can learn and be successful to the best of their individual abilities.
18. Create inclusive learning environments, where diversity is valued and solidarity is shown with those who need special support in the educational process.

Standard No. 6-Evaluation and Assessment

19. Training in the concepts of evaluation, measurement and assessment aligned to the teaching, learning and evaluation process.
20. Reflect on the various uses of diagnostic, formative and summative evaluation.
21. Design different assessment techniques on curricular content.
22. Develop classroom investigations as a means of recognizing students' learning styles and the effectiveness of strategies used in the teaching process.

Standard No.6-Technology Integration

23. Use information and communication technology systems and resources as a tool in their professional development and educational practice.
24. It will create learning environments rich in ICT-mediated experiences that respond to a planning designed with the student as the protagonist of his or her learning.
25. Use the technology resources available in your school or district as a learning resource for your students.

Standard No. 8-Language and Communication

26. Appreciate Spanish as a vernacular language and develop proficiency in communication skills, both oral and written.
27. Promote the process of inquiry and development of social environments conducive to positive relationships among all students.
28. It will value being a model in the use of language in all its variants (spoken, written) as a mediating agent in the teaching and learning processes.

Standard No. 9-Family and Community

29. It will stimulate and foster the cultural exchange that already exists in the communities and will model a social relationship of equity among the members of the school community.
30. Utilize the family and surrounding community as a valuable learning resource.

Standard No. 10-Information Management

31. Make use of information and communication resources and technologies in an ethical, effective and efficient manner, paying particular attention to students with functional diversity.
32. Organize an educational, coherent and effective search process in the different media available.
33. Select content and sources of information, ensuring that they are valid and reliable.

Standard No. 11-Professional Development

34. Will be able to put into practice and critically transfer to the classroom, the knowledge, skills and attitudes achieved during his development as a teacher to achieve a better teaching and learning process.

35. Lead a reflective educational practice by promoting and establishing a learning community with peers.
36. You will use the results of your pedagogical practice research to identify your professional development needs.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH A MAJOR IN PRE-SCHOOL

Teaching at the preschool level is of significant importance. It represents the foundation on which the integral formation of the human being is based. The abundance of knowledge about the nature of children, their styles and ways of learning, which, through research studies, has been discovered, makes it imperative to pay more attention to teacher preparation programs for this level. This program aspires to prepare a professional with the knowledge, innovations, skills and competencies necessary to work with children under five (5) years of age, who at their age have not participated in formal school programs.

Program Mission

To train educational leaders and learners capable of developing a holistic education that combines educational quality based on a curriculum and appropriate practices. To base these practices in a humanistic care that establishes knowledge, values and beliefs, allowing to connect with the environment in a positive way starting from the process of education from the home and the stages of the child's development as a lifelong learner.

Program Objectives:

Upon completion of the degree requirements, the student:

1. Demonstrate knowledge of the development of the whole child under five (5) years of age.
2. Plan and develop appropriate practices in the implementation of curricular areas in the early years.
3. Demonstrate knowledge of assessment and evaluation strategies that promote appropriate programs to meet the individual needs of each child.
4. Include families in the assessment and planning of their children's educational experiences.
5. Demonstrate in their Educational Clinical Experiences, the knowledge of the philosophy, humanistic-Christian of the Universidad Central de Bayamón and the professional competencies of their area of specialty.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH A MAJOR IN PRE-SCHOOL

General Education Requirements	48
Core Requirements	42
Concentration Requirements	<u>41</u>
Total Credits	131 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Seminar in Writing for Behavior Professionals	3
EDUC 228	The School Health Program	3
EDUC 250	Research in Action in the Classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 430	Philosophy of Education	3

EDEL 221	Child Psychology	3
EDEL 306	The Language Arts	3
EDUC 356	Educational Psychology	3
HIST 241	History United States	3
EDES 434	Use of Assistive Technology in Education of the student with a disability	3
TEDU 320	Computers in Education	<u>3</u>
Total Credits		42 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EPRE 230	Curriculum and Methodology in Preschool Education	3
EPRE 235	Development of Scientific Thinking: Methodology of Integrated Teaching at the Preschool Level	3
EPRE 338	Language Development	3
EPRE 356	Organization of Pre-school Centers	3
EPRE 340	Perceptual Motor Development, through creativity, plastic and musical manifestations at the preschool level	3
EPRE 403	The Socio-cultural Content in the Preschool Age	3
EPRE 429	Pre-school Pre-practice	3
EPRE 431	Teaching Practice Pre-school Level	6
EPRE 432	Teaching Practice Seminar	2
EDEL 302	Children's Literature	3
EDUC 310	Early Intervention	3
EDUC 413	Integrative Seminar on Professional Competencies`	3
EDF 340	Teaching Physical Education Elementary Level	<u>3</u>
		41 crs.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION ELEMENTARY LEVEL K-III

K-III elementary education aims to train teachers with the knowledge and skills necessary to work with children at this level. The curriculum is designed taking as a frame of reference the standards of excellence established for this level by the Puerto Rico Department of Education.

To complete the requirements of the Bachelor of Arts in Elementary Education program with concentration in elementary level K-III the student must satisfactorily pass 128 credits. Of which 48 are from the general education component, 48 credits of core requirements and 32 credits of concentration requirements.

Program Mission

Its mission is to train teachers and/or facilitators with the competencies, knowledge and skills necessary to work with children at this level. The curriculum is designed taking as a frame of reference the standards of excellence established for this level by the Puerto Rico Department of Education.

Program Objectives

The objectives of the Bachelor of Arts in Elementary Education program with concentration in elementary level K-III are:

1. Demonstrate knowledge of child development for the primary level.
2. Plan and develop curricular practices in line with the standards established in the different programs applied to the primary level.
3. Use measurement, assessment and evaluation practices that relate to the teaching-learning process at the primary level.
4. Demonstrate professional competencies to work with students at this level.
5. Demonstrate a broad Christian humanistic base in all of his or her activities.

BACHELOR OF ARTS WITH A MAJOR IN ELEMENTARY PRIMARY LEVEL K-III

General Education Requirements	48
Core Requirements	48
Concentration Requirements	<u>32</u>
Total Credits	128 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Seminar on Writing for Cond .	3
EDUC 228	The School Health Program	3
EDUC 250	Action Research in the Classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDEL 306	Language Arts	3
EDUC 318	Diagnosis and Remediation of Deficiencies in Elementary Level Learning	3

EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3
EDUC 430	Philosophy of Education	3
EDEL 221	Child Psychology	3
EDUC 356	Educational Psychology	3
TEDU 320	Computers in Education	3
EDES 434	Use of Assistive Technology in education of the student with a disability	3
HIST 241	United States History	<u>3</u>
Total Credits		48 crs.

COURSE	COURSE TITLE	CREDITS
EDEP 211	Curriculum and Science Education Primary Level	3
EDEP 213	Curriculum and Mathematics Teaching Primary Level	3
EDEP 215	Curriculum and Social Studies Teaching Primary Level	3
EDEP 316	Literacy Teaching at the Primary Level	3
EDEP 429	Pre-practice Primary Education	3
EDEP 431	Teaching Practice	6
EDEP 432	Teaching Practice Seminar	2
EDEL 226	Kindergarten Program	3
EDEL 302	Children's Literature	3
EDUC 413	Integrative Seminar on Professional Competencies	<u>3</u>
Total Credits		32 crs.

BACHELOR OF ARTS WITH A MAJOR IN ELEMENTARY EDUCATION LEVEL IV-VI

The Bachelor's Degree in Elementary Education Level 4-6 aspires to prepare the future teacher with the knowledge and skills necessary to work with students at this level. The curriculum is based on the standards of excellence established by the Puerto Rico Department of Education at the elementary level.

To complete the requirements of the Bachelor of Arts in Elementary Education program with concentration in 4th through 6th grade, the student must satisfactorily pass 125 credits. Of which 48 are from the general education component, 48 credits of core requirements and 29 credits of concentration requirements.

Program Mission

The mission of the program is to prepare future teachers with the competencies, skills, knowledge and attitudes necessary to facilitate the teaching and learning process with students at this level. The curriculum is based on the standards of excellence established by the Puerto Rico Department of Education at the elementary level.

Program Objectives

The objectives of the Bachelor of Arts in Elementary Education program with a concentration at the 4th through 6th grade level are:

1. Demonstrate knowledge of child development.
2. Plan and develop curricular practices in line with the standards established in the different programs applied to the level.
3. Use measurement, assessment, and evaluation practices that relate to this level process.
4. Demonstrate professional competencies to work with students at this level.
5. Demonstrate a broad Christian humanistic base in all of his or her activities.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION LEVEL IV TO VI

General Education Requirements	48
Core Requirements	48
Concentration Requirements	<u>29</u>
Total Credits	125 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Writing Seminar for Professionals	
	Behavioral	3
EDUC 228	The School Health Program	3
EDUC 250	Action Research in the Classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3

EDUC 430	Philosophy of Education	3
EDEL 221	Child Psychology	3
EDEL 306	Language Arts	3
EDUC 318	Diagnosis and Remediation of Deficiencies in Elementary Level Learning	3
EDUC 356	Educational Psychology	3
HIST 241	History of the United States	3
EDES 434	Use of Assistive Technology in education of the student with a disability	3
TEDU 320	Computers in Education	<u>3</u>
Total Credits		48 crs.

CONCENTRATION REQUIREMENTS

COURSE TITLE	COURSE TITLE	CREDITS
EDEL 211	Curriculum and Science Teaching Elementary Level	3
EDEL 213	Mathematics Curriculum and Instruction Elementary Level	3
EDEL 215	Curriculum and Instruction in Social Studies Elementary Level	3
EDEL 302	Children's Literature	3
EDEL 316	Elementary Level Spanish Curriculum and Instruction Fourth to Sixth	3
EDEL 429	Pre-practice Elementary Level	3
EDUC 413	Integrative Seminar on Professional Competencies	3
EDEL 431	Elementary Level Teaching Practice	6
EDEL 432	Teaching Practice Seminar	<u>2</u>
Total Credits		29 crs.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH A MAJOR IN ENGLISH

The Bachelor of Arts in Elementary Education aims to prepare the student, a future teacher, with the knowledge of teaching English as a second language: the development of oral and written communication skills and reading skills.

To complete the requirements of the Bachelor of Arts in Elementary Education program with a concentration in English, the student must satisfactorily pass 131 credits. Of which 48 are from the general education component, 42 credits of core requirements and 41 credits of concentration requirements.

Program Mission

Its mission is to prepare the student, the future teacher, with knowledge about teaching English as a second language: the development of oral, written and listening communication skills and reading skills.

Program Objectives

The objectives of the Bachelor of Arts in Elementary Education program with a concentration in English are:

1. Use the curricular content of their specialty with methods, techniques and strategies that facilitate the teaching of English.
2. Demonstrate mastery of the discipline he/she teaches.
3. Integrating new technological trends in second language teaching.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH A MAJOR IN ENGLISH

General Education Requirements	48
Core Requirements	42
Concentration Requirements	<u>41</u>
Total Credits	131 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Writing Seminar for Behavioral Professionals	3
EDUC 250	Action Research in the Classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3
EDUC 430	Philosophy of Education	3
EDEL 221	Child Psychology	3

EDEL 306	Language Arts	3
EDUC 356	Educational Psychology	3
TEDU 320	Computers in Education	3
EDES 434	Use of Assistive Technology in Education of the student with a disability	3
HIST 241	History of the United States	<u>3</u>
Total Credits		42 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ING 203	Conversational English	3
ING 225	Advanced Conversational English	
ING 301	Modern English I: Elementary English Grammatical Structures	3
ING 302	Modern English II: Application of Grammatical Structures in English reading in English	3
ING 355	Linguistic Analysis in English Language Teaching	3
ING 421	Phonetics	3
ING 423	Introduction to Linguistics I	3
ING 425	Phonetic analysis of English and Spanish	3
EDEL 308	Elementary Level English Curriculum and Instruction	3
EDEL 312	Children's Literature in English	3
EDEL 429	Pre-practice Elementary Level	3
EDEL 431	Teaching Practice Elementary Level IV-VI	6
EDEL 432	Teaching Practice Seminar Elementary Level IV-VI	2
EDUC 413	Integrative Seminar on Professional Competencies	<u>3</u>
Total Credits		41 crs.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH A MAJOR IN SPECIAL EDUCATION

This program aims to prepare the student to work professionally as a teacher and consultant for children with mild disabilities in Puerto Rico.

To complete the requirements of the Bachelor of Arts in Elementary Education program with a concentration in Special Education, the student must satisfactorily pass 131 credits. Of which 48 are in the general education component, 42 credits in core requirements and 41 credits in concentration requirements.

Program Mission

The mission of this program is to prepare the student with the competencies, content and attitudes to perform professionally as a consultant to parents, regular teachers and other education specialists in the education and care of children with functional diversity as established by the Associated Secretariat of Special Education attached to the Department of Education of Puerto Rico.

General Objectives of the Program

The general objectives of the Bachelor of Arts in Elementary Education program with a concentration in Special Education are:

1. Demonstrate knowledge of the nature, needs of students with disabilities, and have developed attitudes and skills that enable them to work effectively with them.
2. Mention the processes of human development of the exceptional child in cognitive, neurological, social, emotional, physical and communicological aspects from conception to adulthood and understand their implications in learning.
3. To use the techniques of evaluation, assessment and educational diagnosis that facilitate the development and implementation of specific methods and strategies for the teaching, management and integral formation of the exceptional child.
4. Design and adapt educational materials for the teaching and learning of these children.
5. Use assistive technology as a method and resource to facilitate learning for children with disabilities.
6. Demonstrate knowledge of infants and preschool children with impairments, their assessment and early intervention.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH CONCENTRATION IN SPECIAL EDUCATION

General Education Requirements	48
Core Requirements	42
Concentration Requirements	<u>41</u>
Total Credits	131 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Writing Seminar for Behavioral Professionals	3
EDUC 250	Action Research in the Classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 356	Educational Psychology	3
EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3

EDUC 430	Philosophy of Education	3
EDEL 221	Child Psychology	3
EDEL 306	Language Arts	3
TEDU 320	Computers in Education	3
HIST 241	United States History	3
EDES 434	Use of Assistive Technology in Education of the student with a disability	<u>3</u>
Total Credits		42 crs

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDES 325	Ethical and Legal Aspects of Providing Services to Special Education Students Special Education students	3
EDES 340	Diagnosis and Methodology of teaching reading. in Special Education	3
EDES 349	Teaching Methods for Children and Young Adults with Communicological Problems	3
EDES 350	Diagnosis and Teaching Methodology of Mathematics in Special Education	3
EDES 357	Individualized Educational Program and Orientation to parents of children and youth with disabilities	3
EDES 370	Classroom Behavior Management	3
EDUC 413	Integrative Seminar on Professional Competencies	3
EDES 433	Pre-practicum Special Education	3
EDES 491	Special Education Practice	6
EDES 492	Teaching Practice Seminar	2
EDUC 310	Early Intervention	3
EDUC 318	Diagnosis and Remediation of Deficiencies in Elementary Level Learning	3
EDF 341	Adapted Physical Education Teaching	<u>3</u>
Total Credits		41 crs.

BACHELOR OF ARTS IN EDUCATION (ELEMENTARY or SECONDARY) WITH A MAJOR IN PHYSICAL EDUCATION

These programs are aimed at preparing physical education teachers, specialists at the elementary or secondary level. The main goal of these programs is to provide a curriculum with effective educational, theoretical and practical experiences to prepare highly qualified physical educators. These programs are framed within the standards of excellence established by the Puerto Rico Department of Education.

To complete the requirements of the Bachelor of Arts in Elementary Education program with a concentration in Physical Education (K-6th or 7th-12th) the student must satisfactorily pass 134 credits. Of which 48 are from the general education component, 39 credits of core requirements and 47 credits of concentration requirements.

Program Mission

The mission of the Physical Education program is to provide a curriculum with effective theoretical and practical educational experiences to prepare highly qualified physical educators. These programs are framed within the standards of excellence established by the Puerto Rico Department of Education.

Program Objectives

The objectives of the Bachelor of Arts in Elementary Education program with a concentration in Physical Education (K-6th and 7-12th) are:

1. Demonstrate mastery of curricular content, strategies and techniques of the specialty that facilitate the processes of teaching and learning, in accordance with the standards of excellence established by the Puerto Rico Department of Education.
2. Know the physical, intellectual, social, cultural and emotional characteristics of the student body and take them into consideration when teaching.
3. Demonstrate high self-esteem and ability to reflect self-critically, both as a professional in education and as a human being.
4. Reflect Christian humanistic philosophy in their educational practices.
5. Perform effectively and diligently the administrative tasks involved in teaching.

BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH CONCENTRATION IN PHYSICAL EDUCATION

General Education Requirements	48
Core Requirements	39
Concentration Requirements	<u>47</u>
Total Credits	134 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	TITLE COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Writing Seminar for Behavioral Professionals	3
EDUC 250	Action research in the classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3
EDUC 430	Philosophy of Education	3

EDEL 221	Child Psychology	3
EDSE 222	Adolescent Psychology	3
EDUC 356	Educational Psychology	3
TEDU 320	Computers in education	3
HIST 241	United States History	<u>3</u>
Total Credits		39 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDF 208	Application of the Game as a Teaching Strategy in Physical Education	3
EDF 300	Principle of Science Applied to Sport, The Activity Physical Education and Sport	3
EDF 301	Anatomy and Kinesiology with Laboratory	3
EDF 302	Exercise Physiology with laboratory	3
EDF 340	Physical Education Teaching Elementary Level	3
EDF 341	Adapted Physical Education Teaching	3
EDF 342	Elementary Swimming	3
EDF 343	First Aid, Health and Safety	3
EDF 345	Gymnastics, Dances and Rhythm Skills	3
EDF 372	Curriculum and Instruction in Education Teaching Physics Secondary Level	3
EDF 404	Pre-Practice Physical Education Elementary Level	3
EDUC 413	Integrative Seminar on Professional Competencies	3
EDF 450	Elementary Physical Education Teaching Practice	6
EDF 451	Elementary Physical Education Practice Seminar	2
EDF 479	Curricular Design and Physical Assessment Elementary Level	<u>3</u>
Total Credits		47 crs.

**BACHELOR OF ARTS IN SECONDARY EDUCATION
WITH A MAJOR IN PHYSICAL EDUCATION**

General Education Requirements	48
Core Requirements	39
Concentration Requirements	<u>47</u>
Total Credits	134 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Writing Seminar for Professionals	
	Behavioral	3
EDEL 221	Child Psychology	3
EDUC 250	Action research in the classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 360	The Exceptional Student	3

EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3
EDUC 430	Philosophy of Education	3
EDSE 222	Adolescent Psychology	3
EDUC 356	Educational Psychology	3
TEDU 320	Computers in Education	3
HIST 241	History United States	<u>3</u>
Total Credits		39 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDF 204	Athletics and Weightlifting, Sports, Activities Individuals and Couples	3
EDF 207	Ball Sports and Sports Activities	3
EDF 300	Principle of Applied Sports Science	3
EDF 301	Anatomy and Kinesiology with Laboratory	3
EDF 302	Exercise Physiology with laboratory	3
EDF340	Teaching Physical Education Elementary Level	3
EDF 341	Adapted Physical Education Teaching	3
EDF 342	Elementary Swimming	3
EDF 343	First Aid, Health and Safety	3
EDF 345	Gymnastics, Dance and Rhythm Skills	3
EDF 372	Curriculum and Physical Education Teaching Level of Education Secondary	3
EDUC 413	Integrative Seminar on Professional Competencies	3
EDF 480	Secondary Physical Education Pre-practice	3
EDF 481	Secondary Physical Education Practice	6
EDF 482	Seminar on Physical Education Practice at the Secondary School Level	<u>2</u>
Total Credits		47crs.

BACHELOR OF ARTS IN SECONDARY EDUCATION PROGRAM WITH A MAJOR IN ENGLISH

The BACHELOR in English for Secondary School aims to train future teachers with the necessary skills to teach English as a second language. Linguistic knowledge leading to a better oral and written expression is highlighted. Those reading skills that enable the student to better understand the different areas of knowledge are also developed.

To complete the requirements of the Bachelor of Arts in Secondary Education with a Concentration in English program, the student must satisfactorily pass 134 credits. Of which 48 are from the general education component, 42 credits of core requirements and 44 credits of concentration requirements.

Program Mission

The mission is to train the future teacher with the necessary skills to teach English as a second language. Linguistic knowledge leading to a better oral and written expression is highlighted. Those reading skills that enable the student to better understand the different areas of knowledge are also developed.

Program Objectives

The objectives of the Bachelor of Arts in Secondary Education with a Concentration in English program are:

1. Student teachers need to study the different adolescent literary works that deal with the problems and conflicts of growing of young adult readers to enable them to understand what happens to them and how they can solve and cope with a variety of situations. In addition, students comprehend the psychological theories applied to young readers so that adequate literary works can be selected for the reader's analysis and evaluation.
2. Focusing on Linguistics helps us understand our world. Apart from simply understanding the intricacies of world languages, this knowledge can be applied to improving communication between people, contributing to translation activities, assisting in literacy efforts, and treating speech disorders.
3. Designed to introduce students to the sound system of American English. The study of English phonetics includes the vowels, consonants, and diphthongs. In addition, the speech organs used to articulate the sounds are identified. Students are exposed to intensive practice in transcription and the use of the International Phonetic Alphabet.
4. At the end of this program the students will be acquainted with the differences between the phonological, morphological, structural, and lexical.

BACHELOR OF ARTS IN SECONDARY EDUCATION WITH A MAJOR IN ENGLISH

General Education Requirements	48
Core Requirements	42
Concentration Requirements	<u>44</u>
Total Credits	134 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 204	Ethics and Values in Education	3
EDUC 212	Writing Seminar for Behavior Professionals	3
EDUC 228	The School Health Program	3
EDUC 250	Action Research in the Classroom	3
EDUC 300	Assessment, Evaluation and Measurement of Learning	3
EDUC 356	Educational Psychology	3
EDUC 360	The Exceptional Student	3
EDUC 412	Interdisciplinary Seminar	3
EDUC 427	Sociology of Education	3

EDUC 430	Philosophy of Education	3
EDSE 222	Adolescent Psychology	3
EDSE 434	Use of Assistive Technology in EducationN of the student with a disability	3
HIST 241	United States History	3
TEDU 320	Computers in Education	<u>3</u>
Total Credits		42 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ING 203	Basic Conversational English	
ING 225	Advanced Conversational English	3
ING 246	Introduction to Literary Genres	3
ING 301	Modern English I: Elementary grammatical structures in English	3
ING 307	Literature I	3
ING 322	Basic English Writing I	3
ING 355	Linguistic Analysis in English Language Teaching	3
EDSE 377	English Teaching Curriculum	3
EDUC 413	Integrative Seminar on Professional Competencies	3
ING 421	Phonetics	3
ING 423	Introduction to Linguistics I	3
ING 425	Comparative Analysis of English and Spanish	3
EDSE 479	Pre-practice Secondary Level	3
EDSE 481	Secondary Level Practice	6
EDSE 482	Practice Seminar Secondary Level	<u>2</u>
Total Credits		44 crs.

BACHELOR OF ARTS WITH A MAJOR IN PSYCHOLOGY

The Psychology Program trains students in the general knowledge and basic skills related to theoretical models, research methods, ethical considerations, and specialties within the psychological science. This knowledge will prepare them to continue graduate studies in one of the specialties of psychology, or it will provide them with the foundations in the knowledge of human behavior that will serve as a basis for further studies in another related career.

To complete the requirements of the Bachelor of Arts program with a concentration in Psychology, the student must satisfactorily pass 123 credits. Of which 48 are in the General Education component, 24 credits in Core requirements, 42 credits in Concentration requirements and 9 credits in Electives.

Program Mission

To develop in psychology students the competencies that will allow them to study, investigate, conceptualize and effectively communicate knowledge about human behavior from a perspective that integrates biological, social, cultural, emotional, cognitive and human developmental influences, as well as from an ethical perspective.

General objectives of the Program

The general objectives of the Bachelor of Arts program with a concentration in Psychology are:

1. To prepare students in the study of influences on human behavior.
2. To train students in the skills of collecting and analyzing data and information relevant to the field of psychology.
3. To provide opportunities for reflection on ethical behavior in the professions of human conduct.
4. To foster professional communication skills in the field of psychology.

BACHELOR OF ARTS WITH A MAJOR IN PSYCHOLOGY

General Education Requirements	48
Core Requirements	24
Concentration Requirements	42
Free Electives	9
Total Credits	123 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	3
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 212	Writing Seminar for Behavioral Professionals	3
FIL 372	Philosophy of Science	3
PSIC 121	Introduction to Psychology I	3
PSIC 122	Introduction to Psychology II	3
PSIC 200	Basic Interviewing Skills	3
PSIC 224	Human Development: Infancy and Childhood	3
PSIC 225	Human Development: Adolescence and Adulthood	3
PSIC 311	Statistical Methods	3

Total Credits

24 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
PSIC 201	Ethical Issues in Psychology	3
PSIC 230	Psycho-physiology	3
PSIC 316	Quantitative Research Methods	3
PSIC 322`	Psychology of Learning	3
PSIC 325	Personality Psychology	3
PSIC 335	Social Psychology	3
PSIC 337	Psychopathology	3
PSIC 340	Psychosocial Aspects of the Puerto Rican Family	3
PSIC 349	Industrial Psychology	3
PSIC 360	Forensic Psychology	3
PSIC 401	Psychometry	3
PSIC 407	Group Dynamics	3
PSIC 439	Crisis Intervention	3
PSIC 499	Research Practicum	<u>3</u>
Total Credits		42 crs.

FREE ELECTIVES

9 crs.

BACHELOR OF ARTS WITH A MAJOR IN SOCIAL WORK

The Social Work Program of the Universidad Central de Bayamón (UCB) is the first educational program accredited by the Council on Social Work Education (CSWE) in that discipline in the Bayamón area. It was one of the programs initiated at UCB in the 70s of the last century with the interest of developing an educational offer based on the values and principles of the Catholic faith and the Dominican charism. With 47 years of history, its graduates have occupied important positions in service agencies and university institutions.

The mission, vision, graduate profile and goals of the Program are aligned with the institutional mission and pedagogical efforts that promote the formation of a professional who develops to the maximum his or her intellectual potential, the transcendent dimension of life. In addition, Christian and professional ethics and the value of work within a humanistic Christian university environment where the student is the center of all educational action.

In addition, curricular, teaching, managerial and administrative efforts as well as professional development activities are harmonized to achieve the vision and mission of the Social Work Program. The professional development plan responds to the areas of mastery and competence of the profession. In addition, it responds to the Code of Ethics of the College of Social Work Professionals (2017, p.82) that defines Social Work as: profession committed to participatory democracy, social justice and the confrontation of inequality and social inequity. It bases its ethical-political action on the defense and expansion of human rights. Frames its professional practice in theoretical-methodological and technical-operational knowledge and skills, product of research and professional action in specific historical-cultural contexts. It is inserted in social research; analysis and formulation of social policy; management and administration of social programs; and professional actions of social assistance, socio-educational, therapeutic, teaching, and forensic, among others that affect the strengthening of autonomy, the exercise of citizenship and the integral welfare of human beings in all their contexts.

To complete the requirements of the Bachelor of Arts program with a concentration in Social Work, the student must satisfactorily pass 120 credits. Of which 48 are in the General Education component, 15 credits in Core requirements, 48 credits in Concentration requirements and 9 credits in Directed Electives.

Program Mission

Promote the academic, professional, ethical and spiritual formation of generalist Social Work students. In order for them to be highly trained professionals, aware of the conditions of social inequality in the country and in the world. In addition, they should be prepared to intervene with individuals, families, groups, organizations, communities and diverse populations. It is hoped that through a critical attitude towards the causes of oppression, they will be committed to the protection of the environment and the transformation of society into a just, equitable and inclusive society.

Program Vision

To train social work professionals within a Christian humanistic framework with critical reasoning, scientific and technological research skills that allow them to approach, inform and contribute to the development of a just, equitable and supportive society.

General objectives of the Program

The general objectives of the Bachelor of Arts program with a concentration in Social Work are:

1. Encourage the development of educational experiences so that the student identifies himself/herself as a social worker, following the principles and ethical values of the profession committed to the defense of human rights, social justice and social welfare.
2. Raise awareness of the importance of acquiring, applying, evaluating and renewing knowledge about the characteristics of contemporary society, models, theories and perspectives that contribute to the understanding of political, economic, social and environmental problems that impact individuals, families, groups, organizations and communities.
3. Commit to evidence-based, research-based professional practice, applying technology and self-evaluating the effectiveness of their professional practice.
4. To acquire, within a Christian humanistic framework, critical reasoning skills and the application of the scientific method to address social issues.
5. To acquire comprehensive knowledge regarding human diversity, mechanisms of oppression, and human rights in order to contribute to an equitable society.
6. To train the student academically and professionally so that he/she can continue graduate studies.

BACHELOR OF ARTS WITH A CONCENTRATION IN SOCIAL WORK

General Education Requirements	48
Program Requirements	15
Concentration Requirements	48
Directed Electives	9
Total Credits	120 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EDUC 212	Writing Seminar for Behavioral Professionals	3
PSIC 121	Introduction to Psychology I	3
PSIC 122	Introduction to Psychology II	3
SOC 426	Socio-cultural changes in Puerto Rico	3
HIST 241	United States History	<u>3</u>
		15crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
TSOC 215	Introduction to Social Work	3
TSOC 333	Human Development and Social Functioning I	3
TSOC 334	Human Development and Social Functioning II	3
TSOC 316	Social Policy and Planning in the Social Welfare System	3
TSOC 220	Statistical Methods	3
TSOC 320	Social Research Techniques I	3
TSOC 321	Social Research Techniques II	3
TSOC 340	Models in Social Work	3
TSOC 341	Social Intervention I	3
TSOC 342	Social Intervention II	3
TSOC 346	Diversity and Social Marginalization	3
TSOC 360	Group and Community Social Work	3
TSOC 446	Supervised Practice I	4
TSOC 448	Supervised Practice Seminar I	2
TSOC 447	Supervised Practice II	4
TSOC 449	Supervised Practice Seminar II	<u>2</u>
Total Credits		48 crs.
SUGGESTEDDD ELECTIVES		9crs.
TSOC 415	Social work with women	3
TSOC 344	Society and violence	3
TSOC 357	Intervention techniques with children and adolescents	3
TSCO 410	Old age and social welfare services	3
TSOC 411	Social work mobilization and social action	3

COLLEGE OF SCIENCES AND HEALTH PROFESSIONS



COLLEGE OF SCIENCES AND HEALTH PROFESSIONS

Pedro Oscar Robles Centeno, PhD.
Director

The College of Sciences and Health Professions aims to train its students in the skills of analysis, understanding, critical thinking and decision making that will allow them to contribute to the society of which they are a part.

The health sciences and health professions programs are grounded in the changing needs of the contemporary world, in its scientific, technological, economic and social fields. Its academic programs and university life will provide professional development for the changing world of work with a deep sense of social responsibility and ethical and aesthetic values grounded in the tradition of the teachings of St. Thomas Aquinas.

The College of Health Sciences and Professions offers an education oriented towards the humanization and personalization of the human being, forming citizens of a broad vision and critical spirit framed both in a healthy scale of values and in the principles, methods and results of the different sciences. Our students will have a humanistic formation through the development of their human and Christian values on a basis of faith and respect for the human being.

Mission of the College

The College of Health Sciences and Professions has the mission to provide academic programs in various fields of science and health at the undergraduate level to develop professionals with knowledge, skills and attitudes through higher education of excellence to contribute to a scientific and technological world, aligned with the humanistic-Christian values of the teachings of St. Thomas Aquinas.

Vision

The College of Health Sciences and Professions aspires, through its cutting-edge academic programs, to train professionals who contribute to the construction of a society where scientific-technological knowledge and care are in tune with the state of knowledge, scientific advances, and the values of the Gospel.

General Objectives

1. Encourage the study of the health professions, not only for their intrinsic value, but also also as a discipline that trains analytical thinking that is conducive to facing the technological and cultural environment of our society.
2. Integrate the human-Christian vision, recognizing personal freedom by taking action responsibly before society.
3. Cultivate the capacity for understanding, analysis and critical thinking in the members of our institution.
4. Promote scientific research for the benefit of society.
5. Encourage interest in the study of the problems that characterize reality. Puerto Rican.
6. Develop communication skills.

Academic Offerings:

1. Associate of Science Degree in Emergency Medicine
2. Associate of Science Degree in Nursing
3. Bachelor of Science in Nursing
4. Bachelor's Degree in Applied Computer Science
5. Bachelor of Science in Computer Science with major in Geographic Information Systems
6. Bachelor of Science with major in General Science
7. Bachelor of Science with major in Biology
8. Bachelor of Science with major in Neuroscience

ASSOCIATE DEGREE IN SCIENCE IN MEDICAL EMERGENCY

The Emergency Medical Associate Degree program prepares professionals to safely assess and diagnose, treat and stabilize patients and transport them to an appropriate medical care facility.

To complete the requirements of the Associate Degree in Emergency Medical Sciences program, the student must satisfactorily pass 84 credits. Of which 27 are from the General Education component, 10 credits of Core requirements and 47 credits in Concentration requirements.

Program Mission

The Associate of Science Degree Program in Emergency Medical Care provides an education of excellence in the assessment and diagnosis, treatment and stabilization of patients and transport to an appropriate medical care facility, in a safe manner, through the integration of knowledge, practical experiences and critical thinking aligned with the humanistic-Christian values of the teachings of St. Thomas Aquinas.

General objectives of the Program

The general objectives of the Associate of Science in Emergency Medicine program are:

1. Contribute to the expansion and improvement of quality in the provision of health services in the area of medical emergencies through the training of a competent professional in the execution of his functions.
2. To provide an educational environment in which the future emergency medical paramedic professional develops the necessary competencies that will enable him/her to perform agilely and effectively in the health field.
3. Promote the use of the interdisciplinary approach.
4. To develop in future paramedics an awareness of the importance and necessity of continuing education in their profession and the permanent and continuous updating of their knowledge and skills.
5. To develop in students an understanding of and a sense of commitment to professional ethics as a basis for positive social responsibility.

ASSOCIATE DEGREE IN SCIENCE IN MEDICAL EMERGENCY

General Education Requirements	27
Core Requirements	10
Concentration Requirements	<u>47</u>
Total Credits	84 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
CSOC 110	Basic Principles of Social Sciences	3
ESCO 103	Student Success and Community Service	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
HUM 119	Cultural Development of the West I	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
FIL 345	Bioethics Issues	3
MATE 105	mathematics for health professionals	<u>3</u>
Total Credits		27 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
BIOL 115	Fundamentals in Microbiology	4
COMP 101	Fundamentals and Application of Information Technology	3
PSIC 223	Human Development and Behavior	<u>3</u>
		10 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EM 101	Introduction to Medical Emergencies	3
EM 102	Biomedical Anatomy and Physiology	3
EM 103	Pathophysiology and Medical Terminology	3
EM 104	Basic Public Health Concepts	2
EM 105	Pharmacology	3
EM 106	Management of Respiratory System Emergencies	3
EM 207	Patient History and Evaluation	3
EM 208	Shock and Fluid Therapy	2
EM 209	Trauma	3
EM 210	Internal Medicine Emergencies	3

EM 211	Obstetric and Gynecologic Emergencies	2
EM 212	Pediatric Emergencies	3
EM 213	Management of Patients with Special Conditions	2
EM 214	Extrication and Rescue Techniques	2
EM 215	Practice and Seminar	7
EM 216	Basic Sign Language Course, Part I (ASL)	<u>3</u>
Total		47 crs.
Credits		

ASSOCIATE DEGREE IN NURSING SCIENCES

The UCB Nursing Program aims to train highly qualified competitive nurses with the knowledge, skills and attitudes necessary in the prevention, protection, promotion and optimization of health and capabilities throughout life; the relief of suffering through a humanistic and holistic treatment of human responses, integrating Christian values and becoming advocates in the health care of individuals, families, communities and populations.

This program complies with the requirements of the Puerto Rico Board of Nurse Examiners.

OBJECTIVES OF THE ACADEMIC OFFERING

1. To prepare a specialized professional to provide direct nursing care according to the stages of growth and development, using fundamental knowledge in the arts and sciences.
2. To prepare the student to obtain client data and identify health problems.
3. Develop, implement and evaluate the nursing care plan.
4. Establish effective relationships with the client and other members of the health care team.
5. Develop responsibilities for their professional growth and development, their public image of nursing, and commitment to practice within a legal and ethical framework.
6. Apply principles of prevention, restoration, maintenance and rehabilitation of health in a variety of settings.
7. Apply human-Christian, scientific and nursing principles to the practice of the profession.
8. Utilize research findings to improve nursing practice by applying them in the implementation of care.

ASSOCIATE DEGREE IN NURSING SCIENCES

General Education Requirements	30
Core Requirements	22
Concentration Requirements	<u>30</u>
Total Credits	82 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	TITLE COURSE TITLE	CREDITS
CSOC 110	Basic Principles of Social Sciences	3
ESCO 103	Student Success and Community Service	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
FIL 201	Principles of Philosophy	3
HUM 119	Western Cultural Development I	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
MATE 105	mathematics for health professions	<u>3</u>
Total Credits		30 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
BIOL 115	Fundamentals in Microbiology	4
BIOL 357	Human Anatomy and Physiology I	4
BIOL 358	Human Anatomy and Physiology II	4
COMP 101	Fundamentals and Application of Information Technology	3
PSIC 223	Human Development and Behavior	3
QUIM 208	Fundamentals of Chemistry for Nursing	<u>4</u>
Total Credits		22 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ENF 100	Introduction to the Nursing Profession	3
ENF 102	Fundamentals of Nursing Care	4
NFE 104	Fundamentals of Pharmacology for Nursing	3
ENF 206	Medical-Surgical Nursing Care I	4
ENF 208	Nursing Care During the Gestational Cycle and the Neonate	4
ENF 210	Medico-surgical Nursing Care II	4
ENF 215	Fundamentals of Pediatric Nursing Care	4
ENF 300	Essential Psychosocial Nursing Care	<u>4</u>
Total Credits		30 crs.

BACHELOR IN NURSING SCIENCES

The UCB Nursing Program aims to train highly qualified competitive nurses with the knowledge, skills and attitudes necessary in the prevention, protection, promotion and optimization of health and capabilities throughout life; the relief of suffering through a humanistic and holistic treatment of human responses, integrating Christian values and becoming promoters of health care for individuals, families, communities and populations. To complete the degree requirements, the student must pass 125 credits of which 45 credits are from the general education component, 28 core credits and 52 concentration credits.

This program meets the requirements of the Puerto Rico Nursing Examining Board.

Program Mission

The mission of the Nursing Science program is: To develop knowledge, skills and competencies in nursing care based on the theory of Dorothea Orem, to form them as professionals and leaders with a high commitment, providing holistic care to individuals, families and communities in different health scenarios that reflect an education of excellence, professional ethics, Christian values, based on the philosophy of St. Thomas Aquinas.

Program Objectives

1. Demonstrates skills as generalist nurses in the application of the holistic nursing process, to families and communities based on evidence, considering the client's stages of growth and development.
2. It implements legal aspects and Christian-ethical principles to promote and maintain the satisfaction and well-being of families and communities.
3. Applies the principles of communication, critical thinking, decision making, leadership and creativity to provide nursing care to families and communities, considering primary, secondary and tertiary stages in emergency and natural disaster situations.
4. It assesses the acquisition of knowledge and skills using different research sources, information systems, customer service technology and nursing techniques.
5. Provides evidence-based care, according to the standards of the profession.
6. Directs the professional promotion of health maintenance and disease prevention and supports the rehabilitation of the client, family and community.
7. Demonstrates leadership skills, customer service and integrates collaboration of healthcare professionals.
8. It considers cultural diversity, participating in the process of policy development, public health and advocacy of client, family and community rights.

BACHELOR IN NURSING SCIENCES

General Education Requirements	45
Core Requirements	28
Concentration Requirements	<u>52</u>
Total Credits	125 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CSOC 110	Basic Principles of Social Sciences	3
EDF 106	Lifestyles and Wellness	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO 103	Student Success and Community Service	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
FIL 201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and his ethical behavior	3
HIST 350	History of Puerto Rico	3
HUM 119	Cultural Development of the West I	3
HUM 120	Cultural Development of the West II	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
MATE 105	Mathematics for Health Professionals	<u>3</u>
Total Credits		45 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
BIOL 115	Fundamentals in Microbiology	4
BIOL 357	Human Anatomy and Physiology I	4
BIOL 358	Human Anatomy and Physiology II	4
COMP 101	Fundamentals and Application of Information Technology	3
ING 203	Basic Conversational English	3
MAT 131	Elementary Statistics	3
PSIC 223	Human Development and Behavior	3
QUIM 208	Fundamentals of Chemistry for Nursing	<u>4</u>
Total d Credits		28 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ENF 100	Introduction to the Nursing Profession	3
ENF 102	Fundamentals of Nursing Care	4
NFE 104	Fundamentals of Pharmacology for Nursing	3
ENF 206	Medical-Surgical Nursing Care I	4
ENF 208	Nursing Care During the Gestational Cycle and the Neonate	4
ENF 210	Medico-surgical Nursing Care II	4
ENF 215	Fundamentals of Pediatric Nursing Care	4
ENF 300	Essential Psychosocial Nursing Care	4
ENF 305	Physical Examination for Nursing Professionals	3
ENF 307	Nursing Research	3
ENF 308	Community Nursing	4
ENF 312	Nursing Process Applied to Patients with Cardiac Dysrhythmias and Conduction Disturbances	3
ENF 407	Fundamentals of Critical Care Nursing	4
ENF 415	Practicum: Nursing Leadership and Management	<u>5</u>
		52 crs.

Note: Students who have an Associate's Degree and are working in Nursing for two (2) continuous years and who have a valid nursing license may perform the clinical practice of the ENF 415 course at their place of work.

BACHELOR PROGRAM IN APPLIED COMPUTER SCIENCE

The Bachelor of Applied Computer Science is designed to develop graduates with a career in Computer Science, exercising good practice under the ethical concepts of the profession and embracing the desire for lifelong professional development.

The program enables the student to develop skills in structured problem solving, critical thinking, teamwork, communication and technical expertise in the areas of computers that can be applied immediately in daily and professional life.

Program Objectives

The objectives of the program are based on the needs of the constituents (students, faculty, employers and academia), for whom it is expected to produce graduates capable of:

1. Apply the theoretical foundations and mathematical concepts of computer science to solve complex problems with the use of the best tools, methodologies, programming languages.
2. Engage in the professional practice of computational science to identify and solve important problems in a wide range of application areas that will then be communicated in a professional context.
3. Demonstrate the impact of computer science on society, applying ethical, social and professional codes in their responsibilities for the benefit of humanity.
4. Pursue lifelong learning, adapting to new tools and emerging technologies to stay at the forefront of computer science developments and practice in the computer science profession.

BACHELOR OF SCIENCE IN APPLIED COMPUTER SCIENCE

General Education Requirements	45
Core Requirements	29
Concentration Requirements	49
Elective	<u>3</u>
Total Credits	126 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	Credits
ADM 111	Introduction to Entrepreneurship	3
CSOC 110	Basic Principles of Social Sciences	3
ESCO 103	Student Success and Community Service	3
ING 105	English Grammar	3
ING 106	Oral Communication	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
EDF 106	Lifestyles and Wellness	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
FIL 201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and his ethical behavior	3
HIST 350	History of Puerto Rico	3
HUM 119	Cultural Development of the West I	3
HUM 120	Cultural Development of the West II	3
MATE 106	Intermediate Algebra I	<u>3</u>
Total Credits		45 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	Credits
COMP 110	Introduction to Computer Science and Programming	3
MATE 107	Intermediate Algebra II	3
MAT 131	Elementary Statistics	3
MAT 223	Precalculus I	3
MAT 224	Precalculus II	3
MAT 240	Discrete Mathematics Applied to Computers	3
MAT 320	Calculation I	3
FIS 303	General Physics I	4

BIOL 201	General Biology	<u>4</u>
Total Credits		29 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	Credits
COMP 112	Ethical and Legal Aspects in Computer Science	3
COMP 215	Programming I	3
COMP 232	Programming II	3
COMP 234	Computer Organization and Assembler Language	3
COMP 250	Programming III	3
COMP 240	Operating Systems	3
COMP 242	Algorithms and Data Structure	3
COMP 244	Database Management	3
COMP 300	The Compiler and Programming Languages	3
COMP 310	Computer Graphics	3
COMP 320	Software Engineering	3
COMP 330	Networking and Web Programming for IoT	3
COMP 400	Artificial Intelligence I	3
COMP 410	The Computer, its Electronics, Diagnosis & Repair	3
COMP 450	Data Science I	3
COMP 491	Internship in Computer Science	1
COMP 492	Final project / Capstone	<u>3</u>
Total Credits		49 crs.
Elective		3crs.

BACHELOR DEGREE IN COMPUTER SCIENCES WITH A MAJOR IN GEOGRAPHIC INFORMATION SYSTEMS

The Bachelor of Science in Computer Science program with a concentration in Geographic Information Systems offers the opportunity for an interdisciplinary and integral experience that unifies the processes of computing, informatics and programming with Geographic Information Systems. The student will obtain skills that will allow him/her to develop computer applications on the various contemporary computer platforms and specialize them in the design of applications, routines and commands usable within a Geographic Information System.

Graduates of the Bachelor's program will possess theoretical and practical knowledge in the development of computerized systems with emphasis in the development of applications for the field of Geographic Information Systems. The student will be exposed to a formal process of education in computer science and programming enabling him/her to develop applications for the field of Geographic Information Systems. As a basis for this, the student will master the principles that involve the generation of cartographic data models, the processes for the capture of these, their digital representation and their use within analysis processes.

Program Objectives

1. Analyze a complex computational problem and apply principles of computation and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computationally based solution to meet a given set of computational requirements in the context of the program discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments about the practice of computing based on legal and ethical principles.
5. Function effectively as a member or leader of a team involved in activities appropriate to the program discipline.
6. Apply the theory of computational science and the fundamentals of software development to produce computer-based solutions.

BACHELOR DEGREE PROGRAM IN COMPUTER SCIENCE WITH GEOGRAPHIC INFORMATION SYSTEMS CONCENTRATION

General Education Requirements	45
Core Requirements	32
Computer Science Requirements	24
Concentration Requirements	26
Elective	<u>3</u>
Total Credits	130 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	Credits
ADM 111	Introduction to Entrepreneurship	3
CSOC 110	Basic Principles of Social Sciences	3
ESCO 103	Student Success and Community Service	3
ING 105	English Grammar	3
ING 106	Oral Communication	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
EDF 106	Lifestyles and Wellness	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
FIL 201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and his ethical behavior	3
HIST 350	History of Puerto Rico	3
HUM 119	Cultural Development of the West I	3
HUM 120	Cultural Development of the West II	3
MATE 106	Intermediate Algebra I	<u>3</u>
Total Credits		45 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	Credits
COMP 110	Introduction to Computer Science and Programming	3
MATE 107	Intermediate Algebra II	3
MAT 131	Elementary Statistics	3
MAT 223	Precalculus I	3
MAT 224	Precalculus II	3
MAT 240	Discrete Mathematics Applied to Computers	3

MAT 320	Calculation I	3
FIS 303	General Physics I	4
GEOG 204	Human Geography	3
GEOG 206	Physical Geography	<u>4</u>
Total Credits		32 crs.

COMPUTATIONAL SCIENCE REQUIREMENTS

COURSE	COURSE TITLE	Credits
COMP 210	Networking and Web Programming for IoT	3
COMP 215	Programming I	3
COMP 232	Programming II	3
COMP 234	Computer Organization and Assembler Language	3
COMP 250	Programming III	3
COMP 240	Operating Systems	3
COMP 242	Algorithms and Data Structure	3
COMP 244	Database Management	<u>3</u>
Total Credits		24 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	Credits
GIS 202	Cartographic Science	3
GIS 304	Geographic Information Systems	3
GIS 306	Remote sensing	3
GIS 308	Management of spatial database systems	3
GIS 310	GIS programming	3
GIS 412	Research and GIS	3
GIS 414	Web and Mobile Application Development for GIS	3
GIS 416	Social Responsibility for GIS professionals	3
GIS 418	Final Project - Capstone	3
		26 crs.

ELECTIVE COURSE (Select 1 course - 3 credits)

COURSE	COURSE TITLE	Credits
GEOG 102	Geography of Puerto Rico	3
GEOG 408	Urban Geography	3
GIS 420	Geographic Information Systems applied to Health	3

BACHELOR IN SCIENCE WITH A MAJOR IN GENERAL SCIENCE

The Bachelor of Science with Concentration in General Science program prepares professionals who can perform in various settings in the fields of science and health professionals. It is intended to provide an overview of the various specialties of science to pursue graduate studies in fields such as biology, medicine, pharmacy, veterinary medicine, chiropractic, among other fields of science and health.

To complete the requirements of the Bachelor of Science program with a concentration in General Science, the student must satisfactorily pass 130 credits. Of which 45 are in the General Education component, 50 credits in Core requirements, 32 credits in Concentration requirements and 3 credits in Directed Electives.

Program Mission

The Bachelor of Science Program with a concentration in General Science provides comprehensive training in various fields of science that will allow them to continue their development at the graduate level to contribute to the fields of science and health through the development of critical thinking, research and respect for the human being aligned with the humanistic-Christian values of the teachings of St. Thomas of Assisi and the teachings of St. Thomas of Assisi. Aquino.

General objectives of the Program

The general objectives of the Bachelor of Science program with a concentration in General Science are:

1. Demonstrates fundamental knowledge of a wide range of topics in the various fields of science.
2. Apply their knowledge through critical thinking to problem solving in scientific issues.
3. Effectively applies the scientific method to problem solving in scientific questions.
4. Use interdisciplinary research to analyze and synthesize scientific issues and their social, cultural, economic and political implications.
5. Demonstrates that they can work individually or in teams, in their future careers, as specialists in a scientific or technical field.
6. Demonstrates readiness to continue their education in graduate school and/or directly pursue productive professional careers in the private, state, federal or educational sectors.

BACHELOR IN SCIENCE WITH A MAJOR IN GENERAL SCIENCE

General Education Requirements	45
Core Requirements	50
Concentration Requirements	32
Suggested Elective	<u>3</u>
Total Credits	130 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CSOC 110	Basic Principles of Social Sciences	3
EDF 106	Lifestyles and Wellness	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO 103	Student Success and Community Service	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
FIL 201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and his ethical behavior	3
HIST 350	History of Puerto Rico	3
HUM 119	Cultural Development of the West I	3
HUM 120	Western Cultural Development II	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
MATE 106	Intermediate Algebra I	<u>3</u>
Total Credits 45 crs.		

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
BIOL 201	General Biology I	4
BIOL 202	General Biology II	4
COMP 101	Fundamentals and Application of Information Technology	3
CS 304	Research Methodology	3
FIS 303	General Physics I	4
FIS 304	General Physics II	4
MATE 107	Intermediate Algebra II	3
MAT 223	Pre-calculus I	3
MAT 224	Pre-calculus II	3
MAT 320	Calculation I	3

QUIM 201	General Chemistry I	4
QUIM 202	General Chemistry II	4
QUIM 331	Organic Chemistry I	4
QUIM 332	Organic Chemistry II	<u>4</u>
		50 crs.

CONCENTRATION REQUIREMENTS (32 credits to be selected)

COURSE	COURSE TITLE	CREDITS
BIOL 300	Microbiology	4
BIOL 316	Histology	4
BIOL 324	Genetics	4
BIOL 330	Developmental Biology	4
BIOL 357	Human Anatomy and Physiology I	4
BIOL 358	Human Anatomy and Physiology II	4
BIOL 413	Immunology	4
BIOL 415	Parasitology	4
BIOL 421	Physiology and Pathophysiology I	4
BIOL 422	Physiology and Pathophysiology II	4
BIOL 453	Molecular Cell Biology	4
QUIM 350	Instrumental Analysis	4
QUIM 380	Biochemistry	4
QUIM 441	Physical Chemistry I	4
QUIM 442	Physical Chemistry II	<u>4</u>
		32 crs.

SUGGESTED ELECTIVE **3**

CS 305	Research	3
ING 203	Basic Conversational English	3
MAT 131	Elementary Statistics	3

BACHELOR DEGREE IN SCIENCE WITH A MAJOR IN BIOLOGY

The Bachelor of Science Program with a major in Biology provides didactic learning and research experiences that promote the formation of professionals with the knowledge, skills, and attitudes required to perform effectively in industry, laboratories, and governmental or private agencies for the management and conservation of environmental resources. In addition, it provides the foundation for further graduate studies in biology or allied health professions.

The program of study consists of 130 credits, including general education courses, core courses, concentration courses and electives. Concentration courses include the areas of Microbiology, Genetics, Zoology, Botany, Ecology and Molecular Cell Biology. Among the elective courses, you have the option to select from Human Anatomy and Physiology, Histology, Parasitology, and Immunology, among others. Each of the courses is complemented with laboratory experiences that promote the development of skills in the manipulation of instruments and the application of scientific methodology to solve problems.

Program Mission

The Bachelor of Science Program, with a concentration in Biology, contributes to the development of professionals with a comprehensive biological education, which promotes knowledge and respect for life, the development of critical and investigative thinking and ethical commitment in the performance of their duties, aligned with the values of Christian humanism.

General objectives of the Program

1. The general objectives of the Bachelor of Science program with a concentration in Biology are:
2. To enable the student to know and appreciate biological diversity in its structural and physiological aspects.
3. Analyze the complexity of life from the molecular, cellular, tissue, systemic and organismal levels.
4. To develop the scientific skills, abilities and attitudes required in the search, analysis and dissemination of scientific knowledge.
5. Encourage critical analysis of scientific findings and technological innovations, considering the social, cultural, economic and ethical implications.
6. To enable students to achieve a greater knowledge of themselves, of their relationship with other organisms and with nature, in such a way as to promote respect for life and a commitment to environmental conservation.
7. To develop the competencies inherent to the processes of scientific research, instrumentation management and adequate use of technology.

BACHELOR DEGREE IN SCIENCE WITH A MAJOR IN BIOLOGY

General Education Requirements	45
Core Requirements	50
Concentration Requirements	24
Suggested Electives	<u>11</u>
Total Credits	130 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CSOC 110	Basic Principles of Social Sciences	3
ESCO 103	Student Success and Community Service	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
EDF 106	Lifestyles and Wellness	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
FIL 201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and his ethical behavior	3
HIST 350	History of Puerto Rico	3
HUM 119	Cultural Development of the West I	3
HUM 120	Cultural Development of the West II	3
MATE 106	Intermediate Algebra I	<u>3</u>
Total Credits		45 crs

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
BIOL 201	General Biology I	4
BIOL 202	General Biology II	4
COMP 101	Fundamentals and Application of Information Technology	3
CS 304	Research Methodology	3
FIS 303	General Physics I	4
FIS 304	General Physics II	4
MATE 107	Intermediate Algebra II	3
MAT 223	Pre-calculus I	3
MAT 224	Pre-calculus II	3
MAT 320	Calculus I	3

QUIM 201	General Chemistry I	4
QUIM 202	General Chemistry II	4
QUIM 331	Organic Chemistry I	4
QUIM 332	Organic Chemistry II	<u>4</u>
Total Credits		50 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
BIOL 300	Microbiology	4
BIOL 303	Zoology	4
BIOL 305	Botany	4
BIOL 324	Genetics	4
BIOL 411	Ecology	4
BIOL 453	Molecular Cell Biology	<u>4</u>
Total Credits		24 crs.

SUGGESTED ELECTIVES

11 crs.

CS 305	Research	3
ING 203	Basic Conversational English	3
MAT 131	Elementary Statistics	3
BIOL 357	Human Anatomy and Physiology I	4
BIOL 358	Human Anatomy and Physiology II	4
BIOL 421	Physiology and Pathophysiology I	4
BIOL 422	Physiology and Pathophysiology II	4

BACHELOR OF SCIENCE WITH A MAJOR IN NEUROSCIENCE

Neuroscience is the study of the brain, the nervous system and the physiological substrates of behavior. This academic offering will give students the opportunity to learn about new advances in the field of neuroscience through a novel curriculum that will offer courses in the areas of neurobiology, psychobiology, cognitive neuroscience, affective neuroscience, clinical neuroscience, neuropharmacology, among others. It will also have specialized laboratories where techniques used in histology, biotechnology, molecular biology and neurobiology will be used. As part of the proposed program, the University will offer students in the psychology, education and science programs the option of a minor concentration in neuroscience. The program will focus on the development of professional competencies that will enable students to achieve academic success and pursue post-secondary studies at a graduate school or broaden their career horizons in the various work environments in which they may practice.

To complete the requirements of the Bachelor of Science program with a concentration in Neurosciences, the student must satisfactorily pass 129 credits. Of which 45 are in the General Education component, 53 credits in Core requirements and 31 credits in Concentration requirements.

Program Mission

The Bachelor of Science Program with a concentration in Neurosciences contributes to the integral development of professionals with high social, ethical and cultural commitment to apply their knowledge of the nervous system, a biological approach to pursue careers at the graduate level, through the use of critical thinking and research aligned with the humanistic-Christian values of the teachings of St. Thomas Aquinas.

General objectives of the Program

The general objectives of the Bachelor of Science program with a concentration in Neuroscience are:

1. To provide an academic environment that enables students to develop into future professionals in the area of neuroscience, science or health.
2. Promote the interaction of students from different study programs for a multidisciplinary training.
3. To develop students' knowledge and skills in the area of Neuroscience.
4. To develop in the students of the program the aptitudes to continue graduate studies in the area of neuroscience or any area of biomedical sciences.
5. Encourage students' interest in scientific research in the search for solutions.
6. To develop professionals in the field of science and health with a high level of values, professional ethics and social commitment to the service of Puerto Rican society.

BACHELOR OF SCIENCE WITH A MAJOR IN NEUROSCIENCE

General Education Requirements	45
Core Requirements	53
Concentration Requirements	31
Total Credits	129 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CSOC 110	Introduction to Social Sciences	3
EDF 106	Lifestyle and Wellness	3
EREL ____	Several options	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO 103	Student Success and Community Service	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and Writing	3
FIL 201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and his ethical behavior	3
HIST 350	History of Puerto Rico	3
HUM 119	Cultural Development of the West I	3
HUM 120	Cultural Development of the West II	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
MATE 106	Intermediate Algebra I	<u>3</u>
Total Credits		45 crs.

CORE REQUIREMENTS

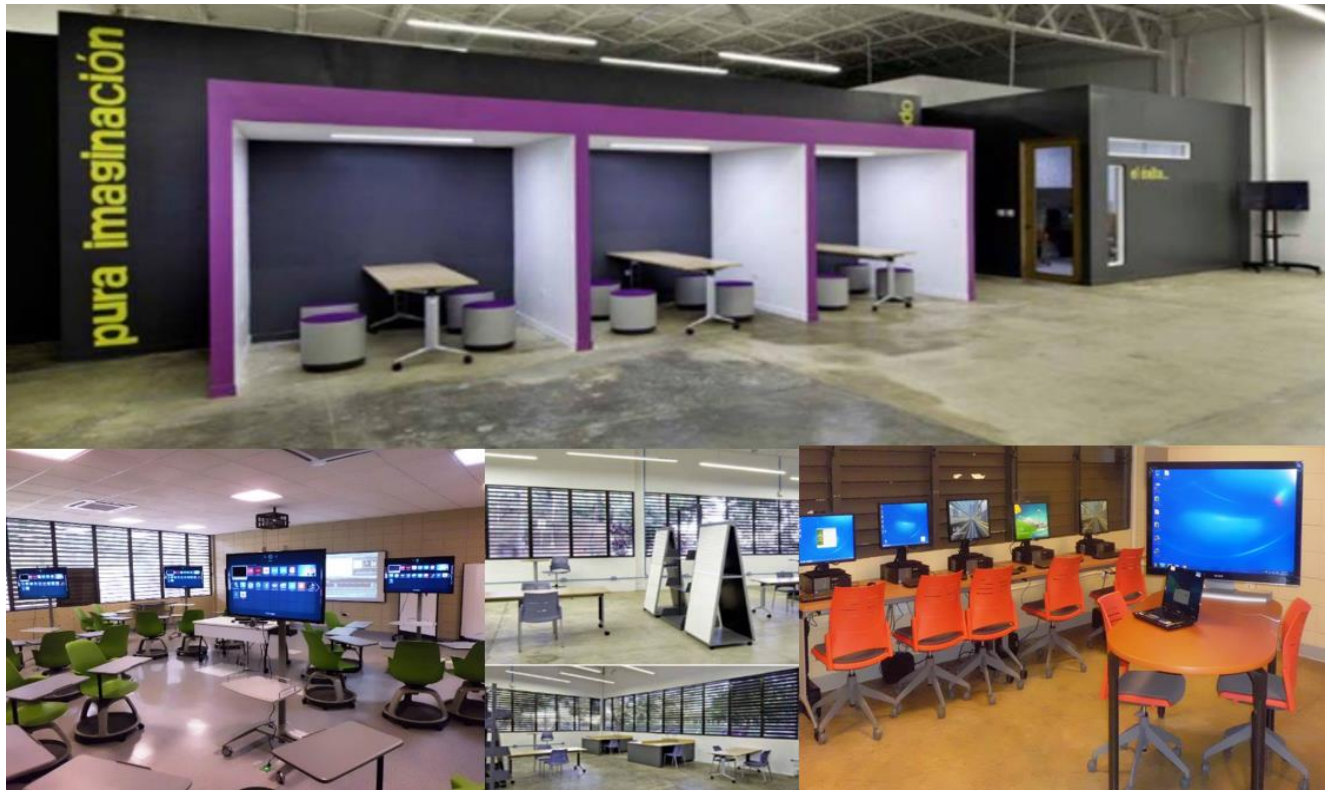
COURSE	COURSE TITLE	CREDITS
BIOL 201	General Biology I	4
BIOL 202	General Biology II	4
COMP 101	Fundamentals and Application of Information Technology	3
CS 304	Research Methodology	3
FIS 303	General Physics I	4
FIS 304	General Physics II	4
MATE 107	Intermediate Algebra II	3
MAT 131	Elementary Statistics	3
MAT 223	Pre-calculus I	3
MAT 224	Pre-calculus II	3
MAT 320	Calculus I	3

QUIM 201	General Chemistry I	4
QUIM 202	General Chemistry II	4
QUIM 331	Organic Chemistry I	4
QUIM 332	Organic Chemistry II	<u>4</u>
Total Credits		53 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
NC 101	Fundamentals of Neuroscience	3
NC 102	Principles of Cognitive Neuroscience	3
NC 201	Neurobiology / Neurobiology Laboratory	4
NC 202	Affective Neuroscience	3
NC 203	Neurobiology of Disease	3
NC 301	Animal Behavior	3
NC 302	Psychopharmacology	3
NC 303	Ethics and Modern Topics in Neuroscience	3
NC 401	Cellular/Molecular Neurobiology Research Laboratory	3
NC 402	Methods in Neuroscience / Undergraduate Research (Capstone)	<u>3</u>
Total Credits		31 crs.

COLLEGE OF BUSINESS DEVELOPMENT AND TECHNOLOGY



COLLEGE OF BUSINESS DEVELOPMENT AND TECHNOLOGY

The College of Business Development and Technology provides an education of excellence that prepares students for a successful professional career. It offers academic programs, services and activities that provide meaningful educational experiences for the development of entrepreneurial, technologically proficient, leaders with high ethical standards capable of performing effectively professionally and socially.

Mission

The College of Business Development and Technology provides an education of excellence that prepares students for a successful professional career. It offers academic programs, services and activities that provide meaningful educational experiences for the development of entrepreneurial, technologically proficient, leaders with high ethical standards capable of performing effectively professionally and socially.

Vision

The College of Business Development and Technology will be recognized for its innovative academic programs and for the development of entrepreneurs who contribute to the country's economy within a global context.

General Objectives

1. To foster in students the highest values of integrity, commitment, respect and honesty in the exercise of their profession.
2. To develop in the student skills that allow him/her to work in multidisciplinary teams in all areas of his/her professional performance.
3. Develop and encourage the use of effective and creative communication processes in the exercise of their profession.
4. To develop in the student the necessary competencies that will qualify him/her professionally to perform successfully in the work environment.
5. To develop in the student an entrepreneurial spirit.
6. To develop in the student the skills to analyze situations, so that he/she is able to make the right decisions at all times in a natural way.
7. To develop in the student skills that allow him/her to make productive use of the new information technologies in the exercise of his/her professional tasks.

Specific Objectives

1. To foster ethical values in students, respect multicultural differences, the importance of social responsibility and healthy coexistence.
2. To foster in the student the value of communication in the organization using the established channels and protocols.
3. Establish between the student and the community ties of communication and participation in social development.
4. To strengthen the student's capacity for business creation and management.

5. To foster creativity, responsibility and independence in the student in order to achieve professional success.
6. To foster in the student the importance of applying knowledge for the development of administrative skills.
7. Expose students to accounting, financial and computer skills in administrative processes.
8. To develop the student's capacity for critical analysis of information for decision making.
9. Develop skills and abilities for the management and analysis of situations in the organization.
10. Encourage students to use technology as an indispensable tool for business success in decision making.

Student profile

The professional graduate of the College of Business Development and Technology must be a person of integrity, leader and innovator. With an entrepreneurial spirit, with mastery in emerging technology, who through his knowledge is able to generate change, with projection into the future at the national and international level and that through his business and professional management contributes to the social, economic and cultural development of the country.

Academic Offerings

1. Associate's Degree in Office Systems Administration with Health Services Billing
2. Associate Degree in Business Administration
3. Bachelor's Degree in Executive Office Administration
4. Bachelor's Degree in Business Administration with a concentration in Accounting
5. Bachelor's/Master's Degree in Business Administration with a major in Accounting
6. Bachelor's Degree in Business Administration with General Concentration
7. Bachelor's Degree in Business Administration with a concentration in Management
8. Bachelor's Degree in Business Administration with a concentration in Business Innovation and Management
9. Bachelor's Degree in Business Administration with a concentration in Marketing
10. Bachelor's Degree in Management with concentration in Human Resources
11. Bachelor's Degree in Business Administration with a concentration in Information Networking

ASSOCIATE DEGREE IN OFFICE SYSTEMS ADMINISTRATION WITH HEALTH BILLING SERVICES

The Associate Degree in Office Systems Administration with Health Billing Services is designed to develop medical office systems administrators according to the demands of the current employment market. The student is prepared with high professionalism in the mastery of administrative skills, procedures and skills necessary to work in health services offices, such as: medical offices, doctor's offices, health services insurance companies, among others. It emphasizes on the processes of billing, collection and claims to medical plans, management of medical records and documents, keyboarding and computer programs, oral and written communication skills in Spanish and English, as well as ethical and human values to perform an efficient and productive professional work.

To complete the requirements of the Associate Degree in Office Systems Management with Health Services Billing program, the student must satisfactorily pass 77 credits. Of which 33 are from the general education component, 10 credits of core requirements and 34 credits of concentration requirements.

Program Mission

The mission of the Associate Degree in Office Systems Management with Billing in Health Services is to prepare students with the knowledge and competencies required for the effective management of medical billing systems.

Program Objectives

The objectives of the Associate Degree program in Office Systems Management with Health Services Billing are:

1. To provide students with a program of study with the fundamental principles of professional ethics and moral values that will enable them to perform with integrity in health service offices.
2. To develop in students the necessary procedures, techniques and skills of an office systems administrator using modern software and technology.
3. Apply written communication skills in documents generated in the health services office.
4. To provide learning experiences that allow students to develop to the maximum extent possible a professional image that will enable positive interpersonal relationships in health service offices.

ASSOCIATE DEGREE IN OFFICE SYSTEMS ADMINISTRATION WITH HEALTH BILLING SERVICES

General Education Requirements	33
Core Requirements	10
Concentration Requirements	34
Total Credits	77 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS 103	General Fundamentals of Science; Life Integration	3
CSOC 110	Introduction to Social Sciences	3
EDF 106	Lifestyles and Wellness	3
EREL	_____ <i>Various options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO 103	Student Success and Community Service	3
ESP 107	Grammatical Skills through Reading and Writing	3
FIL 201	Principles of Philosophy	3
HUM 119	Cultural Development of the West I	3
ING 105	Grammatical English	3
MATE 106	Intermediate Algebra I	<u>3</u>
Total Credits		33 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
CONT 115	Financial Accounting I	<u>4</u>
Total Credits		10 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ASOF 110	Fast Writing in Spanish and English	3
ASOF 120	Keyboard Operation	3
ASOF 121	Document Production I	3
ASOF 230	Systems Administration and Document Control	3
ASOF 235	Applications and Program Integration	3
ASOF 240	Terminology, Abbreviations and Medical Coding	3
ASOF 241	Manual Billing of Health Professional Services	3
ASOF 242	Electronic Billing of Health Professional Services	3
ASOF 244	Administrative Procedures and Legal Aspects in Health Services Offices	3
ASOF 245	Electronic Medical Record	3
ASOF 250	Seminar and Practice	<u>4</u>
Total Credits		34 crs.

BACHELOR'S DEGREE IN EXECUTIVE OFFICE ADMINISTRATION

The Bachelor's Degree in Executive Office Administration is a program designed to develop the knowledge and competencies required for the effective administration of office systems and the necessary skills according to the demands of the current job market. The student is prepared with a high degree of professionalism in the mastery of administrative and technological skills and oral and written skills in Spanish and English for effective communication. Students are exposed to the fundamental principles of professional ethics, moral and Christian values that allow them to perform successfully in the work scenario.

To complete the requirements of the Bachelor of Business Administration program with a General concentration, the student must satisfactorily pass 120 credits. Of which 48 are in the general education component, 32 credits in core requirements, 37 credits in concentration requirements and 3 credits in electives.

Program Mission

The mission of the Bachelor's Degree in Executive Office Administration is to prepare students with the knowledge, skills, techniques, and personal qualities required for executive office administration. It offers an education of excellence with the competencies required by the labor market demand.

General Objectives of the Program

The general objectives of the Bachelor of Science in Executive Office Administration program are:

1. Incorporate the fundamental principles of professional ethics and moral values that will enable them to perform with integrity in practice as office systems administrators.
2. Apply standards and procedures in the production and administration of documents using modern technology.
3. Apply oral and written communication skills in Spanish and English for effective communication in an office systems administrator.
4. Project a professional image as administrative assistants that will enable positive interpersonal relationships in the workplace.

BACHELOR'S DEGREE IN EXECUTIVE OFFICE ADMINISTRATION

General Education Requirements	48
Core Requirements	32
Concentration Requirements	37
Free Elective	<u>3</u>
Total Credits	120 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total	credits	48 crs.

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
CONT 115	Financial Accounting I	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
EST 200	Statistics for Business	4
GER 110	Management and Leadership	3
ING 203	Basic Conversational English	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		32 crs

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ASOF 110	Fast Writing in Spanish and English	3
ASOF 120	Keyboard Operation	3
ASOF 121	Document Production I	3
ASOF 122	Document Production II	3
ASOF 230	Systems Administration and Document Control	3
ASOF 235	Applications and Program Integration	3
ASOF 332	Administrative Procedures in Office Systems	3
AEOF 310	Executive Office Administration	3
AEOF 320	Protocol, Etiquette and Event Organization	3
AEOF 410	Staff Training and Evaluation	3
AEOF 420	Knowledge Application Seminar	3
ASOF 435	Seminar and Office Practice	<u>4</u>
Total Credits		37 crs.
FREE ELECTIVE		3 crs.

GENERAL BUSINESS ADMINISTRATION PROGRAMS

The Associate Degree in Business Administration and the Bachelor's Degree in Business Administration with General Concentration are designed to train professionals prepared in diverse functional areas, such as management, accounting, and marketing. The student is prepared with a high degree of professionalism in the mastery of administrative skills.

To complete the requirements of the Associate Degree in Business Administration program, the student must satisfactorily pass 75 credits. Of which 39 are from the general education component and 36 credits of core requirements.

To complete the requirements of the Bachelor of Business Administration with General Concentration program, the student must satisfactorily pass 123 credits. Of which 48 are in the general education component, 51 credits in core requirements, 21 credits in concentration requirements and 3 credits in electives.

Mission of the Programs

The mission of the Associate Degree in Business Administration is to train professionals with knowledge and a high degree of skills in each functional area of the company.

The mission of the Bachelor's Degree in General Business Administration is to train professionals in the different functional areas of a company, demonstrating social skills, teamwork, understanding the importance of human beings and their moral and Christian relationship in the operation of each area and promoting an efficient and productive performance.

General Objectives of the Program

The general objectives of the Associate and Bachelor's Degree program in Business Administration are:

1. To develop analytically minded professionals capable of implementing efficient administrative systems.
2. To train managers with the ability to analyze situations from a broader and more general perspective of the company.
3. To train technically developed, deeply human and ethical managers, responding to the needs of society.
4. Identify strategies to compete in the labor market within the areas of business administration.

ASSOCIATE DEGREE IN BUSINESS ADMINISTRATION

General Education Requirements	39
Core Requirements	<u>36</u>
Total Credits	75 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS 103	General Fundamentals of Science; Life Integration	3
CSOC 110	Introduction to Social Sciences	3
ESCO 103	Student Success and Community Service	3
EDF 106	Lifestyles and Wellness	3
EREL _____	Several options EREL 113: Bible and Christian Life EREL 205: Sexuality and Christian Marriage EREL 215: Christian Social Thought EREL 238: Introduction to Christology	3
ESP 107	Grammatical Skills through Reading and Writing	3
ESP 108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL 201	Principles of Philosophy	3
HUM 119	Cultural Development of the West I	3
ING 105	Grammatical English	3
ING 106	Oral Communication in English	3
MATH 106	Intermediate Algebra I	<u>3</u>
Total Credits		39 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 285	Business Communication in Spanish	3
COMP 101	Fundamentals and Application of Information Technology	3
COMP 200	Business Information Technology	3
CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4
CONT 116	Financial Accounting II	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
GER 110	Management and Leadership	3
MER 110	Marketing	<u>3</u>
Total Credits		36 crs.

BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH GENERAL MAJOR

General Education Requirements	48
Core Requirements	51
Concentration Requirements	21
Free Elective	<u>3</u>
Total Credits	123 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
COMP 101	Fundamentals and Applications of Information Technology	3
COMP 200	Business Information Technology	3
CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4
CONT 116	Financial Accounting II	4

DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		51 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
CONT 421	Contribution on P.R. Income, for Individuals	3
CONT 430	Managerial Accounting	3
GER 317	Labor-Management Relations	3
GER 425	Strategic Planning	3
MER 213	Advertising	3
MER 312	Marketing Management	3
RHUM 320	Human Resources Management	<u>3</u>
Total Credits		21 crs.

FREE ELECTIVE	3 crs
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BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH A MAJOR IN ACCOUNTING

The Accounting Program is designed to train students with the knowledge and skills necessary to provide financial information useful for decision making to managers. In addition, it provides information to investors who need to have access to the economic performance and conditions of the company. Accounting can be defined as an information system that provides reports for internal and external use. External users, such as: government, banking entities, creditors and others according to the nature of the business, will have to evaluate the company's operations, capacity and effectiveness of its managers to fulfill their obligations.

To complete the requirements of the Bachelor of Business Administration program with a concentration in Accounting, the student must satisfactorily pass 128 credits. Of which 48 are in the general education component, 51 credits in core requirements, 26 credits in concentration requirements and 3 credits in electives.

Program Mission

The mission of the Bachelor's Degree in Business Administration with a concentration in Accounting is to train professionals with a high degree of integrity and competence in the knowledge and skills of accounting practice, allowing them to analyze and make decisions with a profound vision of reality and the social responsibility that this implies.

General Objectives of the Program

The general objectives of the Bachelor of Business Administration program with a concentration in Accounting are:

1. To develop professionals with an analytical, logical and efficient mind that can implement accounting systems in companies based on the importance of the human being in society.
2. To develop professionals who understand the importance of the integrity of ethical principles and who direct their conduct within a value system.
3. Stimulate the ability to analyze the company's financial data to facilitate management's decision-making process and achieve the optimal use of resources.
4. To develop students' skills in the management of all phases of the accounting cycle, enabling them to enter the business world in a globalized environment.
5. To prepare students in auditing knowledge so that by putting it into practice they can express an opinion on the financial condition of a company.
6. To provide educational experiences related to the environment of the profession in the modern company while stimulating him/her to become a consultant and financial advisor.

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

General Education Requirements	48
Core Requirements	51
Concentration Requirements	26
Free Elective	<u>3</u>
Total Credits	128 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
COMP 101	Fundamentals and Applications of Information Technology	3
COMP 200	Business Information Technology	3
CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4

CONT 116	Financial Accounting II	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		51 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
CONT 217	Intermediate Accounting I	4
CONT 218	Intermediate Accounting II	4
CONT 300	Government (Fund) Accounting	3
CONT 419	Advanced Accounting	4
CONT 421	Contribution on P.R. Income for Individuals	3
CONT 422	Cost Accounting	4
CONT 423	Audit	<u>4</u>
Total Credits		26 crs.

FREE ELECTIVE **3 crs.**

COMBINED PROGRAM BACHELOR-MASTER'S DEGREE WITH SPECIALIZATION IN ACCOUNTING

The combined program is for highly motivated students who, by combining the fundamental knowledge of the specialty, the development of technical skills, and ethics will enable them to compete successfully and develop professionally in less time. The field of accounting focuses on the development and interpretation of financial information, critical for managerial decision making. This field is a dynamic one, in constant growth with different sub-specialties, which offers challenges and job stability to its practitioners. Accounting professionals are prepared to solve complex problems in the application of accounting standards and methods, and participate creatively in managerial decision making. The labor market offers accounting graduates the opportunity to join companies that allow them to pursue careers in senior executive positions with fiscal or financial responsibilities, Treasurers, Controllers, Budget Directors, Auditors or Consultants. Likewise, it is important to note that today's working world demands more prepared professionals, with greater capacity for communication, analysis and synthesis, and who demonstrate greater competitiveness.

Master's course credits are not covered by Pell Grant.

Program Objectives:

1. Promote the training of competent professionals committed to the profession.
2. To develop technical, conceptual and affective skills that will allow the student to practice the profession adapting to changes in an effective manner.
3. Strengthen oral and written communication skills, allowing them to express with clarity and precision the issues related to their profession.
4. Promote affective values and social responsibility that allow students to project themselves as agents of social change.
5. Design a program that meets the legal requirements established for a CPA candidate.
6. To guide the student to the achievement of his or her planned professional goals and to keep abreast of changes in the profession.

**BACHELOR'S/MASTER'S DEGREE IN BUSINESS ADMINISTRATION
WITH A MAJOR IN ACCOUNTING**

General Education Requirements	48
Core Requirements	51
Undergraduate Level Requirements	<u>26</u>
Total Credits	125 crs.

Graduate Level Requirements	
Core Requirements	15
Specialty Requirements	12
Grade Requirement	<u>3</u>
Total Credits	30 crs.

Total combined degree credits **155 crs.**

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS UNDERGRADUATE LEVEL

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
COMP 101	Information Technology Fundamentals and Applications and Applications of Information Technology	3
COMP 200	Business Information Technology	3
CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4
CONT 116	Financial Accounting II	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		51 crs.

CONCENTRATION REQUIREMENTS AT THE UNDERGRADUATE LEVEL

COURSE	COURSE TITLE	CREDITS
CONT 217	Intermediate Accounting I	4
CONT 218	Intermediate Accounting II	4
CONT 300	Accounting for Government (Funds)	3
CONT 419	Advanced Accounting	4
CONT 421	Contributions on income for individuals	3
CONT 422	Cost Accounting	4
CONT 423	Audit	<u>4</u>
Total Credits		26 crs.

CORE GRADUATE LEVEL REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
CONT 600	Managerial Accounting	3
EST 600	Statistics for Decision Making	3
FIN 600	Managerial Finance	3
GER 600	Business Policy and Ethics	3
SCI 600	Management Information Systems	<u>3</u>
Total Credits		15 crs.

SPECIALTY REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
CONT 603	Advanced Cost Accounting	3
CONT 609	Advanced Topics in Financial Reporting (GAAP-IFRS)	3
CONT 610	Advanced Auditing and Fraud	3
CONT 611	Federal Contributions (Corporations and Partnerships)	<u>3</u>
Total Credits		12 crs.

DEGREE REQUIREMENTS (3 CREDITS)

ADEM 701	Community Service Project	3
ADEM 702	Seminar on Conceptual Reaffirmation, Validation and Research I-II-III	3
ADEM 700	Theses	6
MPPI 797	Research Preparation and Presentation Template	3
Total Credits		3 crs.

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

The Management Program is designed to facilitate entry into the business world with the knowledge to plan, organize, direct and control the efforts of the members of an organization, with a high sense of ethics and professional integrity. It will also enable the student to use human resources more effectively and achieve the company's objectives in a world of constant change.

To complete the requirements of the Bachelor of Business Administration program with a concentration in Management, the student must satisfactorily pass 126 credits. Of which 48 are from the general education component, 51 credits in core requirements, 21 credits in concentration requirements and 6 credits in electives.

Program Mission

The mission of the Bachelor of Business Administration with a concentration in Management is to prepare students to be enterprising, professional, competent, well-educated and ethical managers.

General Objectives of the Program

The general objectives of the Bachelor of Business Administration program with a concentration in Management are:

1. To develop the appropriate administrative knowledge to enable students to perform as a manager in commercial and/or governmental enterprises.
2. To train managers who understand the role of the company in society and the effect of this relationship on the company's operations.
3. To develop the necessary knowledge for the analysis in the design of strategic plans.
4. To train a technically developed, deeply human and ethical manager, responsive to the needs of society.
5. Develop the ability to identify problems, analyze situations and use the decision making process effectively.
6. Develop the ability to identify problems, analyze situations and use the decision making process effectively.

**BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION
WITH A MAJOR IN MANAGEMENT**

General Education Requirements	48
Core Requirements	51
Concentration Requirements	21
Free Electives	<u>6</u>
Total Credits	126 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
COMP 101	Fundamentals and Applications of Information Technology	3
COMP 200	Business Information Technology	3
CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4

CONT 116	Financial Accounting II	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		51 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
CONT 430	Managerial Accounting	3
GER 260	International Trade	3
GER 315	Society and Business	3
GER 325	Effective Supervision	3
GER 375	Production and Operations Management	3
GER 425	Strategic Planning	3
RHUM 320	Human Resources Management	<u>3</u>
Total Credits		21 crs.

ELECTIVES **6 crs.**

BACHELOR'S DEGREE OF BUSINESS ADMINISTRATION WITH A MAJOR IN INNOVATION AND ENTREPRENEURSHIP

The Bachelor's Degree in Business Administration with a major in innovation and entrepreneurship is a four-year academic program that offers students the tools to: develop their entrepreneurial spirit, be visionary, creative, work with new technologies, accept challenges and adapt to changes, develop analytical and investigative skills for decision making, and enhance their leadership abilities.

This program will give them the opportunity to be part of the solution to the country's economic problem through the generation of employment, self-employment and self-management; to develop skills to recognize business opportunities, to acquire knowledge and experience in the organization, gestation and management of a business in the Business Incubator. To complete the requirements of the Bachelor of Business Administration program with a concentration in Business Innovation and Management, the student must satisfactorily pass 129 credits. Of which 48 are in the general education component, 45 credits in core requirements and 36 credits in concentration requirements.

Program Mission

The mission of the Bachelor's Degree in Business Administration with a concentration in Business Innovation and Management is to train students with entrepreneurial attitudes, with a high sense of social responsibility and service; who have the vision for business, social and economic development of the country, attending to the formation of the whole human being aligned with the philosophy of St. Thomas Aquinas.

General Objectives of the Program

The general objectives of the Bachelor of Business Administration program with a concentration in Business Innovation and Management are:

1. To develop the knowledge of administration and effective management in critical areas of the business.
2. To prepare the student to understand and comprehend the critical areas of the business.
3. Guide the student in the application of knowledge in the incubator.
4. Enhance research and analytical skills.
5. Learn to innovate in business through technology.
6. Demonstrate leadership and communication skills in conflict resolution.

**BACHELOR'S DEGREE OF BUSINESS ADMINISTRATION
WITH A MAJOR IN INNOVATION AND ENTREPRENEURSHIP**

General Education Requirements	48
Core Requirements	4
Concentration Requirements	<u>36</u>
Total Credits	129 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
COMP 101	Fundamentals and Applications of Information Technology	3
CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4
CONT 116	Financial Accounting II	4

DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		45 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
EMP 300	Technological Strategies for Entrepreneurship	3
EMP 320	Corporate Financial Sustainability	3
EMP 330	Project Management	3
EMP 340	International Business Management	3
EMP 350	Pre-Incubation: Business Model Innovation and Validation	3
EMP 360	Business Simulation (Capstone)	3
EMP 380	Permits, Licenses and Regulations	3
EMP 410	Research and Entrepreneurship Chair	3
EMP 420	Business Incubator Internship I	6
EMP 421	Business Incubator Internship II	<u>6</u>
Total Credits		36 crs.

BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH A MAJOR IN MARKETING

The Marketing Program is designed to develop the knowledge and skills to plan and create goods and services, price, promote and distribute them. These strategies will be carried out taking into account the individual objectives and needs of the organization and society.

To complete the requirements of the Bachelor of Business Administration program with a concentration in Marketing, the student must satisfactorily pass 128 credits. Of which 48 are from the general education component, 51 credits in core requirements, 21 credits in concentration requirements and 3 credits in electives.

Program Mission

The mission of the Bachelor of Business Administration with a concentration in Marketing is to develop the knowledge and skills to plan and create goods and services, price them, promote them, and distribute them. These strategies will be carried out taking into account the individual objectives and needs of the organization and society.

General Objectives of the Program

The general objectives of the Bachelor of Business Administration program with a concentration in Marketing are:

1. Expose the student to the principles, concepts, processes and activities that govern the marketing discipline.
2. Strengthen the student's knowledge acquired in marketing for its implementation.
3. Develop the ability to analyze, diagnose and take appropriate actions in situations where the organizational marketing function is needed.
4. Challenge the student to be creative through the implementation of strategies and the use of technology.

**BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION
WITH A CONCENTRATION IN MARKETING**

General Education Requirements	48
Core Requirements	51
Concentration Requirements	21
Free Elective	<u>3</u>
Total Credits	123 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
COMP 101	Information Technology Fundamentals and Applications and Applications of Information Technology	3
COMP 200	Business Information Technology	3

CONT 110	Business Mathematics	3
CONT 115	Financial Accounting I	4
CONT 116	Financial Accounting II	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		51 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
MER 213	Advertising	3
MER 301	Consumer Conduct	3
MER 312	Marketing Management	3
MER 315	Retail Sales Management	3
MER 320	Personal Sales	3
MER 416	International Marketing	3
MER 420	Marketing Research	<u>3</u>
Total Credits		21 crs.

FREE ELECTIVE	3 crs.
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BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH A MAJOR IN HUMAN RESOURCES

The Human Resources Program is designed to integrate the student into the dynamic world of business and to create awareness in the effective and ethical utilization of human resources. Human Resources management is one of the most important areas in the operation of companies, since it gives special attention to its personnel to ensure the selection, retention and improvement of individuals.

To complete the requirements of the Bachelor of Business Administration program with a concentration in Human Resources, the student must satisfactorily pass 128 credits. Of which 48 are in the general education component, 51 credits in core requirements, 21 credits in concentration requirements and 3 credits in electives.

Program Mission

The mission of the Bachelor of Business Administration with a concentration in Human Resources is to prepare students to practice as managers by giving greater emphasis to their personnel to ensure the selection, retention and improvement of the individual.

General Objectives of the Program

The general objectives of the Bachelor of Business Administration program with a concentration in Human Resources are:

1. To train the student to apply the concepts of human resources management to perform effectively in this area with a human, ethical and legal sense and responding to the needs of society.
2. To develop the skills and knowledge necessary to perform effectively as a supervisor of the functional areas of personnel with a humanistic vision of the world.
3. Develop the skills to identify and solve personnel problems having a balanced conceptual perspective of the analytical importance and impact of decisions on personnel motivation and business effectiveness.
4. To enable the student to develop effective training, performance evaluation and compensation programs consistent with the strategic purposes of the company.
5. Develop the skills to advise managers and executives to achieve a greater contribution of human resources to the organization's productivity.
6. Recognize the importance of corporate human resources in the social and economic development of the country.

**BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION
WITH A MAJOR IN HUMAN RESOURCES**

General Education Requirements	48
Core Requirements	51
Concentration Requirements	21
Free Elective	<u>3</u>
Total Credits	123 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 200	Entrepreneurship II	3
ADM 285	Business Communication in Spanish	3
ADM 286	Business Communication in English	3
ADM 300	Business Skills Workshop	3
COMP 101	Fundamentals and Applications of Information Technology	3
COMP 200	Business Information Technology	3
CONT 110	Business Mathematics	3

CONT 115	Financial Accounting I	4
CONT 116	Financial Accounting II	4
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ECON 200	Economy	3
EST 200	Statistics for Business	4
FIN 215	Commercial Finance	3
GER 110	Management and Leadership	3
MER 110	Marketing	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		51 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
GER 317	Labor-Management Relations	3
GER 425	Strategic Planning	3
RHUM 320	Human Resources Management	3
RHUM 485	Personnel Training and Appraisal	3
RHUM 488	Wage and Fringe Benefit Administration	3
RHUM 492	Labor Legislation	3
RHUM 493	Company Personnel Case Studies	<u>3</u>
Total Credits		21 crs.

FREE ELECTIVE **3 crs.**

BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION WITH A MAJOR IN INFORMATION NETWORKS

The Bachelor's Degree in Business Administration with a major in Information Networks is designed to train professionals trained in the design, implementation and administration of information networks from the perspectives of business operation. The student is prepared with a high degree of professionalism in the mastery of technological and administrative skills.

To complete the requirements of the Bachelor of Business Administration program with a concentration in Information Networks, the student must satisfactorily pass 128 credits. Of which 48 are in the general education component, 31 credits in core requirements, 45 credits in concentration requirements and 3 credits in electives.

Program Mission

The mission of the Bachelor of Business Administration with a concentration in Information Networking is to expose students to the most innovative technological tools in the area of information network systems.

General Objectives of the Program

The general objectives of the Bachelor of Business Administration program with a concentration in Information Networking are:

1. To enable the student with the knowledge for the design, construction and implementation of a computer network.
2. To train students in network administration under the theoretical framework of business administration.
3. Develop students' skills to improve their ability to work with network and telecommunications technology.
4. To develop in students the competencies and skills required to work with networks and related technologies in order to compete successfully in the job market.
5. Promote in students the ethical and responsible use of computer technology and its impact on society.
6. Stimulate the student to fulfill with responsibility his mission in the company for progress.

**BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION
WITH A MAJOR IN INFORMATION NETWORKS**

General Education Requirements	48
Core Requirements	31
Concentration Requirements	45
Elective	<u>3</u>
Total Credits	127 crs.

GENERAL EDUCATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
ADM 111	Introduction to Entrepreneurship	3
CS103	General Fundamentals of Science; Life Integration	3
CSOC110	Introduction to Social Sciences	3
EDF 106	Lifestyles & Wellness	3
EREL_____	<i>Several options</i>	3
	EREL 113: Bible and Christian Life	
	EREL 205: Sexuality and Christian Marriage	
	EREL 215: Christian Social Thought	
	EREL 238: Introduction to Christology	
ESCO103	Student Success and Community Service	3
ESP107	Grammatical Skills through Reading and Writing	3
ESP108	Advanced Grammatical Skills through Reading and the Editorial Office	3
FIL201	Principles of Philosophy	3
FIL 302	Philosophy of the Human Being and its ethical behavior	3
HIST350	History of Puerto Rico	3
HUM119	Western Cultural Development I	3
HUM 120	Western Cultural Development II	3
ING105	Grammatical English	3
ING106	Speaking Communication in English	3
MATE106	Intermediate Algebra I	<u>3</u>
Total credits		48 crs.

CORE REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
DMER 110	Legal and ETHICAL Aspects in Businesses	3
ADM 285	Comunicación Empresarial en Español	3
ADM 286	Business Communication in English	3
ADM 200	Entrepreneurship II	3
COMP 101	Fundamentals and Applications of Information Technology	3
CONT 115	Financial Accounting I	4
GER 110	Management and Leadership	3
ING 203	Basic Conversational English	3
MAT 220	Finite Mathematics and its Applications to the Business Administration	3
RHUM 386	Organizational Behavior	<u>3</u>
Total Credits		31 crs.

CONCENTRATION REQUIREMENTS

COURSE	COURSE TITLE	CREDITS
COMP 215	Programming I	3
COMP 232	Programming II	3
COMP 240	Operating Systems	3
COMP 250	Programming III	3
REDES 235	Computer Architecture	3
REDES 245	Database Structure and Management	3
REDES 300	Web Page Design	3
R3EDES 315	Networks I- Introduction to Networks	3
REDES 316	Networking II - OSI Model Levels 1 and 2	3
REDES 333	Computer Network Analysis, Design and Deployment	3
REDES 417	Networks III- Network Administration	3
REDES 418	Networking IV- Computer Network Security	3
REDES 426	Information Network Audit	3
REDES 438	Project Planning and Management	3
REDES 439	Administration of a Computer Center	<u>3</u>
Total Credits		45 crs.

FREE ELECTIVE

3crs

COURSE DESCRIPTIONS

ADM 111 - INTRODUCTION TO ENTREPRENEURSHIP. This course will study the basic aspects in the development of a business. It will include the legal requirements applicable to Puerto Rico. The student will be exposed to the formation process that includes the analysis of opportunities, financial aspects, marketing, and general management of the small business. The general guidelines for the development of a business plan will be discussed. In addition, the ethical, social, and economic aspects of business management will be discussed. 3 credits. 45 hrs.

ADM 200 - ENTREPRENEURSHIP II. Prerequisite: ADM 111. This course promotes the development of creativity and in turn the reasoned analysis of the business model including social entrepreneurship. It studies the challenges and requirements of converting product or service ideas into a business model through a well-defined and structured plan. In addition, the student will learn the components of the business plan as an essential tool of the entrepreneurial process. 3 credits. 45 hrs.

ADM 285 - BUSINESS COMMUNICATION IN SPANISH. Prerequisite: ESP 107. Analysis and practice of the characteristics and modern skills of oral communication and business writing in Spanish. The student will make use of technology to write and prepare different documents related to business administration, emphasizing grammar, style, and legal and ethical aspects. On the other hand, the use of resources such as e-mail, social networks, and other technological means used in modern companies as effective means of communication is analyzed. Emphasis will be placed on Oral Communication, ethics, and professional etiquette in real situations that guarantee the student an effective professional projection in the workplace. This course requires the use of the computer lab. 3 credits. 45 hrs.

ADM 286 - BUSINESS COMMUNICATION IN ENGLISH. Prerequisite: ING 105. Basic courses in business language and writing are intended to provide the student with knowledge of the basic tools of oral and written expression in the business world. Special emphasis is given to vocabulary, reading and business writing with coordinated skills. This course will be complemented with the use of the Computer Lab. Psychological fundamentals of effective communication. Practice in writing routine letters and specialized forms. Oral practice through discussion of trade publications and information obtained in local and international trade. This course requires the use of the computer lab. 3 credits. 45 hrs.

ADM 300 - BUSINESS SKILLS WORKSHOP. Prerequisite: ADM 200. This course aims to promote professional performance of excellence through learning experiences and directed work in the business area. It includes the development of communication skills, creativity and innovation, decision making, leadership, group work, entrepreneurship, interpersonal relations, negotiation, and ethics. 3 credits. 45 hrs.

AEOF 310 - EXECUTIVE OFFICE ADMINISTRATION. Continue to develop and train the student to perform in their functions as a good office administrator. Emphasis will be placed on participation and collaboration towards their supervisors, how to be a good leader, application in decision making, the process of making a scientific investigation, functions of an office supervisor, such as: knowledge about the concept of total quality, globalization of markets and some labor laws, among others. Cases will be studied, and their solutions will be applied. 3 credits. 45 hours.

AEOF 320 - PROTOCOL, ETIQUETTE AND EVENT ORGANIZATION. This course will be offered using a theoretical-practical format, in which the student is exposed to topics related to the organization of events, protocols and etiquette in companies. Techniques and tools for planning a corporate event, such as budget preparation, are presented. Emphasis is placed on the role of the organizational communicator in the planning and management of the event, as well as the protocol and etiquette techniques to be followed. 3 credits. 45 hours.

AEOF 410 - PERSONNEL TRAINING AND EVALUATION. This course will continue training students to successfully perform their functions as executive administrators of an office. Emphasis will be placed on the procedure to be followed when planning and implementing successful performance evaluation systems for a company's personnel. In addition, strategies that should be applied when planning, designing, and offering training to the personnel working in a company will be presented. It will include the study of needs to be carried out to train personnel. Cases will be studied, and their solutions will be applied. Three (3) hours of lecture, 3 credits.

AEOF 420 - KNOWLEDGE APPLICATION SEMINAR. Prerequisites: ASOF 110, ASOF 122, ASOF 230, ASOF 235 ASOF 332, AEOF 310 and AEOF 320. Integrates cognitive and psychomotor experiences practiced throughout the curriculum of the Executive Office Administration program. The focus of this seminar is reinforcement-based learning based on the practice of competencies developed in the courses offered in this academic concentration. This seminar is offered at the culmination of the professional degree. This course requires the use of computer lab. 3 credits. 45 hours.

ALEM 211 - ELEMENTARY GERMAN I. Introductory German course that presents the student in an integrated manner all the language skills: reading, writing, oral communication and listening comprehension) in real communicative contexts. Emphasis is placed on pronunciation and conversation, working on grammatical structures based on the needs of the speaker. Fundamental aspects of German culture are presented. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits. 45 hrs.

ALEM 212 - ELEMENTARY GERMAN II. Prerequisite: ALEM 211. Second introductory German course in which the student continues to be introduced to all language skills (reading, writing, speaking and listening comprehension) in an integrated manner in real communicative contexts while advancing in the mastery of the language. Emphasis is placed on pronunciation and conversation, working on more complicated grammatical structures based on the needs of the speaker. Aspects of German culture are explored in depth. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits. 45 hrs.

ARTE 210 - APPRECIATION OF FINE ARTS. After an introduction to the basic criteria of art appreciation, the student will analyze, evaluate and give his own interpretation of the great works of art of the West with reference to the most important historical styles. The study of the development of the visual arts in Puerto Rico, its periods and artists will be included as a reference. 3 credits. 45 hrs.

ARTE 223 - HISTORY OF WESTERN ART. Chronological study of the development of the fine arts in the West, namely painting, sculpture, architecture, photography, etc. through its major movements from Classical Antiquity to Postmodernism. 3 credits. 45 hrs.

ARTE 240 - BASICS OF DRAWING. Introduction to drawing concepts and techniques. The student will experiment with the visual vocabulary in different media such as pencil, charcoal, and ink. The course requires further hours of practice in addition to the materials. 3 credits. 45 hrs.

ARTE 248 - COMPARATIVE CINEMA. This course, after offering an introduction to the basic criteria for the appreciation of cinema as a seventh art, will analyze paradigmatic films in the history of cinema. Students will attend screenings of various cinematic genres, both Western and Eastern. Further hours of film exposure are required. 3 credits. 45 hrs.

ARTE 340 - BASIC PAINTING. Introduction to basic painting concepts and materials, developing skills in the study of color, compositional elements, and painting techniques. It works with the development of the idea from its beginnings to the expression of the concept in the plastic language of painting. The course requires further hours of practice in addition to the materials. 3 credits. 45 hrs.

ARTE 348 - INTRODUCTION TO GRAPHIC ARTS. Theory and development of graphic design and printed material. Development of manual sketch preparation skills and analysis of their role in the creative process. Fundamental principles of design preparation with emphasis on manual and digitized layout technique. Experimentation with basic publication layout problems. Requires extra class hours of graphic laboratory. 3 credits. 45 hrs.

ASOF 110 - RAPID WRITING IN SPANISH AND ENGLISH. The purpose of the course is to familiarize the student with the skill of rapid writing in Spanish and English, by means of abbreviations using the letters of the alphabet. Emphasis will be placed on quality computer transcription, language proficiency in Spanish and English, and punctuation. This course requires the use of a computer lab. 3 credits, 45 hours.

ASOF 120 - KEYBOARDING. Learning the alphabetic, numeric, symbolic, and function keyboards of the computer system. Development of the correct techniques of typing on a computer with special emphasis on the basic skills of speed, accuracy, and collation. It provides different rules and exercises for learning keyboarding and its application in extreme block-style business letters and traditional memos. This course requires the use of a computer lab. 3 credits. 45 hours.

ASOF 121 - DOCUMENT PRODUCTION I. Prerequisite: ASOF 120. This course will offer the student the opportunity to continue developing the techniques and skills previously learned on computerized equipment using updated software. They will apply these in the preparation of business letters in different styles, memos in a traditional and simplified styles, tables, and reports. This course requires the use of a computer lab. 3 credits. 45 hours.

ASOF 122 - DOCUMENT PRODUCTION II. Prerequisite: ASOF 121. The student will continue skill development on computerized equipment using up-to-date software. Emphasis will be given to the production of business documents, such as two-sheet special part letters, two-sheet memoranda, merge correspondence, manuscripts with footnotes and tables, and legal documents. This course requires the use of a computer lab. 3 credits. 45 hours.

ASOF 230 - SYSTEMS ADMINISTRATION AND DOCUMENT CONTROL. Introduction to the organization and procedures for manual and electronic document management. Emphasis will be placed on the alphabetical system (names of individuals, commercial firms, and government agencies), numerical and by subject, for applying the Access database program. Also, ethical, and legal aspects of document

management; transfer and charge systems; materials and equipment for manual and electronic correspondence filing; specialized records control; imaging technology, procedure manuals, document digitalization, and others will be presented. This course requires the use of computer lab. 3 credits. 45 hours.

ASOF 235 - APPLICATION AND INTEGRATION OF PROGRAMS. Prerequisite: ASOF 120. Training and integration of applications used in offices by means of the computer using up-to-date software such as: Word, Excel, PowerPoint, Access, Publisher, Web Page, and Outlook. This course requires the use of computer lab. 3 credits. 45 hours.

ASOF 240 - MEDICAL TERMINOLOGY, ABBREVIATIONS AND CODING. This course emphasizes terminology, abbreviations and the use and management of didactic resources for clinical diagnoses and medical procedures. It also emphasizes modifiers and all those elements that promote the decision of correct use and application according to the protocols and requirements of insurers and other areas of the industry to produce a health services claim. This course requires the use of computer lab. 3 credits. 45 hours.

ASOF 241 - MANUAL BILLING OF HEALTH PROFESSIONAL SERVICES. This course provides students with the procedures, protocols, rules, regulations, and decision making for billing professional health services to different medical plans. This course requires the use of computer lab. 3 credits. 45 hours.

ASOF 242 - ELECTRONIC BILLING OF PROFESSIONAL HEALTH SERVICES. Prerequisite: ASOF 241. Application for the processing of professional services billing using an electronic transmission program. The student will complete claims processing and collection using electronic transmission systems. This course requires the use of computer lab. 3 credits. 45 hours.

ASOF 244 - ADMINISTRATIVE PROCEDURES AND LEGAL ASPECTS IN HEALTH SERVICE OFFICES. This course emphasizes the administrative procedures, regulations and privacy laws that apply in health service offices. It emphasizes the administration and procedure of medical documents and the documents required to establish one's own business, among others. It analyzes the different appeal processes for rejected claims and the importance of audit reports. It trains the student to perform successfully in their functions as a good office systems administrator creating awareness of the ethical aspect of the profession. This course requires the use of computer lab. 3 credits. 45 hours.

ASOF 245 - ELECTRONIC MEDICAL RECORD. This course emphasizes the knowledge, necessary skills and regulations to prepare the patient's medical record manually and electronically. It emphasizes on electronic medical record technology which facilitates coordinated patient care among different health care providers. This course requires the use of a computer lab. 3 credits. 45 hours.

ASOF 250 - SEMINAR AND PRACTICUM. Prerequisites: all concentration courses. Training in skills, techniques, medical office procedures, billing cycle and medical plan claims in selected health professional services offices as centers where the development of ethics, responsibility, among others, will be emphasized. Students will have the opportunity to attend practice seminars, workshops, case discussions and other activities that facilitate the transition from the university to the work setting. One hundred eighty (180) semester hours of practicum, sixteen (16) hours of seminar. Four (4) credits.

ASOF 332 - OFFICE ADMINISTRATION PROCEDURES. Development and training of students to perform successfully in their functions as good office administrators. Emphasis will be given to teamwork, case

studies, use of critical analysis in different office situations, meeting and conference planning, effective stress and time management, travel coordination and arrangements, creating awareness of the ethical aspect of the profession, career planning and professional growth, among others. 3 credits. 45 hours.

ASOF 435 - OFFICE SEMINAR AND PRACTICE. Prerequisites: ASOF 110, 122, 230, 332, AEOF 310, 410 and 420. Training in office skills by practicing different tasks in selected private or government agencies as centers where the development of initiative and responsibility, among others, will be emphasized. Students will have the opportunity to attend workshops, coordinate and prepare a lecture or oral report for the practicum seminar, attend practicum seminars, case discussions and other activities that facilitate the transition from college to the office. 180 practicum hours, 16 seminar hours. 4 credits.

BIOL 115 - FUNDAMENTALS IN MICROBIOLOGY. In this course the student will analyze the basic principles of microbiology with emphasis on the different groups of pathogenic microorganisms (bacteria). Students will also study the morphology, physiology, genetics, metabolism, prevention, and control of the most important groups of pathogenic microorganisms. Each student will conduct research on one of the topics included in the thematic outline, framed in the field of public health in Puerto Rico. The course will be directed to develop in the student an analytical mentality, critical judgment, and critical thinking skills to prevent and solve problems related to current infectious processes and their impact on the field of public health. In addition, laboratory practical's will be included to complement the course units. The course is geared toward the needs of nursing students. The course includes 3 hours of lecture; 4 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 201 - GENERAL BIOLOGY I. Fundamental concepts and principles of biology. Emphasis on the molecular, cellular, and biochemical levels. Principles of genetics. Course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 202 - GENERAL BIOLOGY II. Prerequisite: BIOL 201. Principles of ecology, evolution of anatomical and physiological systems of organisms, taxonomy, and plant morphology. Includes laboratory practical's complementary to the course. Course includes 3 hours of lecture, 3 hours laboratory complementary to the course. One semester. 4 credits.

BIOL 300 - FUNDAMENTALS IN MICROBIOLOGY. Prerequisite: BIOL. Basic principles, morphology, physiology, movement, metabolism, reproduction, and nutritional requirements of bacteria, algae, fungi, helminths, and viruses. Medical and industrial importance of these organisms. Includes laboratory practices complementary to the course. The course includes 3 hours of lecture, 4 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 303 - ZOOLOGY. Prerequisite: BIOL 202. Theoretical models of the principles of evolution, systematics, taxonomy, anatomy and physiology of protists and invertebrate and vertebrate animals. Includes laboratory practical's complementary to the course. Course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

Prerequisite: BIOL 202. Evolutionary relationships among the various plant taxonomic groups through the study of plant anatomy, physiology, growth, and development. Includes laboratory practical complementary to the course. Course includes 3 hours lecture, 3 hours laboratory complementary to the course. One semester. 4 credits.

BIOL 316 - HISTOLOGY. Prerequisite: BIOL 202. Microanatomy, ultrastructure and functions of tissues and organs of animals and plants. Includes laboratory practical complementary to the course. Course includes 3 hours lecture, 3 hours laboratory complementary to the course. One semester. 4 credits.

BIOL 324 - GENETICS. Prerequisite: BIOL 202. Principles of Mendelian genetics and molecular genetics with emphasis on DNA, RNA expression and related biotechnology. Includes laboratory practical ancillary to the course. Course includes 3 hours lecture, 3 hours laboratory complementary to the course. One semester. 4 credits.

BIOL 330 - DEVELOPMENTAL BIOLOGY Prerequisite: BIOL 202. Basic processes of animal and plant development from the molecular level to the organism. Emphasis on the control of these processes at the cellular level. Includes laboratory practical complementary to the course. Course includes 3 hours lecture, 3 hours laboratory complementary to the course. One semester. 4 credits.

BIOL 357 - HUMAN ANATOMY AND PHYSIOLOGY I. PREREQUISITE: BIOL 202. Prerequisite: BIOL 202. This course presents an introduction to the principles of human anatomy and physiology. Anatomical and directional position and terms, body cavities, regions and quadrants will be considered. The student will study the different levels of structural organization of life, with emphasis on the structure and function of the integumentary, skeletal, muscular, and nervous systems. Students will also analyze the interrelationships between the organ systems leading to body homeostasis. Laboratory practice will be included as a complementary part of the course. Models, films, and other audiovisual resources will be used to obtain a better understanding of the units of study. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 358 - HUMAN ANATOMY AND PHYSIOLOGY II. Prerequisite: BIOL 202 and BIOL 357. This course is designed to study human anatomy and physiology, particularly the nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. The student will analyze the interrelationship between the various organ systems for the maintenance of homeostasis. An introduction to human development and heredity will also be presented. Laboratory experiences will be provided to allow the student to understand the concepts and skills of human anatomy and physiology through activities, exercises and demonstrations. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 411 - ECOLOGY. Prerequisite: BIOL 202. Interactions between biotic and abiotic constituent factors of an ecosystem. Analysis of environmental problems. Includes trips to different ecosystems of Puerto Rico. Includes laboratory practices complementary to the course. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 413 - IMMUNOLOGY. Prerequisites: BIOL 300 and BIOL 324. Study of the mechanisms that the host possesses to maintain the balance of its internal environment. Includes the study of barriers, cells, products of immune processes, genetic control, cellular interactions, and regulation of the immune response. It also includes the study of the various diseases of the immune system that affect humans. It includes laboratory practices complementary to the course. The course includes 3 hours of lecture, and 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 415 - PARASITOLOGY. Prerequisite: BIOL 300. During the course, the basic principles and concepts about the evolution of parasites will be studied. Emphasis will be given to those organisms that are pathogenic to humans, studying their morphology, life cycle, damage they produce, and prevention and control measures. It includes laboratory practices complementary to the course. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 421- PHYSIOLOGY AND PATHOPHYSIOLOGY I. PREREQUISITES: BIOL 202. Prerequisites: BIOL 202. This course reviews the physical and chemical processes occurring in the human body that are responsible for the maintenance of health and the pathophysiology of the disease. Topics covered in the course include physiology, genetic diseases, and the physiology and pathophysiology of the integumentary, musculoskeletal, nervous, lymphatic, and cardiovascular systems. The course includes 3 hours of lecture, and re, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 422- PHYSIOLOGY AND PATHOPHYSIOLOGY II. Prerequisites: BIOL 202 and BIOL 421. This course reviews the physical and chemical processes occurring in the human body that are responsible for the maintenance of health and the pathophysiology of disease. Topics covered in the course include the physiology and pathophysiology of digestive, urinary, respiratory, endocrine, and reproductive processes. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

BIOL 453 - MOLECULAR CELL BIOLOGY. Prerequisites: BIOL 202 and QUIM 332. Analysis of the physiology and biochemistry of the cell with emphasis on cellular metabolism and its control mechanisms. Course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

COMP 101 - FUNDAMENTALS AND APPLICATION OF INFORMATION TECHNOLOGY. The student will define computer systems. They will study the basic components, characteristics, properties, and operation of computers. In addition, he/she will distinguish the concepts of hardware and software and will use word processing, electronic worksheets, and database programs. The student will analyze the impact of this technology on society and the individual. Students will effectively employ techniques for searching and managing information on the Internet. This course requires the use of a computer lab. 3 credits. 45 hrs.

COMP 110 - INTRODUCTION TO COMPUTER SCIENCE AND PROGRAMMING. This course introduces the student to the world of computing, its concepts, and techniques to solve problems through programming and its algorithms. To achieve this, a high-level programming language will be used along with open-source libraries that will allow the student, through practice, to increase the reasoning used to solve, model, and interpret data. This core course serves as the basis for the "Core" and "Concentration" courses of the Applied Computer Science program. 3 credits. 45 hrs.

COMP 112 - ETHICAL AND LEGAL ASPECTS IN COMPUTER SCIENCE. In this course the student will investigate how each discipline in computer science impacts society, the legal implications, and how technological advances have affected the privacy of people in different areas of their lives. The course, as recommended in the Body of Knowledge, contains the curricular components necessary for a program in Applied Computer Science (CS2013) and provides the student with the necessary competencies to understand how technology and science affect -positively and negatively- the social environment and above all his role as an active agent, responsible for the consequences that new technological developments may bring. 3 credits. 45 hrs.

COMP 200 - INFORMATION TECHNOLOGY FOR BUSINESS. Prerequisite: COMP 101. This course introduces students to the use of technology as an indispensable tool for success in the business world. The contents to be covered range from legal and ethical aspects in the use of tools such as social networks, blogs and portals, the different existing programs for businesses, the electronic spreadsheet, and database management for business applications. This course requires the use of the computer lab. 3 credits. 45 hrs.

COMP 215 - PROGRAMMING I. In this course fundamental concepts of computer operation and programming will be studied by means of a third-generation high-level language. Among the topics and concepts to be introduced are visual, structured, and object-oriented programming, flowcharts, algorithms, functions, cycles, arrays, subroutines, random numbers and file management. This course is oriented to active learning and requires the use of the computer in the classroom and in the computer lab. 3 credits. 45 hrs.

COMP 232 - PROGRAMMING II. Prerequisite: COMP. In this course, students will study a structured programming language with an object-oriented approach that allows them to learn to create applications that can model real life concepts and situations for problem solving. Among the programming concepts that will be studied are modular design of algorithms and programs, Boolean, static and dynamic variables, control structure, procedures and functions, scope of variables, recursion, sets, tables, records, files, dynamic structures, pointers (for application in data structures), graphics and solution of a real life case study. This course focuses its student learning strategy on student "active learning" in the classroom. 3 credits. 45 hrs.

COMP 234 - COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE. Prerequisite: COMP. This course will study the elements of computer architecture and organization based on the logical design of the computer. In addition, the lowest level of programming for a computer using assembly language and machine language or machine code will be studied. To achieve this, the processor will be studied in a deeper way, with its instructions, execution cycles, its logic, numerical system, internal registers, memory access and management, and interconnections to the computer components. Then assembly language programming will be used to gain experience in how instructions are executed, and data are processed from the most basic level of the processor to the output level for the user. 3 credits. 45 hrs.

COMP 240 - OPERATING SYSTEMS. This course introduces the student to the basic concepts of operating systems, their usefulness, and limitations. Processes, operating system deadlocks, peripheral administration and parallel programming are defined and analyzed. Students are introduced to and practice in the operation of the following operating systems: DOS, OS/2 or Windows, and UNIX. This course requires the use of the computer lab. 3 credits. 45 hrs.

COMP 242 - ALGORITHMS AND DATA STRUCTURE. Prerequisite: COMP 232. In this course the student will study the fundamental concepts for the analysis, design, and management of data structures, which the student will then implement in classes through algorithms using an object-oriented programming language. Among the concepts to be covered are data structures such as stacks, queues, interleaved lists, trees and the search and organization techniques used to manage them. This course requires the use of the computer lab. 3 credits. 45 hrs.

COMP 244 - DATABASE MANAGEMENT. In this course the fundamental concepts of relational databases (RDB), non-relational databases (NDB) and distributed databases (DDB) will be studied together with the

practical experience in their use. Among the concepts discussed will be entities, their attributes, data integrity, normalization, SQL language and others. The practical experience includes the construction of models by means of entity-relationship diagrams that will then be applied to the most popular databases such as MySQL and SQL Server. This course requires additional hours in an open computer lab. 3 credits. 45 hrs.

COMP 250 - PROGRAMMING III. Prerequisite: COMP. This course covers advanced object-oriented programming techniques typical of large-scale programming projects. Programming techniques such as object design, inheritance of implementation and/or interface and polymorphism are discussed. Other advanced concepts such as smart pointers, garbage collection, object permanence and programming for the Internet are covered. This course requires the use of the computer lab. 3 credits. 45 hrs.

COMP 300 - THE COMPILER AND PROGRAMMING LANGUAGES. Prerequisite: COMP. This course studies the concepts that allow the operation of the compilers and interpreters that serve the different programming languages. Among the concepts covered are the history of programming languages, their comparison, the compiler, semantics, syntax, parsing, code generation, abstraction mechanisms, programming paradigms, programming environments, among others. 3 credits. 45 hrs.

COMP 310 - COMPUTER GRAPHICS. Prerequisite: COMP. 232. The student will become familiar with the methods and problems of computer graphics. A review of interactive and high-level equipment for high-tech computer graphics will be given. Students will work with linear transformations, homogeneous coordinate systems for two and three dimensions, hidden-line and splices, gray scales and color. The course involves programming work. This course requires the use of the computer lab. 3 credits. 45 hrs.

COMP 320 - SOFTWARE ENGINEERING. Prerequisite: MAT. 240. This course studies the concepts of software engineering and its importance to the area of computer science. These concepts form the basis for the adequate development of programming projects that meet the need for their creation, ethics, and in the correct time and costs for their sustainability. Among the topics to be discussed are software engineering and architecture, the software engineering body of knowledge (SWEBOK), software life cycles, requirements, verification and validation, and software project management. 3 credits. 45 hrs.

COMP 330 - NETWORKING AND WEB PROGRAMMING FOR IOT. Prerequisite: COMP 110, COMP 250. This course introduces the student to the area of networking and the programming of devices interconnected to the world's largest network, the Internet. The interconnectivity of millions of devices to the web allows the collection of data through sensors and input and output devices. The course also introduces the student to the different equipment for the development of IoT devices such as micro-board computers (Raspberry Pi and Arduino). 3 credits. 45 hrs.

COMP 400 - ARTIFICIAL INTELLIGENCE I. Prerequisite: COMP 110, COMP 330. This course studies the basic concepts, history and applications of artificial intelligence in a practical manner. Among the concepts covered are: The history of artificial intelligence "AI", intelligent agents, Turing test, knowledge database, logic, reasoning, learning, communication. This course uses single-board computers for the development of artificial intelligence projects that provide hands-on experience to the student. 3 credits. 45 hrs.

COMP 410 - THE COMPUTER, ITS ELECTRONICS, DIAGNOSIS AND REPAIR. Prerequisite: COMP 240. This course introduces the student to the world of internal computer electronics, its components, and technical problems. This includes the basic study of electronics, direct current, alternating current, voltage,

the transistor, self-identification of the other electronic and semiconductor components in a basic circuit, their measurement, and the use of diagnostic tools such as the multimeter. 3 credits. 45 hrs.

COMP 450 - DATA SCIENCE I. Prerequisite: COMP 110, COMP 242. This course studies the foundation of concepts that comprise the field of data science. In relation to data, this involves obtaining, storing, and understanding data to analyze and represent it in a way that provides valuable information for predictive use, decision making, or to feed other systems. Among the concepts covered in the course are the different sources of data, how to obtain them, their quality, cleaning, transformation processes and above all their analysis in search of their real value and content. 3 credits. 45 hrs.

COMP 491 - COMPUTER SCIENCE INTERNSHIP. Prerequisite: MAT 240, COMP 330. The Internship course provides the student with the opportunity to practice in a real-world environment within a company or organization, so that he/she can live and learn the requirements of the industry in a work environment. This course may be taken by students who are in their final academic year and will serve as an introductory source for the Capstone course. Although the student is free to select the place where he/she will do his/her internship, he/she will be allowed as a first alternative the option of doing the internship within the same institution (UCB), as an intern in the department of Computer Science and Communications. The course requires the student to complete a minimum of 90 hours of internship during the period of one academic semester. 1 credit.

COMP 492 - CAPSTONE PROJECT. Prerequisite: COMP 320. The **Capstone Project** course provides the student of the Applied Computer Science degree the opportunity to integrate all the knowledge acquired throughout the years of study. For this, the student will first make a project proposal that solves a real problem, be it a customer, an organization, or a problem in today's world. Then the solution must be developed, documented, tested and implemented so that the objectives described in the project are met. This course is not limited to software solutions, but can also integrate those aspects of hardware that can provide solutions to the problems of today's world such as IoT devices. 3 credits. 45 hrs.

CONT 110 - BUSINESS MATHEMATICS. Prerequisite: COMP 101. Financial and mathematical fundamentals and methods used in business decision making. Topics to be covered are percentage applications, taxes and insurance, discounted and taxed merchandise, markups and markdowns, simple interest, compound interest and annuities, consumer credit, mortgage credit, applications of systems of linear equations to business problems, and spreadsheet accounting applications. This course requires the use of the computer lab. 3 credits. 45 hrs.

CONT 115 - FINANCIAL ACCOUNTING I. This course will study the nature, meaning and analysis of the social aspect of accounting and its development and impact at an international level, emphasizing the importance of professional ethics in practice. Study of the complete accounting cycle for sole proprietorships. Recognition and analysis of transactions for service and buying and selling companies. Presentation of financial statements. Preparation and use of journals, work sheets, general ledger, and subsidiary ledger. Analysis of cash accounts and accounts receivable, inventory valuation. 4 credits. 60 hrs.

CONT 116 - FINANCIAL ACCOUNTING II. Prerequisite: CONT 115. This course will study the nature and formation of corporations, analyze transactions related to issuance and purchase of capital, dividends, financial statements, contributions, the ethical aspect, and social responsibility of corporations in the global market. The organization of corporations, their characteristics, capital formation and liquidation, short- and long-term debts, bond issuance and cash flow statements will also be discussed. 4 credits. 60 hrs.

CONT 217 - INTERMEDIATE ACCOUNTING I. Prerequisite: CONT 116. Study of the principles and standards applicable to financial statements in accordance with generally accepted accounting principles (GAAP). Study of the presentation and analysis of the Statement of Position, Statement of Income and Expenses, Statement of Shareholders' Equity and Statement of Cash Flows. Analysis of the correlation between revenues, accounts receivable and cash. Identification, evaluation, and estimation of inventory cost. Introduction to fixed assets and intangible assets. 4 credits. 60 hrs.

CONT 218 - INTERMEDIATE ACCOUNTING II. Prerequisite: CONT 217. Intensive study of accounting for various types of claims, short and long term. Fixed assets and intangible assets, depreciation, and disposition of these. Capital, its structure and claims of shareholders and creditors are studied. Analysis of pronouncements with leases and pensions. 4 credits. 60 hrs.

CONT 300 - ACCOUNTING FOR GOVERNMENT (FUNDS). Prerequisite: CONT 116. Study of fund accounting, including accounting for government agencies, hospitals, universities, and others. Analysis of principles and standards (GASB). Study of governmental fund management, fiduciary and proprietary funds. Study of budgetary accounting. 3 credits. 45 hrs.

CONT 419 - ADVANCED ACCOUNTING. Prerequisite: CONT 218. Theory and practice in specialized areas of corporate, consolidated and branch accounting. Recognize transactions between related companies and correctly apply the technique for handling them in accordance with generally accepted accounting principles (GAAP) promulgated by the governing bodies of the profession. The importance of human involvement in business operations will be emphasized. 4 credits. 60 hrs.

CONT 421 - P. R. INCOME TAXATION FOR INDIVIDUALS. Prerequisite: CONT 115. Study devoted primarily to the income taxation of individuals. In addition, corporations, partnerships, corporations of individuals, special partnerships and pension plans are included. The tax obligations of employers in Puerto Rico, municipal patents, personal property, and specialists in tax returns are studied. 3 credits. 45 hrs.

CONT 422 - COST ACCOUNTING. Prerequisite: CONT 116. Cost elements based on specific orders and procedural cost; use of application of estimated indirect costs and comparison with incurred indirect costs. Reports and analytical studies for business planning and control. 4 credits. 60 hrs.

CONT 423 - AUDIT. Prerequisite: CONT 218. Basic principles and current procedures used in auditing. Study, analysis and critical evaluation of auditing standards, GAAS, and the final audit report. Study of the applicability of auditing procedures and techniques framed within the professional ethics of accountants. Social, moral and professional implications. Study of contemporary aspects of accounting. 4 credits. 60 hrs.

CONT 425 - FEDERAL TAXATION FOR INDIVIDUALS. Prerequisite: CONT 116. Theoretical and practical interpretation of the Federal Internal Revenue Code and its regulations. Preparation of federal forms and schedules. 3 credits. 45 hrs.

CONT 430 - MANAGERIAL ACCOUNTING. Prerequisite: CONT 116. Describes the concepts and techniques that managers and accountants use in the decision making, planning and control processes. Includes retail, wholesale, plus, sales, and administrative situations related to manufacturing. 3 credits. 45 hrs.

CONT 432 - ACCOUNTING PRACTICE. Prerequisites: CONT 217, CONT 218, CONT 300, CONT 419, CONT 421, CONT 422, CONT 423. 3.0 minimum GPA and concentration average. Senior year of study. Supervised work experience in the accounting field where theory and practice are integrated. This internship will take place in a private company selected as an internship center and will be under the supervision of a professor. Students will be involved in other activities such as workshops, lectures, seminars, case discussions and other activities that will facilitate the transition from university to the firm. The student will complete 150 hours of supervised practice in the semester. 4 credits

Accounting Courses Binary Program

CONT 600 - MANAGEMENT ACCOUNTING. 3 credits. This course presents the study of the different forms of accounting in the administrative process, planning and control for managerial decision-making. It includes cost principles, planning, and control system, marginal revenue analysis, financial statements, budgets, and analytical techniques in the managerial consultative process. To achieve the proposed objectives, the course integrates the use of technology as an educational strategy to teach and learn in an active way, as well as case studies, investigative essay writing, reflective essays, and group work.

CONT 603 - ADVANCED COST ACCOUNTING. 3 credits. Analysis of financial information for the determination and allocation of costs as instruments for planning and managerial decision-making. Includes the study of budgets, cost allocation, production and cost, direct cost, standard cost, distribution cost, and cost research.

CONT 609 - ADVANCED TOPICS IN FINANCIAL REPORTING (GAAP-IFRS). 3 credits. The Advanced Topics in Financial Reporting course converges the development, application, and practice of the GAAP standards and the international practice standards -IFRS. Some topics to be covered are: business combinations, accounting for partnerships, foreign currency transactions, consolidations, and unconsolidated subsidiaries. Students will analyze the information incorporated in financial statements, including the impact of using other assumptions and procedures in emerging situations. Use is made of case studies of U.S. and international corporations. It is recommended to develop an analysis project based on a company.

CONT 610 - ADVANCED AUDITING AND FRAUD. 3 credits. Focuses on applied auditing as a means of preventing, identifying, and investigating corporate fraud. Students are required to study real cases that allow them to focus on practice, professional judgment, and effective communication in opinions.

CONT 611 - FEDERAL CONTRIBUTION (PARTNERSHIPS AND CORPORATIONS) 3 credits. This course discusses the Internal Revenue Code and the various U.S. government tax regulations and their effects on private businesses. The statutory provisions relating to income taxes for partnerships, special partnerships, corporations, and corporations of individuals are considered. The ethical value of information is considered.

CS 103 - GENERAL FUNDAMENTALS OF SCIENCE: INTEGRATION TO LIFE. The course is designed to present an interdisciplinary approach to the sciences in general with a humanistic base. It will study natural phenomena and their relationship to life and the environment. It will examine the basic concepts of biology, chemistry, physics, and astronomy, integrating the ethical aspects of science. In addition, it provides a multidisciplinary view of the natural sciences articulating the concepts in the reality of today's world. The course includes 3 hours of lecture One semester. 3 credits.

CS 207 - INTRODUCTION TO EARTH SCIENCE Prerequisite: CS 103. General course especially designed for science education students. Fundamental principles of Earth and Space Sciences, physical evolution of the earth and universe. Course includes 2 hours lecture, 2 hours laboratory complementary to the course. One semester. 3 credits.

CS 294 - FUNDAMENTALS OF ENVIRONMENTAL SCIENCE. Study of the external components of the ecological universe, such as the environment: water, air, soil, and food, as well as the methods of controlling their contamination. Applied to situations in Puerto Rico. The course includes 3 hours of lecture. One semester. 3 credits (for Education students).

CS 296 - FUNDAMENTALS OF GEOLOGY. Introductory course in the basic principles of geology, with emphasis on rocks, minerals and fossils of Puerto Rico and the geological processes visible in health. Emphasis will be given to both content and activities useful to the Earth Science teacher. The course includes 3 hours of lecture. The course requires workshop hours. 4 credits (for Education students).

CS 304 - RESEARCH METHODOLOGY. Prerequisite: BIOL 202. The course provides students with knowledge of the methodology used in research. The course covers qualitative methodology designs, such as: pre-experiments, quasi-experiments, and experiments. It also discusses qualitative designs such as: action research, case study, historiographic research, among others. The course includes discussion on the mixed approach, the scope of research work, data collection strategies, and general research planning for the realization of a research proposal. 3 credits.

CS 305 - RESEARCH. Prerequisite: CS 304. Development of supervised experimental work in laboratory or field research projects. Considered 3 hours of work equivalent to two semester credits. 3 credits.

CSOC 110 - BASIC PRINCIPLES OF SOCIAL SCIENCES. This course will develop, as a compendium, the basic concepts and skills of the sciences that study social reality starting from an interdisciplinary frame of reference that has its genesis in the methodology of social research. Emphasis will be placed on the reciprocal relationships between the fields of anthropology, sociology, psychology, economics, politics and geography. Likewise, the influence of each of the disciplines studied in some aspects or problems confronting Puerto Rican society will be analyzed. 3 credits. 45 hrs.

DMER 110 - LEGAL AND ETHICAL ASPECTS IN BUSINESS. Study and analysis of the basic and fundamental principles of the law that regulates the commercial activity of our society and the ethical responsibility in its application. Through the investigative process, the Code of Commerce, the special laws that govern commerce, the commercial organization and the sources that nourish commercial law will be studied. Topics such as commercial and civil contracts, typical contracts and special contracts, the legal structure of companies and corporations, negotiable instruments and bankruptcies will be discussed. The analysis of the history of law in Puerto Rico, the branches, divisions and classification of law and the development of law as a product of human coexistence will be part of the course. An evaluation will be made of the most recent trends in contracting, including e-mail, the Internet and other atypical contracts and legal ethical aspects. 3 credits. 45 hrs.

ECON 200 - ECONOMICS. This course introduces the student to the concepts and principles of economics. Based on the conceptual framework of microeconomics and macroeconomics, models are formulated that allow the student to interpret, analyze, and project the behavior of the economy. The main theories are

considering historical events and developments that shape our current reality, such as electronic commerce and globalization. The topics of supply, demand, product markets, international trade, economic growth and cycles, aggregate supply, macroeconomic policy, and contemporary issues are discussed. 3 credits. 45 hrs.

EDEL 211 - ELEMENTARY LEVEL SCIENCE CURRICULUM AND INSTRUCTION IV-VI. Prerequisite: CS 103. The foundation of elementary level science. Analysis of curricular content and new teaching strategies applied to these disciplines, framed by constructivist theories and standards of excellence. Development of critical thinking in science teaching. It is complemented with classroom views to give meaning to the theoretical part. 3 credits.

EDEL 213 - MATHEMATICS CURRICULUM AND INSTRUCTION ELEMENTARY LEVEL IV-VI. Prerequisite: MATE 140. Content analysis of the Mathematics Program at Elementary Level IV- VI. New strategies in the teaching learning process framed in constructivist theory and standards of excellence and pedagogy. It is complemented with classroom visits to give meaning to the theoretical part. 3 credits.

EDEL 215 - CURRICULUM AND TEACHING OF SOCIAL STUDIES ELEMENTARY LEVEL IV-VI. Prerequisite: CSOC 110. Analysis of the curriculum and methods of teaching Social Studies at Elementary Level IV - VI. New techniques, strategies, preparation and use of materials applied to this discipline, framed in constructivist theories and standards of excellence, emphasizing the development of critical thinking. It is complemented with classroom visits to give meaning to the theoretical part. 3 credits.

EDEL 221 - CHILD PSYCHOLOGY. Prerequisite: CSOC 110. Theoretical approaches to the study of human development and the concepts worked on in the field of cognitive development from conception to adolescence are studied. Emphasis is placed on the multiple strategies for working with children in the educational context, considering the contributions of psychology and relevant disciplines. 3 credits.

EDEL 226 - KINDERGARTEN PROGRAM. Prerequisites: EDUC 204 and EDEL 221. Importance of the kindergarten curriculum in the school program. Specific content and skills to be addressed at this level. Lectures, discussions, preparation of materials, and in-class laboratory work. 3 credits.

EDEL 302 - CHILDREN'S LITERATURE. Prerequisites: ESP 106 and EDEL 306. A critical study of the form and content of the literature of the child from 2 years to 12 years of age, from ancient folklore to modern writings. Critical selection of a universal and representative anthology of children's stories and ways to develop an appreciation of literature in elementary school children in Puerto Rico. Production of a creative literature project. 3 credits.

EDEL 306 - LANGUAGE ARTS. Prerequisite: ESP 106. Study of teaching methods and materials for the development of listening, speaking, reading, and writing skills using world literature for this level. New strategies in teaching and learning processes framed in constructivist theories and standards of excellence. It is complemented with visits to the classroom to use and give meaning to the theoretical part. Development of critical thinking in language arts. 3 credits.

EDEL 308 - ELEMENTARY ENGLISH CURRICULUM AND INSTRUCTION IV-VI. Prerequisite: ING 106. Analysis and application of specific theories and problems in teaching English as a second language. Use of new techniques and strategies for the development of reading and Oral and Written Communication skills. Supplemented with classroom and laboratory visits. 3 credits.

EDEL 312 - LITERATURE FOR CHILDREN IN ENGLISH. Prerequisites: ING 106 and ING 203. Analysis and evaluation of literature for this level. Students will prepare their own literary selections. 3 credits.

EDEL 316 - CURRICULUM AND TEACHING OF SPANISH ELEMENTARY LEVEL IV-VI. Prerequisite: EDUC 204. Analysis of the curricular content of the Spanish Program at this level. New strategies and techniques in the process of teaching reading and writing. Supplemented with classroom visits to give meaning to the theoretical part. 3 hours of lectures, one semester, 3 credits.

EDEL 429 - PRE-PRACTICE IN ELEMENTARY EDUCATION. *Must be authorized by the Coordinator.* In this course the student will be exposed to a series of practical experiences in different disciplines at the elementary level. During the semester he/she will assume the responsibility of carrying out activities related to the teaching-learning process in a classroom. The professor will offer individual help and follow-up in those aspects that the student needs for his/her best performance during this experience. Provision will be made for periodic meetings. 3 credits.

EDEL 431 - PRACTICE IN TEACHING ELEMENTARY LEVEL IV-VI. Teaching experiences supervised by the university professor. The student will gradually assume the role of a regular teacher and demonstrate the competencies acquired through their program of study. 6 credits.

EDEL 432 - PRACTICE SEMINAR ELEMENTARY LEVEL IV-VI. Analysis and discussion of experiences and situations encountered in teaching practice. Lectures on specific topics related to situations presented by student teachers. 2 credits.

EDEP 211 - ELEMENTARY LEVEL SCIENCE CURRICULUM AND INSTRUCTION K-III. Prerequisite: CS 103. The foundation of science at the elementary level. Curriculum content analysis and new teaching strategies applied to the elementary level. Development of critical thinking in teaching science at the elementary level. Supplemented by classroom visits to give meaning to the theoretical portion. 3 credits.

EDEP 213 - MATHEMATICS CURRICULUM AND INSTRUCTION ELEMENTARY LEVEL K-III. Prerequisite: MATE 140. Content analysis of the mathematics program at the elementary level. New strategies in the teaching-learning process framed in constructivist theory and standards of excellence and pedagogy. It is complemented with classroom visits to give meaning to the theoretical part. 3 credits.

EDEP 215 - CURRICULUM AND TEACHING OF SOCIAL STUDIES AT PRIMARY LEVEL K-III. Analysis of the curriculum and teaching methodology of Social Studies at the primary level. New strategies in the teaching-learning process framed in constructivist theories and standards of excellence and pedagogy. It is complemented with classroom visits to give meaning to the theoretical part. 3 credits.

EDEP 316 - READING AND WRITING AT THE PRIMARY LEVEL. Study of developmental areas and language processes. Analysis of contemporary ideas about early literacy development and education. Discussion and practice of different strategies, techniques, preparation, and use of materials in literacy education at the primary level. Supplemented by practical experiences in the school setting. 3 credits.

EDEP 429 - ELEMENTARY EDUCATION PRE-PRACTICUM. *Must be authorized by the Coordinator.* In this course the student will be exposed to a series of practical experiences in different disciplines at the elementary education level. During the semester the student will assume the responsibility of carrying out activities related to the teaching and learning process in a classroom. The professor will offer individual help

and follow-up in those aspects that the student needs for his/her best performance during this experience. Provision will be made for periodic meetings. 3 credits.

EDEP 431 - TEACHING PRACTICE AT PRIMARY LEVEL. Teaching experiences supervised by the university professor. The student will gradually assume the role of a regular teacher and demonstrate the competencies acquired through their program of study. 6 credits

EDEP 432 - PRIMARY LEVEL PRACTICE SEMINAR K - III. Discussion and analysis of the experiences and situations encountered in the Teaching Practice. Lectures on specific topics related to the situations presented teachers. 2 credits.

EDES 261 - INTRODUCTION TO PRACTICAL EXPERIENCES WITH EXCEPTIONAL CHILDREN AND YOUTH. Prerequisites: EDUC 204 and EDUC 360. Analysis and development of the skills of observation, assessment, and remediation of academic difficulties presented by the student with disabilities. The student will have the opportunity to serve in the role of tutor to an exceptional child in a Special Education classroom for one semester. The course consists of a minimum of 2 hours per week of practical classroom experiences and one hour per week of class discussion of findings. 3 credits.

EDES 325 - ETHICAL AND LEGAL ASPECTS OF PROVIDING SERVICES TO SPECIAL EDUCATION STUDENTS. Prerequisite: EDUC 360. The course is directed to the study, analysis and discussion of current federal and state legislation in special education. The student will identify the state and federal laws that guarantee the rights of persons with disabilities in relation to the special education program, and will know the legal roles and responsibilities of the personnel who provide special education services. 3 credits.

EDES 340 - DIAGNOSIS AND METHODOLOGY OF TEACHING READING IN SPECIAL EDUCATION. Study and analysis of contemporary ideas on language development and reading and writing education of children and youth with limitations. Factors that influence the development of language and concepts related to the ability to read and write are identified; as well as the student's needs. Curricular content, planning, methods and strategies to facilitate the development of language, reading and writing skills are included. Materials are prepared and developed for the literacy of the student with limitations in different educational levels and it is complemented with practical experiences. 3 credits.

EDUC 349 - TEACHING METHODS FOR CHILDREN AND YOUNG PEOPLE WITH COMMUNICATION PROBLEMS. Prerequisites: EDUC 204 and EDUC 360. Study of the causes and characteristics of speech and language disorders. Analysis of methods and materials for intervention and remediation of the difficulties needed by these students. 3 credits.

EDES 350 - DIAGNOSIS AND TEACHING METHODOLOGY OF MATHEMATICS IN SPECIAL EDUCATION. This course identifies and analyzes the characteristics and needs of children and youngsters with mild disabilities who present learning problems in mathematics. It works with the application of evaluation, measurement and assessment instruments that allow identifying the student's strengths and needs, and analyzes teaching methods and techniques for the planning, selection and design of educational materials in the teaching of mathematics in the regular stream. 3 credits.

EDES 357 - INDIVIDUALIZED EDUCATIONAL PROGRAM AND GUIDANCE TO PARENTS OF CHILDREN AND YOUTH WITH DISABILITIES. Prerequisites: EDUC 204 and EDUC 360. In this course the student will learn to develop individualized educational programs for children and youth with disabilities.

Students will identify strengths and weaknesses in order to establish teaching priorities. Development of long-term goals and short term objectives. Analysis of specific methods and strategies for effective learning. In the role of consulting teacher, the student will orient parents about their rights and those of the exceptional student. Emphasize the importance of parent participation in decision making and in the preparation and implementation of the I.E.P. Advise parents about services available in the community from other professionals on the interdisciplinary team (e.g., psychologist, social workers, physicians, attorneys, etc.) to assist the student with disabilities. 3 credits.

EDES 369 - TEACHING METHODS AND EDUCATIONAL MATERIALS FOR CHILDREN AND YOUTH WITH MILD DISABILITIES Prerequisite: EDUC 360. The characteristics of the student with mild impairments (PEA, ADD, Mental Retardation, Emotional Disturbance, Mild Motor and Health Problems) are studied. The effectiveness of teaching methods within the regular stream will be analyzed. The importance of integration and the inclusion model will be emphasized. Study of the interrelationship between the regular teacher and the Special Education teacher. 3 credits.

EDES 433 - PRE-PRACTICUM IN SPECIAL EDUCATION. *Must be authorized by the Coordinator.* Assessment of academic achievement, planning and individualized instruction in a special education classroom. Follow-up and individual assistance through monthly reports and individual interviews with the teacher. 3 credits.

EDES 434 - THE USE OF ASSISTIVE TECHNOLOGY IN TEACHING STUDENTS WITH DISABILITIES. Prerequisites: EDUC 360 and TEDU 320. The course is geared to learn and apply the use of technology from non-technology to high technology, making the necessary adaptations for home, school, work, and community. Various assistive technology equipment will be studied to help remediate deficiencies, develop skills in the areas of memory, organization, time management, listening, auditory and visual information processing, reading, math, written language, and self-help. 3 credits.

EDES 491 - TEACHING PRACTICE IN SPECIAL EDUCATION. Completion of all concentration courses. Experience working in the classroom with groups of children with disabilities. The teacher-practitioner will perform such tasks as: planning classes, preparing teaching materials, keeping school records, professional notebook and other records, in addition to practice in direct and individualized teaching. 300 hrs. 6 credits.

EDES 492 - SPECIAL EDUCATION PRACTICE SEMINAR. Concurrent with EDES 491. Discussion of problems encountered in teaching practice. Remediation of the difficulties presented. Analysis of the competencies that a good teacher should possess and of the norms and procedures in the administration of special education programs. 2 credits.

EDF 106 - LIFESTYLES AND WELL-BEING. Study of the dimensions of wellness and health and their effect on quality of life. Emphasizes the theoretical and practical bases of knowledge related to health maintenance, fitness, nutrition, and other components that contribute to quality of life. The course emphasizes individual and collective responsibility in the maintenance of adequate lifestyles for the preservation and promotion of health and integral wellness. It includes the practice of physical activities. 3 credits.

EDF 110 - INTRODUCTION TO PHYSICAL EDUCATION TEACHING. Conceptual approach to the characteristics, duties and responsibilities of the professional in this discipline, his role as an educator and integration with the school community; classifications for the development and analysis of human movement; development of skills for leadership and teamwork, nature of the school program, contribution of physical education in achieving healthy lifestyles. Includes field experiences and observation visits to schools. 3 credits.

EDF 204 - ATHLETICS, WEIGHT LIFTING, SPORTS, INDIVIDUAL AND PARTNER ACTIVITIES. Prerequisite: EDF 110. Study of the fundamentals and teaching methodology of sports, individual and partner activities such as; athletics, weight lifting, racquet sports and aerobic activities. Motor learning theories are analyzed, the development of concepts and skills in human movement, integrating the basic techniques in these disciplines. Organization and planning of activities in the educational and community setting. 3 credits.

EDF 207 - BALL SPORTS AND TEAM ACTIVITIES. Prerequisite: EDF 110. Development of fundamental movement concepts and skills in team sports; volleyball, basketball, soccer, handball, baseball, and softball, among others. Motor learning of the basic techniques of these sports. Study of the technical and tactical fundamentals and their implementation in the development of a training plan; organization, motivation and management of students in the educational scenario. 3 credits.

EDF 208 - APPLICATION OF THE GAME AS A TEACHING STRATEGY IN PHYSICAL EDUCATION. Study of the game as a teaching strategy in physical education. Analysis of the theories and the value of play in physical, intellectual, affective, social and creative development. Emphasis is placed on the teaching, development and practice of games such as: simple games, new games, traditional and cultural games, cooperative and preparatory games for sports and how they can be integrated with other subjects. 3 credits.

EDF 300 - PRINCIPLES OF SCIENCE APPLIED TO SPORT, PHYSICAL ACTIVITY AND EXERCISE. Prerequisite: EDF 110. Study of basic physiological functions, organizationally and structurally, as applied to sport, physical activity and exercise. Relationship between organs and systems as a means of physiological interaction through analysis of human movement activities in varied populations. 3 credits.

EDF 301 - ANATOMY AND KINESIOLOGY WITH LABORATORY Prerequisites: EDF 110 and EDF 300. The course details the study of the biomechanics of the human body in direct relation to movement. It develops skills of understanding and application of the skeletal and muscular systems. It analyzes the anatomical situations of special populations and their relationship to the movement of different body segments. Emphasizes the importance of kinesiological and biomechanical analysis within various movement activities. 3 credits.

EDF 302 - EXERCISE PHYSIOLOGY WITH LABORATORY Prerequisites: EDF 110, EDF 300 and EDF 301. Study of physiological mechanisms during human movement activities as applied to sport and physical activity and exercise. Integration of different systems to the improvement of the physiological capabilities of the student and athlete. Physiology is analyzed from the athletic perspective for the general population and for special populations. 3 credits.

EDF 340 - TEACHING ELEMENTARY LEVEL PHYSICAL EDUCATION. Prerequisites: *EDF110 or EDUC 204. Study of modern approaches in the area of elementary physical education. Discussion and practices of strategies to be used in the teaching and learning process for the elementary and elementary grade school level. Theories of motor learning and development, including body management and control, fundamental

skills, rhythmic activities, games and movement education. Includes participation in organizing and directing appropriate movement activities. 3 credits.

EDF 341 - TEACHING ADAPTED PHYSICAL EDUCATION. Prerequisites: EDF 110 AND EDUC 360. Study of methods and strategies of assessing, programming, and teaching physical activities to persons with special needs. Includes physical activity practice, body movement, field experiences, and observation of adapted physical education programs. 3 credits

EDF 342 - ELEMENTARY SWIMMING. Teaching of basic swimming skills; movement analysis of swimming skills and aquatic safety rules; elementary swimming strokes and introduction to the methodology of evaluation, teaching and development of skills, attitudes and dispositions conducive to improved performance, physical fitness, aquatic culture and wellness. 3 credits.

EDF 343 - FIRST AID, HEALTH AND SAFETY. Prerequisite: EDF 110. Study of methods, techniques, and strategies for the prevention, management, and treatment of injuries; teaching and practice of bandaging. Individual and community prevention and safety. 3 credits.

EDF 345 - GYMNASTICS, DANCES AND RHYTHM SKILLS. Prerequisite: EDF 110. Theory and practice of the fundamentals of teaching basic gymnastics, dances, and rhythm skills as a strategy for the development of physical and motor fitness. Includes tests of physical fitness, motor fitness and practice of activities requiring body handling, control and coordination. 3 credits.

EDF 372 - CURRICULUM AND TEACHING OF PHYSICAL EDUCATION AT THE SECONDARY LEVEL. Prerequisites: EDF 110 and EDUC 204. Study and analysis of modern trends in teaching secondary physical education. Discussion and practice of strategies to be used in the educational setting. Discussion of physical education curriculum, learning theories, and major philosophical approaches. Includes field experiences and observation visits to schools. 3 credits.

EDF 404 - PRE-PRACTICUM IN TEACHING ELEMENTARY LEVEL PHYSICAL EDUCATION. *Must be authorized by the Coordinator.* Analysis and discussion of problems related to the implementation of the physical education curriculum at the elementary level. Emphasis is made on the familiarization of the university student with the school academic dynamics through observations and field experiences. Development of competencies in the organization, planning and teaching of physical education activities at the primary and elementary levels. 3 credits.

EDF 412 - RECREATION AND RECREATIONAL GAMES. Study of the origin, history and evolution of world recreation and its implications in today's world. Emphasis is given to the importance of educating for leisure. It includes the preparation of a recreation program including the organization and execution of activities according to the different modalities of recreation: recreational games, recreational sports, outdoor activities, artistic and creative activities. 3 credits.

EDF 450 - PRACTICE IN TEACHING ELEMENTARY LEVEL PHYSICAL EDUCATION. Prerequisites: All concentration courses; Concurrent with: EDF 451. Teaching practice in physical education at the elementary level in a school setting. Development of competencies in teaching methods and techniques, planning and organization of programs and activities, evaluation and assessment of school performance, and other practical experiences. 6 credits.

EDF 451 - ELEMENTARY LEVEL PHYSICAL EDUCATION PRACTICE SEMINAR - Prerequisites: All concentration courses; Concurrent with EDF 450. Analysis and discussion of experiences and situations encountered during teaching practice. Lectures and other educational experiences related to the professional training of the future physical education teacher. 2 credits.

EDF 479 - CURRICULUM DESIGN AND EVALUATION IN PHYSICAL EDUCATION-Elementary Level. Prerequisites: EDF 110, EDF 340, EDF 372 and EDUC 300. Study of the steps in planning, developing, implementing, and evaluating a curriculum. Design of a physical education curriculum. Study, research and practice of techniques used in the measurement, assessment and evaluation of physical activities. Includes field experiences and observation visits to educational programs. 3 credits.

EDF 480 - PRE-PRACTICUM IN TEACHING PHYSICAL EDUCATION AT THE SECONDARY LEVEL. *Must be authorized by the Coordinator.* Analysis and discussion of problems related to the implementation of the physical education curriculum at the secondary level. Emphasis is placed on the integration of the university student with the school dynamics through observations and field experiences. Development of competencies in the organization, planning and teaching of physical education activities at the secondary level. 3 credits.

EDF 481 - PRACTICE IN PHYSICAL EDUCATION AT THE SECONDARY LEVEL. Co-requisite: EDF 482. Program of experiences in a school center (laboratory) where the student puts into practice what he/she has learned in the educational field, namely: planning of teaching and learning, organization, and implementation of activities of the physical education program, use of teaching strategies and techniques of measurement, evaluation and assessment of school achievement. 6 credits.

EDF 482 - PHYSICAL EDUCATION PRACTICE SEMINAR - SECONDARY LEVEL. Analysis and discussion of experiences and situations encountered during teaching practice. Lectures and other educational experiences related to the professional training of physical educators. 2 credits.

EDSE 222 - ADOLESCENT PSYCHOLOGY SECONDARY LEVEL. Prerequisite: CSOC 110. This course studies adolescence and the psychological theories available. Problems of adolescents in Puerto Rico are studied. 3 credits.

EDSE 371 - CURRICULUM AND TEACHING OF SCIENCE AT THE SECONDARY LEVEL. Prerequisites: EDUC 204, EDUC 356 and CS 103. Study of the nature of the scientific method used in teaching this subject. Use of new techniques and strategies taking as a frame of reference the standards of excellence established for this discipline. Practical classroom experiences in connection with curricular content. 3 credits.

EDSE 374 - SECONDARY LEVEL SPANISH CURRICULUM AND INSTRUCTION. Prerequisite: EDUC 204. Specialty courses in Spanish. Curricular methods and materials for teaching Spanish at the secondary school level. Strategies for skill development and teaching methodology for grammar and literary genres will be studied. Analysis of the Spanish curriculum and modern trends in the teaching of this discipline. It is complemented with classroom visits to give meaning to the theoretical part. 3 credits.

EDSE 376 - SECONDARY LEVEL MATHEMATICS CURRICULUM AND INSTRUCTION. Prerequisites: EDUC 204 and EDUC 356. Analysis of the content of the Mathematics Program at this level. Use of new strategies and techniques in the teaching-learning process framed in the standards of excellence applied to this discipline. It is complemented with classroom visits to give meaning to the theoretical part. 3 credits.

EDSE 377 - SECONDARY LEVEL ENGLISH CURRICULUM AND INSTRUCTION. Prerequisite: EDUC 204, English major courses. Analysis of the principles, techniques, theories, and specific problems related to teaching English as a second language. Development of reading and writing skills. Use of new strategies in the teaching and learning process framed in constructivist theories and standards of excellence in this discipline. It is complemented with classroom visits to give meaning to the theoretical part. Development of critical thinking in the teaching of English. 3 credits.

EDSE 479 - PRE-PRACTICUM IN SECONDARY EDUCATION. *Must be authorized by the Coordinator.* In this course the student will be exposed to a series of laboratory experiences in teaching the discipline of his/her major at the secondary level. The student will assume the responsibility of carrying out activities related to the teaching and learning process. 3 credits.

EDSE 481 - SECONDARY LEVEL PRACTICE. All specialized courses and teaching method. Teaching experiences supervised by the university professor. The student will gradually assume the role of a regular teacher and demonstrate the competencies acquired through their program of study. 6 credits.

EDSE 482 - SECONDARY LEVEL PRACTICE SEMINAR. Analysis and discussion of experiences and situations encountered in teaching practice. Lectures on specific topics related to the situations presented by students and teachers. 2 credits.

EDUC 204 - ETHICS AND VALUES IN EDUCATION. Covers the fundamentals of ethics and values of professional practice through reflection and analysis of the moral activity of people, both in their social and individual aspects, to contribute to the formation of professionals committed to society within the framework of the Puerto Rican educational system. 3 credits.

EDUC 212 - WRITING SEMINAR FOR BEHAVIORAL PROFESSIONALS. Prerequisite: ESP 108. Studies of prewriting processes and morphosyntactic, semantic, and lexicological structures in written communication. The student will apply theoretical knowledge and write different types of writing. 3 credits.

EDUC 228 - THE SCHOOL HEALTH PROGRAM. The scope of a general school health program and existing services. Development of desirable habits and attitudes. Emphasis will be given to existing programs regarding drug, alcohol, and sex education prevention. 3 credits.

EDUC 250 - ACTION RESEARCH IN THE CLASSROOM. The course describes the conceptual elements that define and explain the action research process. It discusses the stages of a research process and its application in the classroom. The student will have the opportunity to investigate a problem in the educational process and the different alternatives to solve and apply the findings, product of the research conducted. 3 credits.

EDUC 300 - ASSESSMENT, EVALUATION, AND MEASUREMENT OF LEARNING. Prerequisite: EDUC 204. Knowledge, interpretation, and application of the concepts of assessment, evaluation, and measurement as they relate to the educational process. Preparation, use and analysis of tests, other techniques of assessment of student learning and development. Writing observable behavioral objectives and their

relationship to the assessment process. Application of statistical principles for the assessment and interpretation of results. 3 credits.

EDUC 310 - EARLY INTERVENTION. Physiological and environmental processes of child growth and development from conception through early childhood. Intercommunication with other professionals working with infants or children. Effective teaching practices. The family and early stimulation. 3 credits.

EDUC 318 - DIAGNOSIS AND REMEDIATION OF LEARNING DEFICIENCIES ELEMENTARY LEVEL. The student will learn to administer educational tests in the areas of reading, mathematics, and writing and interpret the results to develop specific objectives, methods, and materials used in remediation. 3 credits.

EDUC 356 - EDUCATIONAL PSYCHOLOGY. Prerequisite: EDUC 204. The course emphasizes the psychological and cognitive aspects and their application in the classroom. Different learning theories are compared, such as individual differences, such as: intelligence, learning styles, and learning problems. The theories studied are applied to the teaching-learning process. 3 credits.

EDUC 360 - THE EXCEPTIONAL STUDENT. Types of exceptionalities, evaluation and diagnostic processes, concepts of inclusion, characteristics of these children and the educational and complementary services they need, including the use of technological assistance in the teaching-learning process. State and federal legislation applicable to special education. 3 credits.

EDUC 379 - TEACHING MODERN GRAMMAR. Prerequisite: ESP 108. Methodology of language teaching through modern linguistics. Language function and mastery of oral and written expression. 3 credits.

EDUC 412 - INTERDISCIPLINARY SEMINAR - This course must be taken at the conclusion of the General Education courses in the curriculum. The course reviews relevant general knowledge information learned in the basic courses previously taken by the student. We want to form educators who develop in a comprehensive manner with a complete historical, social, philosophical, and cultural perspective, who can use the Spanish and/or English language to express themselves correctly, demonstrating their mastery of a general, broad and integrated culture of the world in which they live. 3 credits.

EDUC 413 - INTEGRATIVE SEMINAR ON PROFESSIONAL COMPETENCIES. For students of the Teacher Preparation Program (PPM), required to take the Teaching Practice course. In the seminar, students will have the opportunity to reflect on professional issues and situations, with the objective of demonstrating the ability to integrate and apply the theories, concepts and pedagogical principles learned. Through in-class exercises, the student must recognize and manage the philosophical, psychological, and sociological foundations of education in order to discuss and analyze different pedagogical situations. In the analysis he/she must apply the methodology learned in his/her field of concentration or the one required in the particular situation presented, demonstrating mastery of the knowledge acquired. 3 credits.

EDUC 427 - SOCIOLOGY OF EDUCATION. Prerequisite: EDUC 204. The course establishes the relationship between society, culture and education. Social changes and cultures and their implications in the educational process are analyzed. It also analyzes the importance of social institutions and how social change affects education in general. 3 credits.

EDUC 430 - PHILOSOPHY OF EDUCATION. Prerequisites: FIL 201 and EDUC 204. Philosophical perspectives and their implications or links between philosophical concepts and educational practices are

studied. The student will be introduced to concepts linked to contemporary discussions in the philosophy of science. 3 credits.

EM 101 - FUNDAMENTALS OF EMERGENCY MEDICAL EMERGENCY. Study of the role of the paramedic in the emergency medical field, origin (history) and evolution of the profession. Study of the code of ethics, state and federal rules, laws and regulations governing the practice of the profession. Analysis of the responsibilities and functions of the paramedic using as a framework the statutes that regulate its operation. The course includes 3 hours of lecture. 3 credits.

MS 102 - BIOMEDICAL ANATOMY AND PHYSIOLOGY. Introductory course that studies the organs and systems that compose the human body and the physiological processes of these systems in the clinical context of the different pathologies that may alter their functioning. The course includes 3 hours of lecture. One semester. 3 credits.

EM 103 - PATHOPHYSIOLOGY AND MEDICAL TERMINOLOGY. Study of different diseases and health conditions that affect and compromise human health in the context of a medical emergency. Study of different terms commonly used in medicine and their application in the field of medical emergencies. The course includes 3 hours of lecture. One semester. 3 credits.

EM 104 - BASIC CONCEPTS OF PUBLIC HEALTH. Study of different concepts most used in public health. It includes the definition of the concepts of health, prevention, promotion, and maintenance of health, basic concepts of epidemiology, infectious diseases and natural history of diseases. The course includes 2 hours of lecture. One semester. 2 credits.

EM 105 - PHARMACOLOGY. General study of drugs and their classification according to their origin. Information on each specific group of drugs, therapeutic effects, contraindications, correct dosage, and side effects of drugs. Use of the metric system and routes of drug administration under medical direction and order. Course includes 3 hours of lecture. One semester. 3 credits.

EM 106 - MANAGEMENT OF RESPIRATORY SYSTEM EMERGENCIES. Study of the conditions that constitute a respiratory system emergency and their management, basic and advanced resuscitation techniques for infant, child, and adult patients. Study of the use of equipment and mechanical instruments to assist ventilations and the use of equipment for invasive processes in the patient. The course includes 3 hours of lecture. One semester. 3 credits.

EM 207 - PATIENT HISTORY AND EVALUATION. Study of the processes and steps to follow to establish a patient history according to their condition. It will teach the performance of a proper physical examination from the taking of vital signs to the correct performance of a primary and secondary cephalocaudal evaluation. It also includes the steps to follow in the documentation of the patient's clinical record. Course includes 3 hours of lecture. One semester. 3 credits.

EM 208 - SHOCK AND FLUID THERAPY. Study of fluids and electrolytes in the body, with emphasis on the manifestation of fluid and electrolyte imbalance, particularly dehydration and intoxication. Analysis of the most common causes and symptoms of shock. Study of the different routes, administration techniques and equipment for fluid administration. The course includes 2 hours of lecture. One semester. 2 credits.

EM 209 - TRAUMA. Study of the different traumas and injuries that a patient may suffer because of an accident. Identification of the causes of trauma and intervention techniques for the stabilization of the patient to avoid further complications until an adequate transfer of the patient is completed. The course includes 3 hours of lecture. One semester. 3 credits.

EM 210 - INTERNAL MEDICINE EMERGENCIES. Study of the characteristics, manifestations and management of medical emergencies related to pre-existing conditions in patients, both sudden and chronic degenerative. Course includes 3 hours of lecture. One semester. 3 credits.

EM 211 - OBSTETRIC AND GYNECOLOGIC EMERGENCIES. Study of gynecological and obstetrical emergencies. Care and management of emergency delivery: normal or with complications. Emergency measures and care to be observed in the mother and newborn and children in neonatal transport. The course includes 2 hours of lecture. One semester. 2 credits.

EM 212 - PEDIATRIC EMERGENCIES. Study of the most common pediatric emergencies, symptomatology, signs, and conditions of a medical emergency; use of appropriate techniques and procedures in the management of pediatric emergencies, both basic and advanced (PALS). Course includes 3 hours of lecture. One semester. 3 credits.

EM 213 - MANAGEMENT OF PATIENTS WITH SPECIAL CONDITIONS. Study of the most common medical emergencies in the geriatric population, management, and intervention for each of these. Discussion of prevention and care measures for this population and identification of signs of both mistreatment and abuse and misuse of medications. In addition, the study of syndromic conditions such as autism, Down syndrome among others and the use of assistive technology is included. In addition, some possible emotional disturbances are discussed. The course includes 2 hours of lecture. One semester. 2 credits.

EM 214 - EXTRICATION AND RESCUE TECHNIQUES. Study of situations involving accidents and injuries received involving patients in various graphic type scenarios. Discussion of appropriate uses or procedures, techniques to gain access to the patient to be rescued. Study of the principles of triage action (MCI-T) in emergency situations related to disasters. Course includes 2 hours of lecture. One semester. 2 credits.

EM 215 - PRACTICUM AND SEMINAR. Supervised practice in emergency room, delivery room, ambulance and office to put into practice the theoretical knowledge learned and expand it. In the seminar, discussion of cases and situations encountered in practice. Students will share the experiences lived in the different practice scenarios and presentation through discussions guided by the professor of the different alternatives for the management and care of each case presented. 7 credits. One semester 105 contact hours.

EM 216 - BASIC SIGN LANGUAGE COURSE, Part I (ASL). The basic sign language course includes initial experiences in the basic acquisition of sign language so that students gain an updated, sensitized, and experiential knowledge of communication methods. It includes the acquisition of more vocabulary, integration of medical vocabulary, and the application of other elements in communicating with the hearing impaired. Moreover, this first part of the course will cover the following topics: the laws that protect the rights of the deaf population, the agencies that currently provide services to the deaf community and the imminent importance of providing services to this population in a preventive and health care manner. Course includes 3 hours of lecture. One semester. 3 credits.

EMP 300 - TECHNOLOGY STRATEGIES FOR ENTREPRENEURSHIP PREREQUISITE: COMP 101.

Prerequisite: COMP 101. This course emphasizes the identification, benefits, and strategic use of technology tools for small business. It includes business programming, e-commerce, e-marketing, social networking, blogging, and other technological tools for decision making. Emphasis is placed on practical applications and exercises that expose the student to business experiences. This course requires the use of the computer lab. 3 credits.

EMP 320 - CORPORATE FINANCIAL SUSTAINABILITY. Prerequisite: ADM 200. The success and continuity of a company depends, to a large extent, on ensuring that its business activities continue to add value and are carried out efficiently and effectively. The Business Financial Sustainability course provides students with the tools to enable them to make, through introspection, a timely assessment of the financial, technical operational, organizational and contextual areas of the business. The course will cover topics related to financial statement analysis, financial ratio analysis, cash flow analysis. The purpose of the course is to create business awareness regarding the management of critical areas to achieve the expected results and the continuity of the company in the market. 3 credits.

EMP 330 - PROJECT MANAGEMENT Prerequisite: ADM 200. Fundamentals of project management with emphasis on planning, control techniques and interpersonal aspects as basic aspects for the achievement of project results. Includes key components of project management such as: project scope, time, cost, quality, communication, and risk. 3 credits.

EMP 340 - INTERNATIONAL BUSINESS MANAGEMENT. Prerequisite: ADM 200. The course emphasizes the importance of learning to identify business opportunities abroad by analyzing local products and services versus foreign markets. It includes the study of the commercial procedures that are required when wishing to establish a company outside Puerto Rico. Also, the initiation and establishment of international relations. Students will be provided with sales tools and tactics to negotiate effectively in international markets. Emphasis will be placed on the importance of making the right decisions in terms of distribution and promotion of their products. 3 credits.

EMP 350 - PRE-INCUBATION: INNOVATION AND BUSINESS MODEL VALIDATION. Prerequisite: ADM 200. This course takes the student in an organized and methodical way to the business idea validation process. The student is exposed to the process of market research and analysis, feasibility study, and business plan validation. In addition, the student is introduced to the concept of the business incubator and the opportunity to innovate, implement, and strengthen the idea in the incubator. 3 credits.

EMP 360 - BUSINESS SIMULATION (CAPSTONE). Prerequisite: ADM 200. This is a laboratory type course where business simulation games and case studies will be used. Students will work actively, both individually and in groups, assuming managerial roles in which they will integrate various functional areas of business with emphasis on the strategic management process. The course is a *Capstone* modality that serves to integrate knowledge and disciplines of small business management. 3 credits.

EMP 380 - PERMITS, LICENSES AND REGULATIONS. Prerequisite: ADM 200. In this course the student will become familiar with the documentation required to establish a business in Puerto Rico: legal forms, permits, licenses, and insurance. Students will become familiar with contracts, tax liability and mandatory taxes. How to complete each of the forms needed to apply for licenses, permits and endorsements in the online platforms. Understand the importance of employer responsibilities and duties and corporate social responsibility. 3 credits.

EMP 410 - RESEARCH AND ENTREPRENEURSHIP PROFESSORSHIP. Prerequisite: ADM 200. The course will provide space for the development of research skills and the search for new sources of knowledge for professional training. On the other hand, the course proposes the formation of entrepreneurs from the point of view of the experiences and experiences of successful entrepreneurs. Throughout the term, entrepreneurs and other resources will offer students lectures and mentoring on their experiences during the creation of their businesses and the strategies implemented to achieve success. In turn, students will use empirical data from entrepreneurs for their research. 3 credits.

EMP 420 - INTERNSHIP AT THE BUSINESS INCUBATOR I. *Must be authorized by the Coordinator.* The internship at the incubator will provide the student with experiential experiences that will complement the competencies acquired. In the incubator the student will practice specific skills in management, development, legalization, compliance, interpersonal and communication skills. In addition, the skills to establish networks of contacts with entrepreneurs, financial institutions, government, suppliers, and customers. On the other hand, the student is exposed to the social responsibility that, as an entrepreneur, he/she must assume. 6 credits.

EMP 421 - BUSINESS INCUBATOR INTERNSHIP II. *Must be authorized by the Coordinator.* During this course the student entrepreneur continues with the incubation process of his/her business. The student, together with his/her mentor, will permanently evaluate the environment and strategies to reduce the risks of failure. At this stage, it is important that the student researches and innovates products that meet and improve market needs. In addition, the commitment to social responsibility and community welfare is strengthened. 6 credits.

ENF 100 - INTRODUCTION TO THE NURSING PROFESSION. Concurrent courses: BIOL 115 and MATE 105. In this course the student will develop the scientific knowledge, basic competencies and professional attitudes that underpin the identity of the nursing profession. The student will be initiated in the historical and philosophical evolution, as well as in the different theoretical schools that support the knowledge of nursing sciences and Dorothea Orem's self-care theory. The student will be instructed about the ethical and legal aspects that govern the profession, in addition to the standards of care, roles, functions and the different categories of practice. This course is complemented concurrently with the clinical simulation laboratory where the student will practice and reinforce basic nursing care skills. The course includes 3 hours of lectures, 2 hours of laboratory weekly complementary to the course. One semester. 3 credits.

ENF 102 - FUNDAMENTALS OF NURSING CARE. Prerequisites: ENF 100, BIOL 115 and MATE 105: ENF 104. During this course the student will be introduced to the nursing process, its application to the professional role in the basic competencies of physical examination and universal requirements. The fundamentals of educating the adult client and their families as a standard of care will also be discussed. Nursing intervention during the terminal stage of the adult client with a Christian and ethical approach will be included. The competencies to be developed during the professional training will be framed in a humanistic and Christian philosophical base which is a hallmark of the Central University of Bayamon. The course includes 4 hours of lectures per week, 2 hours of laboratory per week, 6 hours of clinical experience per week complementary to the course. One semester. 4 credits.

ENF 104 - PHARMACOLOGY FOR NURSING PROFESSIONALS. Prerequisites: ENF 100, BIOL 115, and MATE 105: ENF 102. The educational experiences of the course will foster the development of fundamental competencies in pharmacology and their integration into professional nursing performance. Students will

study the historical development, the scope of practice of the profession, and the ethical-legal and cultural aspects that affect pharmacotherapy. The student will study the origin, characteristics, drug metabolism, and therapeutic and non-therapeutic functions. Emphasis will also be placed on the process of calculating, dosing and administering drugs, body responses and considerations in the administration process. Rational scientific judgment will be encouraged in applying the nursing process as a method of problem solving. The theoretical component will be complemented with skills practice through the clinical simulation laboratory. The course includes 3 hours of weekly lectures, 2 hours of weekly laboratory complementary to the course. One semester. 3 credits.

ENF 206 - MEDICO-SURGICAL NURSING CARE I. Prerequisites: ENF 100, ENF 102, ENF 104: ENF 300 and BIOL 357. The course will initiate the student in the competencies of nursing care in different medical-surgical settings. It will study the nursing care of the diseases of greater incidence and mortality that affect the adult population in our context. Likewise, the nursing process and the scientific rationale in each care competence will be highlighted, while forging the professional, ethical, and humanistic character. The principles of health promotion and maintenance and disease prevention will be considered with emphasis on the self-care theory. On the other hand, the theoretical component will be applied concurrently with the practice of skills through the simulation laboratory and real clinical experience. The course includes 4 hours of lectures per week, 2 hours of laboratory per week, 6 hours of clinical experience per week. One semester. 4 credits.

ENF 208 - NURSING CARE DURING THE GESTATIONAL AND NEONATAL CYCLE. Prerequisites: ENF 100, ENF 102, ENF 104, ENF 206, and BIOL 357: ENF 210 and BIOL 358. In this course the student will develop the competencies of nursing care during the different stages of the gestation cycle and the delivery process. Also, they will study the therapeutic nursing interventions in postpartum complications and the first interventions with the healthy neonate and with physical complications. It will analyze the ethical-legal aspects and their effects on the mother's self-care and the potential conflicts that arise during the gestation cycle. In addition, the concept of family and the different structures and their functions will be discussed. The theoretical component will be complemented with skills practice through the simulation laboratory and performance in the clinical setting. The course includes 4 hours of weekly lectures, 2 hours of simulation laboratory and 6 hours of weekly clinical experience. 1 semester. 4 credits.

ENF 210 - MEDICAL-SURGICAL NURSING II. Prerequisites: ENF 100, ENF 102, ENF 104, ENF 206, and BIOL 357: ENF 208 and BIOL 358. In this course the student will develop nursing care competencies in the adult client with hemodynamic, circulatory, hematological, gastrointestinal, renal, and neurological alterations of major incidence and mortality. The nursing process will be applied as a problem-solving method. Nursing intervention will be based on the principles of promotion and maintenance of health and prevention of the client's disease at optimal levels. The course includes 4 hours of weekly lectures, 2 hours of simulation laboratory and 6 hours of weekly clinical experience. 1 semester. 4 credits.

ENF 215 - FUNDAMENTALS OF PEDIATRIC NURSING CARE. Prerequisites: ENF 208, ENF 210 and BIOL 358. In this course, the student will develop the theoretical competencies of nursing care directed to pediatric clients and their families, considering the different stages of growth and development, promotion and maintenance of health and prevention of disease. The historical aspects of the pediatric nursing role will also be discussed; as well as the ethical-legal considerations related to the care of the pediatric client. The nursing care process in the management of the most common life-threatening disorders in the pediatric population and the emotional, mental, and behavioral developmental conditions will be studied. The course includes 4

hours of weekly lecture, 2 hours of simulation laboratory and 6 hours of weekly clinical experience. 1 semester. 4 credits.

ENF 300 - ESSENTIAL PSYCHOSOCIAL NURSING CARE. Prerequisites: ENF 100, ENF 102, ENF 104, PSIC 223. Concurrent courses: ENF 206 and BIOL 357: ENF 206 and BIOL 357. The course will provide the student the opportunity to study the historical evolution of psychiatric nursing worldwide and nationally, as well as the concepts of mental health and mental illness of greater incidence. Likewise, the ethical-legal implications related to nursing practice and mental health services will be analyzed. Likewise, students will study the theoretical competencies to establish communication and therapeutic relationship, perform the mental health assessment and intervene with clients in crisis and with diverse psychiatric conditions. They will also study the psychopathological process of conditions, safety standards and the nursing process when planning therapeutic interventions considering the levels of prevention. The course includes 4 hours of weekly lectures and 6 hours of weekly clinical experience. One semester. 4 credits.

ENF 305 - PHYSICAL EXAMINATION FOR NURSING PROFESSIONALS. Prerequisites, ENF 215, ENF 300 and ENF 307. Concurrent courses: ENF 308 and ENF 312. In this course the student will be introduced to the nursing care competencies of physical examination and semitechnical techniques. The various strategies of subjective and objective data collection will be studied, as well as normal and clinically relevant physical characteristics in adult clients. Critical and reflective thinking will be encouraged in data management based on the estimate. The functions of the nursing process and its integration in the physical examination will also be analyzed. On the other hand, the theoretical component will be applied with the practice of competencies through the simulation laboratory. In addition, it will discuss the ethical and legal aspects related to the practice of physical examination. The course includes 3 hours of lectures per week and 2 hours of laboratory per week. One semester. 3 credits.

ENF 307 - METHODOLOGY OF RESEARCH IN NURSING. Prerequisites: ENF 208, ENF 210, ENF 215, ENF 300 and MAT 131. In this course students will study the fundamental competencies required for the application and development of the scientific method in the field of nursing. The historical evolution of the research process and the contributions in the validation of the body of knowledge that distinguishes the nursing profession will be examined, as well as the ethical-legal aspects. In addition, the stages of the research process will be analyzed, with emphasis on the quantitative approach. Likewise, they will discuss the basic aspects of the methodology applied in the analysis and interpretation of the findings. The course includes 3 hours of weekly lectures. One semester. 3 credits.

ENF 308 - COMMUNITY NURSING. Prerequisites: ENF 215, ENF 300 and ENF 307. Concurrent courses: ENF 305 and ENF 312. The course will provide the student the opportunity to study the historical evolution of community nursing worldwide and nationally, as well as the legislations and ethical-legal issues that govern community nursing practice. Students will study the functions relevant to nursing practice in diverse community settings. The application of the nursing process in the promotion of health both in the community and in families will also be distinguished. In addition, the student will be able to study the relevance of epidemiological aspects in the performance of the professional role, as well as the implications of nursing in the environmental aspects and the diverse disasters that affect the health of the population at a national and global level. This course will be offered concurrently with clinical practice in the community. The course includes 4 hours of weekly lecture and 4 hours of weekly clinical experience. 1 semester. 4 credits.

ENF 312 - NURSING PROCESS APPLIED TO PATIENTS WITH CARDIAC DYSRHYTHMIAS AND CONDUCTION DISTURBANCES. Prerequisites: ENF 215, ENF 300 and ENF 307. Concurrent courses: ENF 305 and ENF 308. In this course, students will study the nursing care of clients with cardiac rhythm disturbances and conduction disturbances, considering the fundamental aspects of the nursing process. The course describes the anatomy and physiology of the heart with emphasis on the conduction system and electrophysiology. The basic concepts for the interpretation of the electrocardiogram (ECG), interpretation and management of cardiac dysrhythmias will also be analyzed. In addition, diagnostic and therapeutic tests and procedures used in clients with cardiac dysrhythmias and conduction disturbances, as well as antiarrhythmic drugs will be discussed. The course includes 3 hours of lecture weekly and 2 hours of laboratory weekly. 1 semester. 3 credits.

ENF 407 - FUNDAMENTALS OF CRITICAL CARE NURSING. Prerequisites: ENF 305, ENF 307, ENF 308 and ENF 312: ENF 415. The course will introduce the student to the fundamental competencies of nursing care with adult clients receiving treatment in the critical care unit. The effects of the clinical environment of the unit on the psychological, social, spiritual, and ethical-legal aspects of the client and his/her family will be studied. Likewise, the educational component based on the participation of the client and his family in the recovery process will be considered. High risk and mortality conditions affecting the adult population will be studied, articulating the nursing process as a scientific method to provide nursing care. The course includes 4 hours of weekly lectures. One semester. 4 credits.

ENF 415 - PRACTICUM: NURSING ADMINISTRATION AND LEADERSHIP. Prerequisites: ENF 305, ENF 307, ENF 308 and ENF 312. Concurrent Courses: ENF 407. This course will introduce students to the study of the fundamental concepts of management, supervision and leadership in nursing services. Processes for conflict management in the clinical unit and problem solving methods aimed at improving health services will be studied. In addition, critical and reflective judgment will be fostered by studying the philosophical and bioethical aspects related to the organizational structures that provide health and nursing services. Simultaneously, the theoretical component will be complemented with clinical practice; integrating administrative aspects with the performance of nursing functions and care. The course includes 4 hours of weekly lectures and 12 hours of weekly clinical experience. One semester. 5 credits.

EPRE 230 - CURRICULUM AND METHODOLOGY IN TEACHING PRE-SCHOOL LEVEL. Prerequisite: EDUC 204. Development of concepts and skills in the different curricular areas: Science, Mathematics and Social Studies. Teaching methodology and planning for the development of these concepts. Discussion of different learning methods and topics such as Montessori, Piaget, Rousseau and others. 3 credits.

EPRE 235 - DEVELOPMENT OF SCIENTIFIC THINKING: INTEGRATED TEACHING METHODOLOGY AT THE PRESCHOOL LEVEL. The course will provide information related to the value, concepts, and curricular content necessary to promote investigative awareness in the preschool child. Necessary knowledge and experiences with the components of science: physical science, life science, earth and environment will be highlighted. Appropriate educational strategies, techniques, materials, and resources for the development of the preschool child are examined. 3 credits.

EPRE 338 - PRESCHOOL LANGUAGE DEVELOPMENT. Prerequisite: EDUC 204 Knowledge of considerations in language development of the preschool child. Attention to the development of language skills, how it is acquired and the contribution of adults to proper acquisition. Attention will be given to individualization of instruction in language development. 3 credits.

EPRE 340 - PERCEPTUAL MOTOR DEVELOPMENT, through CREATIVITY, PLASTIC AND MUSICAL MANIFESTATIONS AT PRESCHOOL LEVEL. Knowledge in the perceptual motor development in the preschool age. Development of activities that stimulate movement and creativity. Music and art will serve as the basis for the development of skills that will enable this professional in these areas. The stimulation of creativity through self-expression is one of the most relevant aspects of this course. 3 credits.

EPRE 356 - BASIC FUNDAMENTALS FOR THE ADMINISTRATION OF PRESCHOOL EDUCATION CENTERS. Fundamental knowledge about the administration of pre-school education centers. The goals, objectives, organization, and evaluation of these. Services provided by the different agencies for the development of the program. 3 credits.

EPRE 403 - THE SOCIO-CULTURAL CONTEXT IN THE PRESCHOOL AGE. Prerequisite: EDUC 204. Knowledge of the socio-cultural in the integral development of the pre-school child. Role of the family, development of values, and the impact of modern technology on the development of the child of this age. 3 credits.

EPRE 429 - PRE-PRACTICE PRE-SCHOOL LEVEL. *Must be authorized by the Coordinator.* Prerequisites: EDUC 204 and EDEL 221. Direct experiences in a Pre-School Education Center. The student will observe the development of the different experiences offered in the Pre-School Education setting. They will assume the responsibility of working in activities of the teaching-learning process. 3 credits.

EPRE 431 - PRESCHOOL EDUCATION PRACTICE. Direct teaching practice. Initially the student-teacher will assume responsibility for one area of the preschool curriculum. He/she will then assume other areas according to the recommendations of his/her cooperating teacher and supervisor. 6 credits.

EPRE 432 - PRE-SCHOOL PRACTICE SEMINAR. Analysis and discussion of experiences and situations encountered in the Teaching Practice. Educational conferences related to the professional training of the future teacher. 2 credits.

EREL 113 - BIBLE AND CHRISTIAN LIFE. This course promotes the study of the Bible in such a way that students learn the path of faith and link the Holy Scriptures with their own personal and social histories. Students will identify the religious fact as something fundamental and referential in the history of mankind. In addition, the concept of God's Revelation will be explained. The structure and content of the Bible, its location within sacred literature and its importance in the history of salvation will be studied. The student will analyze the biblical anthropology and the concept of the Covenant of God. Finally, the student will identify from the Sacred Scriptures, the person of Jesus, his relationship with God as father and the project of the Kingdom. 3 credits.

EREL 202 - GREAT RELIGIONS. Study of the phenomenon of human faith in God, its questions and the answers given by the great religions of the world, especially Islam, Judaism, Christianity and Hinduism. The great symbols of each religion, their sacred texts, mode of worship, traditions and doctrinal principles will be studied. 3 credits.

EREL 205 - SEXUALITY AND CHRISTIAN MARRIAGE. The course studies human sexuality in the light of contemporary moral theology. It deals with the biblical bases, anthropological, scientific, theological foundations of human sexuality and the various ways of expressing love in couple relationships. The relationship of courtship as a preparation for marriage, as well as the reality of marriage and the family from the Christian perspective are studied in the light of the magisterium of the Catholic Church. 3 credits.

EREL 215 - CHRISTIAN SOCIAL THOUGHT. The course deals in an introductory way with social morality through the study of the main social documents of the pontifical magisterium from Leo XIII to the present day. Thus, the realities of politics, economics, and other social relations will be analyzed from the point of view of the postulates of the Gospel. 3 credits.

EREL 252 - INTRODUCTION TO MARIOLOGY. The course introduces the student to the theology of the figure of Mary in the Christian Gospels and in the sacred texts of other religions. The contemporary pontifical magisterium on Mary, the mother of Jesus of Nazareth, will be taken as a reference for the study of the various aspects of the treatment of Mary: the Catholic Marian dogmas, her cult and popular traditions. 3 credits. 45 hrs.

EREL 238 - INTRODUCTION TO CHRISTOLOGY. Introductory study on the historical Jesus starting from the sources of the Christian communities, the Gospels, his historical environment and the latest hermeneutical studies. It will deepen in the person of Jesus as it emerges from the Gospels, emphasizing his attitudes towards the poor, the marginalized, the religious and the powerful. The theological themes of the death and resurrection of Jesus, as well as his message, will be addressed. 3 credits.

EREL 340 - HISTORY OF CHRISTIANITY IN PUERTO RICO. Development of the Christian faith in the history of Puerto Rico from the colonization of the sixteenth century, through the introduction of Protestantism during the U.S. invasion, to the configuration of the churches in our days. Emphasis will be placed on paradigmatic events and characters of Christianity for Puerto Rican society, emphasizing the context of the history of the Catholic Church in relation to the Caribbean. 3 credits.

EREL 345 - INTRODUCTION TO THE OLD TESTAMENT. Basic analysis of the Hebrew traditions from the book of Genesis to the book of Maccabees in the context of the History of Israel. The major Old Testament theological themes will be studied with emphasis on the Pentateuch, the Prophets, and the wisdom tradition. 3 credits.

EREL 346 - INTRODUCTION TO THE NEW TESTAMENT. Introductory study on the formation of the Gospels. The problem of hermeneutics and the New Testament literary genres: gospels, epistles, apocalyptic. The synoptic problem and the particularities of the Johannine literature will be addressed. The figure of Paul and his main theological themes will be analyzed in a panoramic way. 3 credits.

EREL 347- CONTEMPORARY PROBLEMS OF CHRISTIAN MORALITY. The great current problems of the morality of the person will be analyzed, such as birth control and assisted birth, euthanasia, genetic experimentation, among others. The dialogue between the contemporary pontifical magisterium and current moral theology will be taken as a criterion of understanding and analysis. 3 credits.

EREL 401 - INTRODUCTION TO ECCLESIOLOGY. This course will deal in a basic way with the theology of the congregation of believers called Church since its understanding in the Second Vatican Council. The major themes of the Church in the Christian tradition such as its characteristic features, its hierarchical reality and ministries will be addressed. Catholic ecclesiology will be compared with that of other Christian faith communities. 3 credits.

EREL 485 - DEVELOPMENT OF THEOLOGICAL THOUGHT. The paradigmatic theological thinkers from ancient Christianity to the present day will be studied chronologically: Augustine, Thomas Aquinas, Catherine of Siena, Teresa of Jesus, Luther, Rahner, Schillebeeckx, Congar, Gutierrez, Tamez, among others. Students will be exposed to a selection of readings on the theologians studied. 3 credits.

ESCO 103 - STUDENT SUCCESS AND COMMUNITY SERVICE. This course must be passed during the first semester of studies in order to be able to enroll in subsequent semesters. The course seeks that incoming students acquire the necessary competencies to carry out their university studies and develop as professionals in society: study habits and methods, use of information resources, analysis techniques, interpretation and evaluation of personality, career, or profession. In their professional development, they are expected to integrate social concern and a sense of selfless service to the community in which they live. Community service experiences will be required. 3 credits.

ESP 107 - GRAMMATICAL SKILLS THROUGH READING AND WRITING. In this course, students will study the grammatical skills of the Spanish language through the reading of diverse literary manifestations and the practice of written composition. Students will interpret, analyze, and appreciate readings of poetry, short stories, and novels. Students will study the origin and evolution of the Spanish language, the correct use of vocabulary, word stress, the nominal syntagm, the simple sentence, and the paragraph. The student will practice writing skills, emphasizing morphosyntactic and lexical-semantic aspects. Additional practice in virtual language lab is required. 3 credits.

ESP 108 - ADVANCED GRAMMATICAL SKILLS THROUGH READING AND WRITING. Prerequisite: ESP 107. This course will seek to develop advanced Spanish grammatical skills through the reading and analysis of diverse literary manifestations, especially essays, poetry, and novels, and the practice of written composition. Students will study the verbal syntagm and its structure, the coordinated compound sentence, punctuation marks, and the subordinate compound sentence. The student will practice the development of ideas in expository and argumentative paragraphs, giving importance to morphosyntactic and lexical-semantic aspects. Additional practice in virtual language laboratory is required. 3 credits.

ESP 217 - INTRODUCTION TO LITERARY GENRES. Prerequisite: ESP 108. This course is intended to provide a broad overview of literary genres: poetry, short stories, novels, essays, journalism, and theater. The genres will be studied from the historical and theoretical point of view through concrete examples of each genre, preferably from Puerto Rican literature. 3 credits.

ESP 221 - SPANISH LITERATURE Prerequisite: ESP 108. Study and critical analysis of Spanish literature through representative texts of the Middle Ages and the Renaissance. 3 credits.

ESP 235 - INTRODUCTION TO LINGUISTICS. Prerequisites: ESP 108. Theoretical study of the general problems of linguistics and practical application to Puerto Rican Spanish. 3 credits.

ESP 236 - PHILOLOGY. Prerequisite: ESP 108. Theoretical study of the origin and evolution of the Spanish language and the particularities of the Spanish of America and Puerto Rico. 3 credits.

ESP 301 - ADVANCED GRAMMAR AND WRITING. Prerequisite: ESP 108. Advanced study of the laws of grammar of the Spanish language as applied to the practice of writing. Intensive review of the practical rules of syntax and style. Basic writing skills in different genres will be exercised to develop clarity, naturalness, precision, conciseness, and harmony in writing. 3 credits.

ESP 327 - SPANISH LITERATURE OF THE GOLDEN CENTURY. Prerequisites: ESP 108 and ESP 221. Intensified study of Spanish literature of the Golden Age (XVI - XVII) in all its genres. Analysis of the theoretical proposals of the great authors of this period and their representative works. 3 credits.

ESP 328 - CONTEMPORARY SPANISH LITERATURE. Prerequisite: ESP 108. Study, analysis and discussion of the most important works, authors and movements of the Generation of '98, '27, the Civil War and the present time. Critical analysis and discussion of representative works. 3 credits.

ESP 341 - HISPANIC AMERICAN LITERATURE I. Prerequisite: ESP 108. Study, analysis and discussion of representative works, authors and movements of Spanish American literature from its beginnings to the XIX Century. Critical analysis and discussion of representative works. 3 credits.

ESP 342 - HISPANIC AMERICAN LITERATURE II. Prerequisite: ESP 108. Study, analysis and discussion of representative works, authors, and movements of Spanish American literature from modernism to current literature. Critical analysis and discussion of representative works. 3 credits.

ESP 365 - PUERTORICAN LITERATURE I. Prerequisite: ESP 108. Study of representative works, authors, and movements of Puerto Rican literature from its beginnings to Modernism. Reading and critical analysis of representative works. 3 credits.

ESP 366 - PUERTO RICAN LITERATURE II. Prerequisite: ESP 108. Study of representative works, authors, and movements of Puerto Rican literature from the Generation of the Thirties to the present. Reading and critical analysis of representative works. 3 credits.

ESP 380 - DICTION AND PUBLIC SPEAKING. Elementary techniques in the art of human voice emission and public speaking. The skills of elocution, phonation, and intonation will be developed, as well as the various modalities of Oral Communication. Emphasis will be placed on speech preparation and reading, as well as reading news, commercials, and other genres. Use of microphone and integration of voice and body movement. 3 credits.

EST 200 - STATISTICS FOR BUSINESS. Prerequisite: MATE 106. The Statistics for Business course divides the basic principles of statistics into the three fundamental parts of the discipline: descriptive statistics, probability, and inferential statistics. The topics to be covered are basic concepts of statistics, data collection and organization, sampling, and measures of central tendency and deviation. Concepts of probability and probability distributions, sampling techniques, intervals, hypothesis testing, linear regression, and correlation. This course requires the use of the computer lab. 4 credits.

FIL 201 - PRINCIPLES OF PHILOSOPHY. This course aims to help students understand the value of philosophy as a science that investigates reality and as a fundamental way of knowing about the human

being. As a science, students will be introduced to the broad field of philosophy and the different disciplines that compose it. In addition, the main manifestations of philosophical knowledge throughout history will be analyzed, especially at present. As human knowledge par excellence, philosophy establishes fundamental rules that order the human intellect to acquire valid knowledge about reality. Finally, the student will be able to acquire, develop and apply the logical method to reflect critically about the reality that surrounds him/her and about him/herself as a thinking being. 3 credits.

FIL 302 - PHILOSOPHY OF THE HUMAN BEING AND ITS ETHICAL BEHAVIOR. Philosophical study of the human being from the main theories in Western thought. The understanding of the human being as an integral being and being in relation will be the basis for the philosophical analysis of his ethical behavior. The main ethical theories in the history of western philosophy will be worked for the application to daily life. 3 credits. 45 hrs.

FIL 345 - BIOETHICS ISSUES. Bioethics is a discipline closely related to ethics or, according to some, a branch of ethics, which studies current and long-standing ethical concepts and principles on such topics as: euthanasia, organ transplants, sterilization, abortion, cloning, etc. etc. etc. 3 credits.

FIL 372 - PHILOSOPHY OF SCIENCE. Prerequisites: FIL 201 and FIL 302. Succinct overview of the secessionist and integrative process between science and philosophy. Analysis of the basic aspects of the scientific endeavor: its objectives, methods, and theoretical constructs. Scientific objectivity and epistemological realism. Reflection on progress in science. 3 credits.

FIL 374 - METAPHYSICS. Prerequisite: FIL 201. Study of "being" insofar as it is common to material and spiritual realities. With the aid of fundamental Aristotelian-Thomistic concepts, the causes of being, its consistency and dynamism are investigated. Critical analysis of the contrast between essentialism and existentialism. Intelligence and will as spiritual capacities. Study of the transcendental properties of being. Analysis of the main "crises" of Metaphysics in the history of the Western world. 3 credits.

FIL 375 - HISTORY OF ANCIENT PHILOSOPHY. Prereq: FIL 201. Overview of Greek and Roman philosophy, especially the Platonic and Aristotelian schools, Stoicism and Neoplatonism, St. Augustine. 3 credits.

FIL 376 - HISTORY OF MEDIEVAL PHILOSOPHY. Prerequisite: FIL 201. Encounter of "pistis" and "gnosis" at the beginning of Christianity. Period of transmission of Christian Greco-Roman culture at the death of St. Augustine. Birth of the institutions with the Carolingians. Relations of "pistis" and "gnosis" in the Islamic and Jewish world. The entry of Aristotle in the West; the appearance of the universities and the foundation of the Mendicant Orders lead the Middle Ages to its maximum splendor. The period of apogee is followed by another, in which the medieval warp is dismantled and the foundations of the modern world are established. 3 credits.

FIL 378 - PHILOSOPHY OF NATURE. Prerequisite: FIL 201. In the studied reality there are different perspectives: spatiotemporal and metaphysical. The constitutive fabric of nature will be approached first: systems and substances; the dynamic reality of processes and becoming to approach the structure of matter. In a second part we will study the quantitative properties of nature; causality and contingency to connect with the origin of life, the cosmos, and its meaning. 3 credits.

FIL 380 - HISTORY OF PUERTO RICAN THOUGHT. Prerequisite: FIL 201. This course studies the essence of Puerto Rican thought in the different political, social, cultural, and artistic facets of Puerto Rico. It also analyzes the origin and development of Puerto Rican. 3 credits.

FIL 381 - HISTORY OF LATIN AMERICAN PHILOSOPHY. Prerequisite: FIL 201A visionon of Hispanic Philosophy. Scholasticism in Latin America. Positivism and its repercussions in the different countries of Latin America. Existentialism in America. Current trends. Is it possible to speak of a Latin American philosophy, 3 credits.

FIL 471 - NATURAL THEOLOGY. Prerequisite: FIL 201. Possibility of a science of God within Philosophy. Theoretical foundations of such a science. Proofs for the existence of God in St. Thomas. Analysis of other arguments. Atheism and its modern forms. Knowledge of the nature of God. Pantheism. Influence of God on creatures. The concept of God is the main modern philosophical current. 3 credits.

FIL 472 - EPISTEMOLOGY. Prerequisite: FIL 201. The "critical" problem in philosophy: existence, origin, and present formulation. Metaphysical nature of epistemology. Its method, skepticism, empiricism, rationalism, idealism, and realism. Criticism of concepts, judgment, and reasoning. The problem of certainty and its criteria. 3 credits.

FIL 474 - PHILOSOPHY OF RELIGION. Prerequisite: FIL 201. Study of the spatiotemporal phenomenon of dialogue between man and the transcendent until reaching the optical root of religion. This involves the description of the religious fact (sciences of religion) and its peculiarity among other phenomena. Man's behavior varies according to times and places in relation to transcendence, translated into acceptance or rejection of it (responses to the sacred). Our attitude towards the future of religion. 3 credits.

FIL 475 - HISTORY OF MODERN PHILOSOPHY. Prerequisite: FIL 201. After a post-medieval period of crisis (Renaissance), modern philosophical systems emerge from the seventeenth century (rationalism, empiricism) that will culminate in the eighteenth and first half of the nineteenth century with Kantian criticism and Hegelian idealism. 3 credits.

FIL 476 - HISTORY OF CONTEMPORARY PHILOSOPHY. Prereq: FIL 201. Analysis of the most outstanding contemporary and current philosophical systems since Hegel's death (1831): positivism, the renewal of modern systems, irrationalism, Marxism, essentialism, existentialism, historicism, personalism, structuralism, realism, technocracy. Also, the main authors framed in the general lines of each system will be studied. 3 credits.

FIL 480 - SOCIAL ETHICS. Prerequisite: FIL 201. Social ethical concepts and principles considering traditional and current philosophy as they relate to the moral conduct of man in society. 3 credits.

FIL 483 - PHILOSOPHY, MORALS AND POLITICS. 3 credits. Concepts and social ethical principles in the light of traditional and current philosophy as they relate to the moral conduct of man in society.

FIN 215 - COMMERCIAL FINANCE. Prerequisites: ECON 200 and CONT 116. Introduction to the basic concepts of finance, decision areas and analytical procedures relevant to the financial management of private companies and their scope in the global economic environment. Study of the process of providing, managing, and distributing a company's funds, valuation of bonds and stocks. It includes capital budgeting and techniques for capital budget evaluation. 3 credits.

FIS 303 - GENERAL PHYSICS I. Prerequisite: MAT 224. Discussion of Newtonian mechanics; that is, unit systems, vectors, statics, kinematics, dynamics, energy, momentum, universal gravitation, fluids, among others. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

FIS 304 - GENERAL PHYSICS II. Prerequisite: MAT 224, FIS. 303. Discussion of waves, heat, electricity, magnetism, optics, among others. Course includes 3 hours of lecture, 3 hours of lab complementary to the course. One semester. 4 credits.

FIS 305 - MODERN PHYSICS SEMINAR. General course designed for science education students. Includes topics related to atomic physics, relativity, quantum mechanics and their applications. Course includes 1 hour of lecture. One semester. 1 credit.

FRAN 211 - ELEMENTARY FRENCH I. Introductory French course that presents the student in an integrated manner all the language skills: reading, writing, oral communication and listening comprehension) in real communicative contexts. Emphasis is placed on pronunciation and conversation, working on grammatical structures based on the needs of the speaker. Fundamental aspects of French culture in the world are presented. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits.

FRAN 212 - ELEMENTARY FRENCH II. Prerequisite: FRAN 211. Second introductory course of French in which the student continues to be introduced to all language skills (reading, writing, oral communication and listening comprehension) in an integrated manner in real communicative contexts while advancing in the mastery of the language. Emphasis is placed on pronunciation and conversation, working on more complicated grammatical structures based on the needs of the speaker. Aspects of French culture in the world are explored in depth. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits.

GEOG 102 - GEOGRAPHY OF PUERTO RICO Prerequisite: None. The course introduces the geography of Puerto Rico, from its physical and human aspects, taking into consideration the historical factor. The course begins with an introduction to geography and its development as a discipline. It then goes on to discuss the physical environment of Puerto Rico (rocks, soils, streams, wetlands, climate, vegetation) and its historical evolution. Once the physical aspect is discussed, the course moves on to analyze aspects of human geography (economic, social, urban and city geography, geopolitics, demography) and how these have evolved over time. 3 credits.

GEOG 204 - HUMAN GEOGRAPHY. The study of social and human reality from a geographic frame of reference. This approach allows understanding the spatial patterns and processes that shape how humans use and alter their social environment, creating the diversity of places and people in today's world. In this context, a variety of topics are explored that raise relationships with other branches of the social sciences including anthropology, sociology, or economics. The focus of the course is on current processes and their geographic variability along with the study of the ways in which changes on a global scale are affecting and, in turn, are affected by local events and regional conditions. The course will give special emphasis to Puerto Rican society. 3 credits.

GEOG 206 - PHYSICAL GEOGRAPHY. Study of the fundamental processes and interrelationships among the atmosphere, lithosphere, biosphere, and hydrosphere using a systems science approach. Topics will include landforms and landscapes, geodesy, Earth surface materials, soils, biogeography, weather and climate, hydrology, water resources, and glacial processes. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. 4 credits.

GEOG 408 - URBAN GEOGRAPHY This course introduces the study of the city and urban spaces. Classical models of the city are discussed along with contemporary issues in geography and urban planning. Emphasis is placed on the importance of transportation, housing, social conditions, and environmental aspects of the city. 3 credits.

GER 110 - MANAGEMENT AND LEADERSHIP. Application of administrative theories to the practices of planning, organization, management, and control of organizations. Study of the fundamentals and skills necessary for management and leadership processes. Approach to the challenges of globalization, technological changes, and social responsibility. Responsible use of power and organizational influence. 3 credits.

GER 260 - INTERNATIONAL TRADE. Prerequisite: GER 110. Fundamentals of international trade. Study of political, economic, and socio-cultural factors affecting international trade. Study of administrative, operational, and ethical aspects. 3 credits.

GER 315 - SOCIETY AND BUSINESS. Prerequisite: GER 110. Relationship of the firm with the social system and its effect on managerial decision making and the establishment of organizational policies. Study of factors in the company's environment, such as public policy, social responsibility, technology, and the environment. Analysis of the various stakeholders: government, shareholders, consumers, employees, and community. 3 credits.

GER 317 - LABOR-MANAGEMENT RELATIONS. Prerequisite: GER 110. History of the labor movement. Current legislation in labor-management relations in Puerto Rico and the United States. Organization of unions, rights, and responsibilities of the employer, strikes and unionization of public employees. The general process of collective bargaining and arbitration is studied. 3 credits.

GER 325 - EFFECTIVE SUPERVISION. Prerequisite(s): GER 110. Study of techniques and tools for effective supervision of employees and company operations. Emphasis will be given to the role of the supervisor in the modern business. Discussion of such topics as: assignment of tasks, selection and evaluation of personnel, leadership, communication, management of conflict, change and stress. 3 credits.

GER 375 - PRODUCTION AND OPERATIONS MANAGEMENT. Prerequisite: GER 110. Fundamental principles of the organization of production systems for goods and services. Includes the historical development of production management, manufacturing methods, location of facilities, and effective arrangement of machinery and equipment. Materials handling, purchasing and storage. Quality control. 3 credits.

GER 425 - STRATEGIC PLANNING. Prerequisite: GER 110. Basic concepts of strategic planning and its relationship to external factors affecting the company. Analysis of the environment, internal evaluation, mission, and goal setting. Formulation and implementation of organizational strategies. 3 credits.

GER 494 - MANAGEMENT INTERNSHIP. Prerequisites: Overall and concentration average of 3.0 minimum. Senior year of study. Supervised work experience in the field of management where theory and practice are integrated. It will take place in a private company selected as an internship center and will be under the supervision of a professor. In addition to the internship, students will have the opportunity to participate in workshops, conferences, seminars, case discussions and other activities that will facilitate the transition from the university to the company. The student will complete 150 hours of supervised practice. 4 credits.

GIS 202 - CARTOGRAPHIC SCIENCE. Prerequisite: None. Cartography is the science of communicating spatial information with maps. The course presents the concepts, principles, and techniques related to the design and production of cartography. 3 credits.

GIS 304 - GEOGRAPHIC INFORMATION SYSTEMS. Prerequisite: GIS 202. Theoretical and practical introduction to geographic information science. Course emphasizes the general theory of Geographic Information Systems (GIS) and its use as a tool in spatial analysis. The course offers a balanced combination of theoretical fundamentals and practical applications dealing with, among others, raster/vector data models and analysis, databases and attributes, data capture and visualization, and spatial analysis. 3 credits.

GIS 306 - REMOTE SENSING. Prerequisite: GIS 202. Principles of spatial remote sensing and satellite image analysis. Fundamentals of the electromagnetic spectrum and how we use these to obtain and analyze imagery are discussed. Techniques for image analysis, interpretation and validation of results are discussed. Practical work will involve digital image analysis. 3 credits.

GIS 308 - SPATIAL DATABASE SYSTEMS MANAGEMENT PREREQUISITE: COMP 244. Prerequisite: COMP 244. This course covers geospatial database design, implementation, administration, and access for students interested in organizing spatial and non-spatial data in database management systems (DBMS). Students will gain a basic understanding of terminology related to database systems, design principles, and issues faced by database administrators and analysts. They will gain hands-on experience in the use of databases using database management systems software and geographic information systems software to design and use spatial and non-spatial data. 3 credits.

GIS 310 - PROGRAMMING IN GIS. Prerequisite: COMP 250. This course is designed to introduce the student to the world of programming within a Geographic Information Systems environment. Upon completion of the course the student is expected to be able to effectively apply various programming languages to solve spatial problems and automate workflows through the creation and modification of scripts. The course will use languages such as Python, R and others. 3 credits.

GIS 412 - GEOGRAPHIC INFORMATION SYSTEMS AND RESEARCH. Prerequisite: GIS 304. This course is designed to prepare students in aspects related to research strategies practiced by Geographic Information Systems professionals and prepare students to address many of the challenges they will face when conducting research. 3 credits.

GIS 414 - WEB AND MOBILE APPLICATION DEVELOPMENT FOR GIS. Prerequisite: COMP 210. The course will cover aspects of geographically based application programming with a focus on programming for the web and cell phones. Students learn about the advantages and techniques of publishing, viewing, and accessing maps on the Internet, including Web GIS / Web mapping systems architecture, Markup languages

(e.g., HTML, XML, SVG, and GML), scripting language, web mapping, data exchange and geoportals, spatial web services, and OGC standards. 3 credits.

GIS 416 - SOCIAL RESPONSIBILITY FOR SIG PROFESSIONALS. Prerequisite: None. Drawing from the major theories of behavior, practices, and guidelines of the Geographic Information Systems (GIS) professional are examined with the goal of helping to develop decision-making and ethical behavior in compliance with the appropriate and moral standards of this professional group. Major ethical theories in the history of Western philosophy are reviewed in the course. 1 credit.

GIS 418 - CAPSTONE PROJECT PREREQUISITE: GIS 412. Prerequisite: GIS 412. Course in which the student must undertake a research project as a demonstration of proficiency in Computer Science and Geographic Information Systems. 4 credits.

GIS 420 - GEOGRAPHIC INFORMATION SYSTEMS APPLIED TO HEALTH. Prerequisite: None. Health geography is the study of human-environment interactions and the influence of these interactions on population health, i.e., how people interact with their physical and social environment to promote health and well-being or to increase their vulnerability to disease. The objective of this course is to introduce students to the use of Geographic Information Systems as a tool to explore and analyze geographic data related to health issues. 3 credits.

GRIE 211 - GENERAL INTRODUCTION TO KOINE GREEK. Introductory course to biblical Greek. Study of the alphabet, declensions, and conjugations. Acquisition of vocabulary for the understanding and translation of selected texts of the New Testament. 3 credits.

HIST 241 - HISTORY OF THE UNITED STATES. This course offers the student a compendium of the most significant events in the historical development of the United States of America, from its origins as a nation to the present. It emphasizes the economic, social, and political events that have given way to the formation and social constitution of the American people. 3 credits.

HIST 350 - HISTORY OF PUERTO RICO. This course offers the student a compendium of the most significant events in the historical development of Puerto Rico from its origins to the present. Emphasis will be placed on the study of the political, economic, and social development of the island in the 19th, 20th, and 21st centuries. Students will study basic concepts of the geography of Puerto Rico. In addition, students will analyze the historical processes that led to the formation of the Puerto Rican consciousness, the influences of the military governments of Spain and the United States on the social and political life of Puerto Ricans, the development of the Commonwealth and the struggle to maintain the national identity. 3 credits.

HUM 119 - CULTURAL DEVELOPMENT OF THE WEST I. Study of Western culture from the classical Greco-Roman cultures to the Medieval Era. The basic functions and characteristics of the humanistic disciplines, namely the visual arts, music, architecture, literature, philosophy, and religion, will be treated diachronically from the point of view of the respective artistic movements and styles in their socio-political context. The current Puerto Rican reality will always be present as a point of reflection. 3 credits.

HUM 120 - WESTERN CULTURAL DEVELOPMENT II. Prerequisite: HUM 119 A study of western culture from the Renaissance to contemporary culture. The basic functions and characteristics of the humanistic disciplines, namely the visual arts, music, architecture, literature, philosophy, and religion, will be treated

diachronically from the point of view of the respective artistic movements and styles in their socio-political context. The current Puerto Rican reality will always be present as a point of reflection.

3 credits.

HUM 220 - CONTEMPORARY CULTURE AND POSTMODERNITY. Study of Western culture in the 20th and 21st century with emphasis on all the artistic, philosophical, and social manifestations of the so-called Postmodernity. The theoretical assumptions of Postmodernity will be approached by analyzing contemporary literary, pictorial, photographic, cinematographic, architectural, musical, historical, philosophical, and theological production. The current Puerto Rican reality will be present as a point of reflection. 3 credits.

HUM 490 - RESEARCH SEMINAR. This course is for students in the College of Liberal Arts programs and is to be enrolled in the last term of studies. It is intended to intensively address research skills in the humanities. An integrating theme will be chosen so that the students of each program can produce, guided by the teacher. A dissertation. 3 credits. 45 hrs.

ING 100 - BASIC SKILLS IN ENGLISH. Students with 449 or less in the English achievement area of the PEAU must pass this course before enrolling in ING 105: English Grammar. In this course students will develop basic English skills through intensive practice in listening, speaking, reading, and writing exercises with interactive activities. In addition, this practice will be reinforced with the use of the Virtual Language Lab and mandatory tutorials. 3 credits. 45 hrs.

ING 105 - ENGLISH GRAMMAR. Study of the fundamental grammatical structure of English as a second language. Concepts of English grammar, vocabulary and writing are presented. The course involves the use of a virtual language laboratory. 3 credits.

ING 106 - ORAL COMMUNICATION. Prerequisite: ING 105. Emphasis is placed on the practice and development of oral expression through various activities, including the reading of diverse literary genres. The course involves the use of virtual language laboratory. 3 credits.

ING 113 - GRAMMAR, READING AND WRITING FOR BILINGUAL STUDENTS I. Practice of intermediate and advanced level grammatical forms through critical analysis of readings, writing paragraphs, compositions, and essays. 3 credits.

ING 114 - GRAMMAR, READING AND WRITING FOR BILINGUAL STUDENTS II. Practice of intermediate and advanced level grammatical forms through critical analysis of essays, essay writing, and presentation of oral activities such as panel, symposium, and debate. 3 credits.

ING 201 - REPORT WRITING WITH MEDICAL TERMINOLOGY. Prerequisite: ING 106 or advanced coursework in ING. This course will work with the basic medical vocabulary that nursing and pre-medical students should know to write reports, reports and other types of documents appropriate to the student's field of specialization. Technical articles related to the student's field of study will be discussed and essential medical vocabulary for writing in English will be worked on. 3 credits.

ING 203 - BASIC CONVERSATIONAL ENGLISH. Prerequisite: ING 106 or advanced courses in ING. Designed to improve the oral communication skills of English as a second language students. This course includes a variety of activities that promote oral communication in a variety of contexts. 3 credits. 45 hrs.

ING 225 - ADVANCED CONVERSATIONAL ENGLISH. Prerequisite: ING 106 or advanced courses in ING. Prepares students in oral and written skills conducive to public presentations. Good diction habits, techniques, and strategies necessary for leadership development will be observed. The course involves the use of the language lab. The course involves the use of the language lab. 3 credits. 45 hrs.

ING 246 - INTRODUCTION TO LITERARY GENRES. Prerequisite(s): ING 106 or advanced courses in ING. Introduction to the study of the structure, historical development, and teaching methodology of literary forms. Discussion is grounded in the reading, analysis, and teaching of the methodology of poetry, the short story, the novel, and drama especially written for adolescents. 3 credits. 45 hrs.

ING 301 - MODERN ENGLISH I: ELEMENTARY GRAMMATICAL STRUCTURES IN ENGLISH. Prerequisite: ING 106 or advanced courses in ING. Practice in the elementary grammatical structures of English. This course helps students differentiate between the formal and informal structures of the English language. 3 credits. 45 hrs.

ING 302 - MODERN ENGLISH II: APPLICATION OF GRAMMATICAL STRUCTURES IN READING ENGLISH. Prerequisite(s): ING 106 or advanced courses in ING. Practice of grammatical structures across literary genres. This course helps students differentiate between formal and informal structures of modern English. 3 credits. 45 hrs.

ING 307 - LITERATURE I. Prerequisite: ING 106. Introduction to literature through the different literary genres. The emphasis in this course is given to the study of poetry and the short story. Reading and analysis of an extensive variety of authors from all periods. 3 credits.

ING 322 - BASIC COMPOSITION. Prerequisite(s): ING 106 or advanced courses in ING. Introduction to basic principles of English writing; sentence structure, structure, and method of development from paragraph to essay. 3 credits. 45 hrs.

ING 323 - ADVANCED COMPOSITION. Prerequisite(s): ING 106 or advanced courses in ING. Introduction and application of writing different types of essays (expository, narrative, and descriptive) and writing a research paper. 3 credits. 45 hrs.

ING 355 - LINGUISTIC ANALYSIS IN THE TEACHING OF ENGLISH. Prerequisite(s): ING 106 or advanced courses in ING. This course is for prospective teachers. Linguistic content will be analyzed and a Workshop in Preparation of materials for teaching this discipline is offered. 3 credits. 45 hrs.

ING 365 - LITERATURE OF THE UNITED STATES. Panoramic survey of the development of literature in the United States. U.S.A., FROM COLONIAL TIMES TO THE PRESENT DAY. From colonial times to the present day. Reading and analysis of great authors such as Washington Irving, James Fenimore Cooper, Nathaniel Hawthorne, Herman Melville, Edgar Allan Poe, Henry James, Ernest Hemingway, William Falukner, Emily Dickinson, John Steinbeck, Junot Díaz, Philip Roth, among others. Readings and discussion will be in English. 3 credits. 45 hrs.

ING 380 - BRITISH LITERATURE. Panoramic survey of the development of British literature in both the United Kingdom and the Commonwealth from the Medieval Era to the present day. A representative selection of authors such as Chaucer, Shakespeare, Milton, Fielding, Dickens, Shelley, Wolf, Wilde, Lawrence, Yeats, Joyce, Conrad, among others, will be read and analyzed. Readings and discussion will be in English. 3 credits. 45 hrs.

ING 421 - PHONETICS. Prerequisite(s): ING 106 or advanced courses in ING. In this course the concepts of linguistics such as phonetics, morphology, syntax, semantics, and lexicon are studied and analyzed. It defines the concept of linguistics and its importance in the study of English. The origin of languages is studied and the origin of English in order to understand the differences between Romance and Germanic languages. 3 credits. 45 hrs.

ING 423 - INTRODUCTION TO LINGUISTICS I. Prerequisite(s): ING 106 or advanced courses in ING. Overview of linguistics leading to the student developing an interest in one or more of its specific areas, such as linguistics, etc. Study of the relationship between the various branches of linguistics such as phonetics, morphology, semantics, philology, morphology, syntax, and thus language teaching and learning. 3 credits. 45 hrs.

ING 425 - COMPARATIVE ANALYSIS BETWEEN ENGLISH AND SPANISH. Prerequisites: ING 106 or advanced courses in ING. Comparison of the phonetic, morphological, structural, and lexicographic systems of Latin American Spanish and U.S. English. Analysis of the difficulties of Puerto Ricans in studying English as a second language. 3 credits.

ITAL 211 - ELEMENTARY ITALIAN I. Introductory Italian course that presents the student in an integrated manner all the language skills (reading, writing, oral communication and listening comprehension) in real communicative contexts. Emphasis is placed on pronunciation and conversation, working on grammatical structures based on the needs of the speaker. Fundamental aspects of Italian culture are presented. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits.

ITAL 212 - ELEMENTARY ITALIAN II. Prerequisite: ITAL 211. Second introductory course of Italian in which the student continues to be introduced to all language skills (reading, writing, oral communication and listening comprehension) in an integrated manner in real communicative contexts while advancing in the mastery of the language. Emphasis is placed on pronunciation and conversation, working on more complicated grammatical structures based on the needs of the speaker. Aspects of Italian culture are explored in depth. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits.

LATIN 211 - ELEMENTARY LATIN I. Introduction to the Latin language in its classical variant. Study of declensions and conjugations, as well as the basic grammatical rules for comprehension and translation. Reading and explanation of elementary classical and ecclesiastical texts. 3 credits.

LATIN 212 - ELEMENTARY LATIN II. Second introductory course to the Latin language in its classical variant. Continuation of the study of declensions and conjugations, as well as the basic grammatical rules for comprehension and translation. Reading and explanation of elementary classical and ecclesiastical texts. 3 credits.

LITE 440 - COMPARATIVE LITERATURE TOPICS. Comparative study of the fundamental themes of Western literature such as the use of mythology, but with emphasis on contemporary criticism: feminism and gender, postcoloniality, history and fiction, postmodernity, canon, etc. 3 credits.

LITE 441 - LITERARY THEORY. Study of the main theories of literature as a phenomenon and of genres from Aristotle to the present day. These theories will be applied to literary criticism according to the main schools. 3 credits.

MAND 211 - BASIC MANDARIN I. Introductory Mandarin Chinese course that presents the student in an integrated manner all the language skills: reading, writing, oral communication and listening comprehension) in real communicative contexts. Emphasis is placed on learning the characters, their meaning and phonology. Fundamental aspects of Chinese culture are presented. 3 credits.

MAND 212 - BASIC MANDARIN II. Prerequisite: MAND 211. Second introductory Mandarin Chinese course that introduces the student to all language skills (reading, writing, speaking and listening) in an integrated manner in real communicative contexts. The learning of characters, their meaning, and phonology is enhanced. Fundamental aspects of Chinese culture continue to be presented. 3 credits. **MAT 100 - BASIC MATH SKILLS.** Studies of basic operations with non-negative whole numbers with fractions and decimals. Application of this mathematics to problem solving. Concepts and elementary applications of geometry - use of the computer as a tool in education. The course includes 3 hours of lecture. One semester. 3 credits.

MAT 131 - ELEMENTARY STATISTICS. Prerequisite: MATE 106. Sampling. Data analysis. Frequency distributions. Graphs. Measures of central tendency. Measures of dispersion. Measures of position. Probability. Binomial and normal distribution. Correlation and regression. T distribution. The course includes 3 hours of lecture. One semester. 3 credits.

MAT 138 - COMPUTER SCIENCE MATHEMATICS AND ALGORITHMS. Prerequisite: MATE 107. Mathematical problems related to computers and number systems most commonly in the field. Requires use of computers. Course includes 3 hours of lecture. Semester. 3 credits.

MAT 204 - GEOMETRY. Prerequisite: MAT 107. Fundamental elements of Euclidean geometry. Elements of logic. Deductive reasoning. Congruence. Similarity. Geometric constructions. Notions of non-Euclidean geometry. The course includes 3 hours of lecture. One semester. 3 credits.

MAT 206 - MODERN MATHEMATICS. Prerequisite: MAT 224. Formal logic set theory. Functions. Groups. Semigroups. Rings. Bodies. The course includes 3 hours of lecture. One semester. 3 credits.

MAT 208 - NUMBER THEORY. Prerequisite: MAT 224. Divisibility and number systems. Divisors and multiples Euclidean algorithms, Fermat's and Euler's methods. Prime number theory, number theory functions, linear and diophantine equations. Linear congruence. Historical development. Course includes 3 hours of lecture. One semester. 3 credits.

MAT 220 - FINITE MATHEMATICS AND ITS APPLICATIONS TO BUSINESS ADMINISTRATION. Prerequisite: MATE 106. Linear functions, polynomial and rational functions. Exponential functions, logarithmic functions. Use of simple interest and compound interest. Present and future value of an ordinary annuity: amortization. Systems of linear equations and matrices. Operations with matrices, Gauss-Jordan

method. Application of linear programming. Graphical and simple method. 3 hours lecture, one semester, 3 credits.

MAT 223 - PRECALCULUS I. Prerequisite: MATE 107. Equation of the line. Functions and graphs. Algebra of functions. Exponential and logarithmic functions. Trigonometric functions. Course includes 3 hours of lecture. One semester. 3 credits.

MAT 224 - PRECALCULUS II. Prerequisite : MAT 107, MAT 223. Analytic trigonometry. Complex numbers. Trigonometry applications. Analytic geometry. Systems of linear equations (Gauss-Jordan) and matrices. Successions and series. The course includes 3 hours of lecture. One semester. 3 credits.

MAT 240 - DISCRETE MATHEMATICS APPLIED TO COMPUTERS. Prerequisite: MAT 320. This course studies those concepts and topics that relate discrete mathematics and its structures to computer science. These concepts form the basis for a proper understanding of the computational logic and reasoning that has led to the development of computer systems. Among the topics to be discussed are sets and their operations, basic and propositional logic, counting, Cartesian product, recurrence and equivalence relations, graphs, binary trees, Karnaugh maps, logic gates, logical expressions, their simplification and Boolean Algebra. 3 credits. 45 hrs.

MAT 320 - CALCULUS I. Prerequisite: MAT 224. Limits, continuity, derivatives, applications to anti-derivative maxima and minima, integrals of polynomial, exponential, logarithmic and trigonometric functions, applications of integrals. Course includes 3 hours of lecture. One semester. 3 credits.

MAT 321 - CALCULUS II. Prerequisite: MAT 320. Definite integrals, applications of integrals, integration techniques, L'Hospital's Rule. Appropriate improper integrals. Infinite series. Functions of several variables. Multiple integrals. Course includes 3 hours of lecture. One semester. 3 credits.

MAT 325 - LINEAR ALGEBRA. Prerequisite: MAT 320. Systems of linear equations. Linear transformations. Matrix algebra. Determinants. Vector spaces. Eigenvalues and eigenvectors. Inner product. Orthogonality. The course includes 3 hours of lecture. One semester. 3 credits.

MATE 105- MATHEMATICS FOR HEALTH PROFESSIONALS. Study of topics related to number theory: primes and composites, greatest common divisor and least common multiple. Basic operations with fractions and decimals. Evaluations of algebraic expressions and literal equations. Ratio and proportion. Percentages. Conversions between units. Application of this mathematics to the resolution of problems related to the health professions. The course includes 3 hours of lecture. One semester. 3 credits.

MATE 106 - INTERMEDIATE ALGEBRA I. This course will present an introduction to the study of intermediate algebra. It will study sets and operations with sets and operations with real numbers. It will work with operations with algebraic expressions. In addition, the student will be exposed to the resolution of equations and linear inequalities with one variable, including ratios and proportions and literal equations. Of equal importance, the rules of exponents and scientific notation will be studied. We will also work with polynomials and their operations, as well as factoring. An introduction to rational expressions and operations with rational expressions will be presented. The course includes 3 hours of lecture. One semester. 3 credits.

MATE 107 - INTERMEDIATE ALGEBRA II. Prerequisite: MATH 106. Rational expressions. Roots and radicals. Equations with radicals. Quadratic equations. Linear equations and inequalities in two variables.

Equations and inequalities with absolute value. Matrix algebra. Systems of equations (Cramer) and linear inequalities. The course includes 3 hours of lecture. One semester. 3 credits.

MATE 140 - MATHEMATICS FOR EDUCATORS. This course will train College of Education students in the mathematics competencies tested on the PCMAS tests. It will emphasize problem solving skills through deductive and inductive, convergent, and divergent thinking. The basic concepts of set theory are discussed. In addition, they will study topics related to number theory: primes and composites, maximum common factor, and least common multiple and Fibonacci sequence. As well as operations with fractions and decimals. It will also present an introduction to statistics and Geometry. Of equal importance, algebraic expressions will be studied. The course includes 3 hours of lecture. One semester. 3 credits.

MER 110 - MARKETING. This course presents the fundamentals of marketing as a functional area of a company. In addition, as a scientific and artistic discipline, its purpose is to create value for customers and to obtain added value for the company. Topics to be covered are: understanding and relationship with customers, brand creation and brand value building, integrated marketing strategies to create, deliver and communicate value from the perspective of socially responsible marketing at national and international level. 3 credits.

MER 213 - ADVERTISING. Prerequisite: MER. History and basic principles of advertising. Planning and design of an advertising campaign, media selection. Role of the advertising agency. 3 credits.

MER 301 - CONSUMER BEHAVIOR. Prerequisite: MER 110. Analysis of prevailing theories of human behavior and adaptation in consumer behavior that aid in marketing decision making. 3 credits.

MER 312 - MARKETING MANAGEMENT. Prerequisite: MER 110. Managerial approach to marketing principles, techniques, and practices for decision making, with emphasis on planning, development, and control of resources in the preparation of a company's marketing plan. 3 credits.

MER 315 - RETAIL MANAGEMENT. Prerequisite: MER 110. Management principles and methods applied to retailing including feasibility analysis, organizational structure design, personnel, inventory planning and control techniques, sales and promotion. 3 credits.

MER 320 - PERSONAL SELLING. Prerequisite: MER 110. The salesperson in the company, consumer behavior. Knowledge of sales techniques in the buying and selling process. In the administrative area: recruitment, motivations, compensation, and measurement of salespersons' results. 3 credits.

MER 380 - PUBLIC RELATIONS. Prerequisite: MER 110. Principles and practices for solving problems faced by organizations with the public and regulatory (governmental) agencies. Implementation of corporate social responsibility philosophy. Classification of publics, media, legal and ethical aspects of public relations. 3 credits.

MER 416 - INTERNATIONAL MARKETING. Prerequisite: MER 110. Criteria to differentiate the marketing characteristics of a domestic and an international company. Analysis of cultural, social, technological, political, economic factors and their impact on decision making. Recognize and identify the opportunities that the global market represents. 3 credits.

MER 420 - MARKETING RESEARCH. Prerequisites: MER 110, MER 301 and EST 200. Analysis of marketing information systems. Definition of research objectives and design, collection and interpretation of data and its application in decision making such as product design, development, and marketing, among others. 3 credits.

MER 426 - MARKETING PRACTICE. Requirements: Minimum overall and concentration GPA of 3.0. Senior year of study. Supervised work experience in the marketing field, where theory and practice are integrated. It will take place in a private company selected as an internship center and will be under the supervision of a professor. In addition to the internship, students will have the opportunity to experience workshops, conferences, seminars, case discussions and other activities that will facilitate the transition from the university to the company. The student will complete 150 hours of supervised practice. 4 credits.

MUSI 201 - MUSIC APPRECIATION. Introductory study of musical forms, the fundamentals of music and its historical development. The value of music in our society will be studied, stimulating the enjoyment of universal music from a multicultural approach, using methods that develop auditory perception. Students will experiment in the analysis of representative works of Western classical music, as well as Latin American and Caribbean popular production. 3 credits.

MUSI 204 - INTRODUCTION TO THE GUITAR. The fundamentals of the guitar are studied in order to play the instrument, read melodies, chords and accompaniment patterns. Requires obtaining the musical instrument and subsequent hours of personal and group rehearsal. 3 credits.

MUSI 211- BASIC CHORAL PERFORMANCE. Concert choral practice with the study of basic vocal performance. Entrance to the course by audition. Further hours of personal and group rehearsal are required. 3 credits.

NC 101 - FUNDAMENTALS OF NEUROSCIENCE. Prerequisite: BIOL 202. This course familiarizes students with the field of neuroscience. This course will present topics such as: the fundamentals for the development of the field, the different subspecialties that compose neuroscience, the divisions of the nervous system, neurons and their properties. The concepts of synaptic communication and conditions of the nervous system will also be discussed. The course includes 3 hours of lecture. One semester. 3 credits.

NC 102 - PRINCIPLES OF COGNITIVE NEUROSCIENCE. Prerequisite: NC 101 and BIOL 202. Includes the study of the physiological basis of human behavior. Concepts to be studied include the structure and functioning of the nervous system, cortical and autonomic functions, related body systems and their relationship to such psychological phenomena as sensation, perception, learning, thinking, motivation and emotion, psychosomatic disorders, among others. The course includes 3 hours of lecture. One semester. 3 credits.

NC 201 - NEUROBIOLOGY. Prerequisites: NC 102 and BIOL 202. This course studies the cells of the nervous system, their organization to form functional circuits and their influence human behavior. Topics discussed include: the cellular components of the nervous system, the properties of nerve cells, the organization of the nervous system, the development of the nervous system, and the processes of perception and integration in the central nervous system. This course has concurrent laboratory and lecture. The laboratory course familiarizes students with the field of neuroscience. This course will present topics such as: the fundamentals for the development of the field, the different subspecialties that compose neuroscience, the divisions of the nervous system, neurons and their properties. The concepts of synaptic communication

and conditions of the nervous system will also be discussed. 4 credits. The course includes 3 hours of lecture. 3 hours of laboratory complementary to the course. One semester. 4 credits.

NC 202 - AFFECTIVE NEUROSCIENCE. Prerequisite: NC 102. Affective neuroscience is the study of the neural systems and behaviors that underlie the expression of human emotions and sometimes animal behavior. The educational activities of the course are oriented to seek answers to the following questions: What are emotions? Why do we have emotions? What is the evolutionary value of having emotions? What are the neural substrates to explain emotions? What techniques are used for the study of emotions? In addition, the student will participate in the critical evaluation of scientific articles in the area of affective neuroscience. The course includes 3 hours of lecture. One semester. 3 credits.

NC 203 - NEUROBIOLOGY OF DISEASE. Prerequisite: NC 102. Clinical Neuroscience is the study of conditions and diseases affecting the nervous system. This is an advanced course consisting of lectures and discussions of articles and student-led presentations on the physiological and molecular basis of diseases of the nervous system such as: Alzheimer's, Parkinson's, Huntington's, epilepsy, behavioral disorders, addiction, and ataxia among others. The course includes 3 hours of lecture. One semester. 3 credits.

NC 301 - ANIMAL BEHAVIOR. Prerequisite: NC 201. Neuroethology is the study of nervous circuitry as it relates to animal and insect behavior. In this course, the reasons and development of animal behaviors will be studied. It will also analyze the value of behaviors for survival and their evolution. The course will use a comparative and evolutionary approach to study the nervous system of animals and their behaviors. The course includes 3 hours of lecture. One semester. 3 credits.

NC 302 - PSYCHOPHARMACOLOGY. Prerequisites: NC 202 and NC 203. Psychopharmacology is the discipline that studies the functional changes of the nervous system induced by drug use. The specific focus of this course is to provide a description of the cellular and molecular effects of drugs on the processes of synaptic transmission, treatment of nervous system conditions and addiction. The course includes 3 hours of lecture. 1 semester. 3 credits.

NC 303 - ETHICS AND MODERN TOPICS IN NEUROSCIENCE. Prerequisites: NC 202 and NC 203. In this course we will study the concept of professional ethics and its application for different branches of science. It will specifically discuss the ethics of scientific research in neuroscience, the use of animals for scientific research, medication versus psychological therapies, the use of stem cells, among others. In addition, major topics in the study of Neuroscience will be studied such as: the concept of Neuroculture, Neuroscience and alternative therapies and Epigenetics. The course includes 3 hours of lectures. One semester. 3 credits.

NC 401 - CELLULAR/MOLECULAR NEUROBIOLOGY RESEARCH LABORATORY. Prerequisites: NC 201 and NC 303. Educational activities are directed toward the development of scientific research skills in the areas of Cellular/Molecular/Neuroscience. Laboratory safety rules, techniques for searching scientific literature, basic research methods, and ethics in scientific research will be studied. In addition, the student will participate in a Journal Club. Techniques such as: histology of the nervous system, DNA extraction, polymerase chain reaction, extraction, purification, and analysis of proteins and immunodetection of proteins in tissue will be covered. The course includes 3 hours of lecture. One semester. 3 credits.

NC 402 - METHODS IN NEUROSCIENCE (INTEGRATIVE SEMINAR OR CAPSTONE COURSE).

Prerequisite: NC 201 and Co-requisite: NC 401. The course consists of integrated lectures, seminars and labs for undergraduate students. The educational activities will focus on integrating the concepts learned during the BACHELOR to carry out discussion of cases of ethics in research, execution of laboratory techniques, experimental design and analysis, search of scientific articles, preparation of scientific presentations and posters, preparation of a mini proposal, among others. The student will participate in research projects, in conjunction with the faculty, and in seminars about research and its findings in the area of neuroscience. The course includes 3 hours of lectures. One semester. 3 credits.

PORT 211 - ELEMENTARY PORTUGUESE I. Introductory course of Portuguese in its Brazilian variant that presents the student in an integrated manner all the language skills: reading, writing, oral communication and listening comprehension) in real communicative contexts. Emphasis is placed on pronunciation and conversation, working on grammatical structures based on the needs of the speaker. Fundamental aspects of Portuguese-Brazilian culture are presented. Vocabulary acquisition and further language practice is provided through the Virtual Language Laboratory. 3 credits.

PORT 212 - ELEMENTARY PORTUGUESE II. Prerequisite: PORT 211. Second introductory course of Portuguese in its Brazilian variant in which all language skills (reading, writing, oral communication and listening comprehension) continue to be presented to the student in an integrated manner in real communicative contexts while advancing in the mastery of the language. Emphasis is placed on pronunciation and conversation, working on more complicated grammatical structures based on the needs of the speaker. Aspects of Portuguese-Brazilian culture are explored in depth. The acquisition of vocabulary and further practice of the language is given through the Virtual Language Laboratory. 3 credits.

PSIC 121 - INTRODUCTION TO PSYCHOLOGY I. Prerequisite: CSOC 110. This is the first of two courses that provide an overview of psychology as a social science and profession. The field and its object of study are defined, as well as a brief historical overview of its development and the most representative topics of psychology's specializations and applications. This first course focuses on introductory topics related to human development, clinical psychology, personality psychology, and learning psychology. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 122 - INTRODUCTION TO PSYCHOLOGY II. Prerequisite: PSIC 121. This is the second of two courses offering an overview of psychology as a social science and profession. The field and its object of study are defined, as well as a brief historical overview of its development and the most representative topics of psychology's specializations and applications. In this second course, introductory topics related to social psychology, industrial/organizational psychology, psychometrics and human intelligence, and psychophysiology (biopsychology) are focused on. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 200 - BASIC INTERVIEWING SKILLS. Prerequisites: PSIC 121 and PSIC 122. The course introduces the concepts, techniques, characteristics, and applications of interviewing as used in the behavioral professions. Students will have the opportunity to explore interviewing techniques from both theoretical and practical perspectives. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 201 - ETHICAL ISSUES IN PSYCHOLOGY. Prerequisite(s): PSIC 122 and PSIC 200. Topics related to ethical, legal, and professional conduct issues in psychology and the behavioral sciences will be presented. Cases reflecting current ethical conflicts in academic, research, and professional settings will be analyzed.

The course encourages students to begin to adopt the highest standards of conduct in the profession of psychology. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 223 - HUMAN DEVELOPMENT AND BEHAVIOR. Study of the development of the normal individual from conception to old age and death. Physical, psychological, and social factors of behavior are considered. Course includes 3 hours of lecture. One semester. 3 credits.

PSIC 224 - HUMAN DEVELOPMENT: INFANCY AND CHILDHOOD Prerequisites: PSIC 121: PSIC 121. The course is directed to the study of human development from the stage of conception through middle childhood. It analyzes the theories that support each aspect of human development. In addition, the bio-psycho-socio-cultural, political, economic, and spiritual factors present in these processes are analyzed. The basic needs of human beings are considered, applied to individual, family, group, community, and organizational dimensions, which allow understanding their interaction with the environment. Emphasis is placed on the impact of the systems on the health and well-being of the human being in a positive or negative way. The development of the course includes the recognition of the diversity of the human being, the values and ethical aspects that govern the profession applied to human relations. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 225 - HUMAN DEVELOPMENT: ADOLESCENCE AND ADULTHOOD. Prerequisites: PSIC 121 and PSIC 224. This course studies the development of the human being from the stage of adolescence to death and the theories that support each of them. It analyzes the bio-psycho-socio-cultural, political, economic, and spiritual factors present in these processes considering the elements associated with human diversity. It considers the basic needs of human beings, applied to individual, family, group, community and organizational dimensions, which allow understanding their interaction with the environment. Emphasis is placed on the impact of health systems on human welfare, values and ethical aspects that govern the profession applied to human relations. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 230 - PSYCHOPHYSIOLOGY. Prerequisites: PSIC 121 and PSIC 122. A study of ideas about the biological basis of human behavior, both as currently conceived and from a historical perspective. The body is presented as one among several contributing factors to human behavior. The historical debate about the relationship between the body and the mind and related philosophical debates are studied. Emphasis is placed on the study of the anatomy and physiology that give rise to sensory, motor, emotional, language, and abnormal behavior, among other aspects of human behavior. The main methods of study of the brain and nervous system are also studied. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 311 - STATISTICAL METHODS. Prerequisite: MATE 106. It discusses what is descriptive and inferential statistics and its usefulness for the social scientist, as well as misconceptions about these topics. In addition, general concepts for understanding statistical terms are explored, along with types of data and their levels of measurement. Ways to calculate or identify measures of central tendency, measures of dispersion or variability, standardized or typed scores, and how we can represent data graphically are discussed and practiced. Special attention is given to discussing skewed distribution curves and the normal curve. Finally, an introduction is given to the concepts of statistical inference, its relation to the testing of research hypotheses, the concept of significance and the most common statistical inference procedures. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 316 - QUANTITATIVE RESEARCH METHODS. Prerequisite: PSIC 122. This course discusses the fundamentals of research from the point of view of the quantitative model. The goals of quantitative research

will be discussed, as well as its differences from other methods of acquiring knowledge. The main methods of participant selection and research designs within this model will be discussed, as well as the main quantitative data collection methods and their standards of validity and reliability, social-community psychology approach. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 322 - PSYCHOLOGY OF LEARNING. Prerequisite: PSIC 122. Study of the concept of learning, its nature, means and mechanisms. Major theories of learning are explored comparatively. Course includes 3 hours of lecture. Semester. 3 credits.

PSIC 325 - PERSONALITY PSYCHOLOGY. Prerequisite: PSIC 122. Comparative and critical study of the major theories of personality: its structure, determinants, dynamics and characteristics of personality development, its differentiation and integration. Course includes 3 hours of lecture. One semester. 3 credits.

PSIC 335 - SOCIAL PSYCHOLOGY. Prerequisite: PSIC 122. This course explores the individual behavior of human beings when they are in the context of groups. Fundamental issues and findings in the field of social psychology in the past years are discussed, such as the development of attitudes, beliefs, prejudices, stereotypes, and feelings of love and attraction toward other people. It also explores the circumstances in which human beings are more likely to attack, help others or yield to the persuasion of others. It even explores the effect of the presence of other people in the management of human skills and abilities, obedience or disobedience to authority. Finally, the traditional social psychology approach is compared and contrasted with the social-community psychology approach. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 337 - PSYCHOPATHOLOGY. Prerequisites: PSIC 122 and PSIC 201. The course explores the definitions and criteria used in the mental health professions to distinguish typical behavior, sometimes called "normal behavior" or "mental health," from atypical behavior, sometimes called "abnormal behavior" or "mental illness." Criticisms of these concepts are discussed. The diagnostic classification model proposed by the American Psychiatric Association, in its current edition, is described, explained, and the criticisms of this taxonomy system are explored. Symptoms and differential diagnosis strategies are described in the main diagnostic categories contained in the most prevalent psychopathological groups: psychotic disorders, mood disorders, anxiety disorders, personality disorders, among others. The student will develop elementary skills to recognize psychopathological symptoms through the analysis of hypothetical cases. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 340 - PSYCHOSOCIAL ASPECTS OF THE FAMILY IN PUERTO RICO. Prerequisite: CSOC 110. Study of different proposals of the concept of family, as well as the criticisms of such concepts from the point of view of diversity and human rights. The family life cycle is explored, as well as different social problems that the Puerto Rican family is going through at present, including in the discussion the current legal aspects and the theoretical models with which behavioral professionals explain and intervene in these cases. The course includes 3 hours of lectures. One semester. 3 credits.

PSIC 349 - INDUSTRIAL PSYCHOLOGY. Prerequisite: PSIC 122. In this course the principles of psychology will be discussed, but with application to industry. In particular, the history of Industrial Psychology is discussed with an emphasis on the history of Industrial Psychology in Puerto Rico. Also discussed are the concepts of personnel psychology with emphasis on the selection, evaluation, promotion and training of

personnel. In addition, the main labor laws applicable to Puerto Rico are explored and the impact of social and health problems in the industry and occupational environments are discussed. Among them, the impact of alcoholism, drug use, moral harassment, sexual harassment, stress, burnout syndrome and boredom syndrome will be discussed. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 350 - ORGANIZATIONAL PSYCHOLOGY. Prerequisite: PSIC 122. This course will discuss topics in Organizational Psychology, its history, and its main fundamentals. Concepts such as organizational theory, organizational culture, organizational change, and organizational commitment will be explored. In addition, aspects of motivation, satisfaction, and leadership among the members of the organization will be discussed. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 360 - FORENSIC PSYCHOLOGY. Prerequisite(s): PSIC 122, PSIC 337, and PSIC 340. The course explores the various ways in which the psychology professional contributes to the understanding and resolution of issues that are debated in judicial forums, both in civil and criminal proceedings. It discusses techniques and models that enable the psychologist to assess, make decisions and intervene in the judicial aspects that concern the people who interact in these forums; among them, families, perpetrators and victims of crimes, as well as the personnel involved in forensic proceedings. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 390 - SPORT PSYCHOLOGY. Prerequisite(s): PSIC 122 and PSIC 325. Students are provided with a comprehensive view of the ways in which the principles and techniques of psychology are applied in the field of sport. An understanding of the cognitive, emotional, and behavioral aspects that impact sport settings is promoted. The historical events that linked sport and psychology will be explored. Major theories related to performance, motivation, and anxiety during competition will be discussed. Students will be exposed to the main techniques and standardized tests used in the discipline. The course includes 3 hours of lecture. Semester. 3 credits.

PSIC 401 - PSYCHOMETRY. Prerequisite(s): PSIC 122 and PSIC 311. In this course, topics related to the theories and techniques of psychological measurement will be discussed in order to understand the principles and problems of the use of tests in this professional endeavor. In addition, the ethical and legal aspects of the use of psychological measurement tests will be studied, as well as the main measurement techniques. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 407 - GROUP DYNAMICS. Prerequisites: PSIC 122, PSIC 200 and PSIC 335. This course discusses the concept of what a "group" is and compares and contrasts it with the concepts of "set" and "team." It explores the theories related to the composition of a group, its stages of development, the roles assumed by its members, the types of leadership to manage groups and the impact that these concepts have on the behavior of group members. Different types of conflict situations in groups and alternative strategies for their successful management will be explored. Finally, strategies for evaluating group dynamics will be examined. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 439 - CRISIS INTERVENTION. Prerequisites: PSIC 122 and PSIC 201. This course proposes to the student a primary model of intervention in crisis situations. It defines what constitutes a crisis and what does not fall under this concept, as well as the different types of crises that a human being goes through or could go through. Criteria are established to identify a crisis, its signs, possible consequences, and opening resources on the part of the client, and intervention guidelines are presented by the helping professional,

both general and specific, for common crisis situations. Ethical issues related to this aspect of helping services are also explored. The course includes 3 hours of lecture. One semester. 3 credits.

PSIC 499 - PRACTICE IN RESEARCH. Prerequisites: EDUC 212, PSIC 201, PSIC 311, PSIC 316, and PSIC 325. In this course, the basic concepts of research under the quantitative model are applied, with emphasis on the development of the research proposal and report. Students are directed to relate to the fundamental standards and requirements for the publication of an article on quantitative research in a professional journal in the field of psychology, including the elements of the publication style of the American Psychological Association (APA), in its current edition. The ethical principles that pertain to this professional activity are integrated in this process. Particular emphasis is placed on the application of procedures and strategies for the search of professional literature applicable to the research topic, the drafting of questions for a data collection instrument, the evaluation of criteria for the selection of an adequate research design, the application of strategies for the selection of participants, and the implementation of procedures and modalities for the collection and analysis of quantitative data. In addition, mechanisms that establish rigor in quantitative research practice, publication standards, and standards for oral presentation of research results are discussed. The course includes 3 hours of lecture. One semester. 3 credits.

QUIM 201 - GENERAL CHEMISTRY I. Fundamental concepts of chemistry, atomic theory, atomic and molecular structure, chemical equations and their quantitative relationships, gas laws, solution. Development of basic skills and scientific attitudes through experiments that illustrate theoretical concepts. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 202 - GENERAL CHEMISTRY II. Prerequisites: MATE 107 and CHEM 201. Oxidation-reduction reactions, electrochemistry, equilibrium, thermodynamics, and kinetics. Experimental application of theoretical concepts. Course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 208 - FUNDAMENTALS OF CHEMISTRY FOR NURSING. Prerequisite: MATE 105. General, organic and biochemical chemistry with applications to health. Emphasis is placed on the proper use of theoretical concepts and different chemical methods: separation and identification of organic and biochemical compounds. The course includes 4 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 305 - ANALYTICAL CHEMISTRY. Prerequisite: CHEM 202. Theoretical principles of chemical analysis: gravimetric and volumetric. Application of statistical methods. Fundamental laws of oxidation-reduction reactions, acid-base equilibrium, complexometric. Different methods of operations such as precipitation, volatilization, extraction and ion exchange. The course includes 3 hours of lecture, 6 hours of laboratory complementary to the course. One semester. 5 credits.

QUIM 331 - ORGANIC CHEMISTRY I. PREREQUISITE: CHEM 202. Carbon chemistry, orbitals, molecular orbitals, structural isomerism, nomenclature, stereochemistry, free radicals, substitution and elimination reactions, functional groups, hydrocarbons, aromatic compounds, synthesis of compounds and reaction mechanisms. Basic methods of separation, purification, and identification of organic compounds. The course includes 3 hours of lecture, 4 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 332 - ORGANIC CHEMISTRY II. Prerequisite: CHEM 331. Synthesis of organic compounds with emphasis on reaction mechanisms and nomenclature of aldehydes, ketones, carboxylic acids and their derivatives, amines, polycycles and heterocycles and their reactions, natural products, proteins. Synthesis of organic compounds discussing mechanisms. Identification of organic compounds including spectroscopy. Course includes 3 hours of lecture, 4 hours of lab complementary to the course. One semester. 4 credits.

QUIM 350 - INSTRUMENTAL ANALYSIS. Prerequisite(s): CHEM 305, CHEM 332 and MAT 320. Chemical analysis using instrumentation such as potentiometry, electro analysis, spectrophotometry, liquid gas chromatography and atomic absorption. Course includes 3 hours of lecture, 4 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 380 - BIOCHEMISTRY. Prerequisites: QUIM 332 and BIOL 202. Fundamental concepts of the chemistry of Life processes. Intermediate, energetic, and etymological metabolism. Metabolism of carbohydrates, lipids, amino acids, and proteins. Techniques of analysis, separation and identification of amino acids, proteins and carbohydrates. Metabolic pathways of cellular functions by isolation of macromolecules. The course includes 3 hours of lecture, 3 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 441 - PHYSICAL CHEMISTRY I. Prerequisite(s): CHEM 332, CHEM 350, MAT 321, FIS 304. introduction to thermodynamics. Theory of gases, liquids, and solids. Kinetic theory of gases. Ionic and molecular transport. Laws of thermodynamics. Chemical equilibria and phase equilibria. The course includes 3 hours of lecture, 4 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 442 - PHYSICAL CHEMISTRY II. Prerequisites: QUIM 441. Electrochemistry, Chemical Kinetics and Quantum Mechanics, Atomic and Molecular Structure, Symmetry, Rotational and vibrational spectra. Statistical Thermodynamics. The course includes 3 hours of lecture, 4 hours of laboratory complementary to the course. One semester. 4 credits.

QUIM 460 - INORGANIC CHEMISTRY. Prerequisite(s): CHEM 350, CHEM 332, MAT 225. A study of inorganic compounds, based on modern concepts of atomic and molecular structure and coordination chemistry. Course includes 3 hours of lecture. Semester. 3 credits.

REDES 235 - COMPUTER ARCHITECTURE. In this course the most common codes used by computers will be studied. The architecture, components and organization of the computer based on the logical design will be studied. The student will have the opportunity to assemble and diagnose a computer. In addition, students will study and program in assembly language for microcomputers. This course requires the use of the Computer Center. 3 credits.

REDES 245 - DATABASE STRUCTURE AND MANAGEMENT. Prerequisites: COMP 232 and COMP 240. In this course basic concepts of file and database manipulation will be studied. A file manipulator will be used to illustrate the theoretical concepts. Databases (tables), reports and forms will be created. Databases will be edited and organized and the concept of relational databases will be explained. We will study the set of instructions that the database has in order to program in it. Basic data structures such as stacks, queues and interleaved lists will be studied. Sorting and searching methods in binary trees (prefix, infix and postfix). This course requires the use of the Computer Center. 3 credits.

REDES 300 - WEB PAGE DESIGN. Impact of technology on society and the individual. Understanding of the Internet as a means of disseminating information. Description of a *web browser* and an ISP (*Internet Service Provider*). Knowing the main parts of a *web page*. This course requires the use of the computer lab. 3 credits.

REDES 315 - NETWORKS I - INTRODUCTION TO THE NETWORKS. Prerequisite: COMP. This is the first of four courses designed to provide students with classroom and laboratory experiences based on current technology for computer networking. The course will prepare them to enter the workforce, higher education and training in the field of computer networking. The course includes: security, networking, terminology, protocols, network standards, Lan, Wan, OSI model, cabling, tools, routers, star topology, IP addressing. Emphasis is placed on the use of decision making and problem-solving techniques applying concepts of science, mathematics, communication and the study of social concepts to solve problems in the creation of a computer network. Proper care, maintenance, software management, tools, codes, and local and federal regulations related to the environment and physical plant in establishing a network are provided. This course requires the use of the Computer Center. 3 credits.

REDES 316 - NETWORKS II - OSI MODEL LEVELS 1 AND 2. Prerequisite: NETWORKS 315. This is the second course of four designed to provide students with classroom and laboratory experiences based on current technology for the creation of a computer network. The course will prepare them to enter the workforce, higher education, and training in the field of computer networking. The course includes: networking, terminology, routing protocols, network standards, Lan, Wan, Ethernet, Token Ring, Fiber Distributed Data Interface, TCP/IP Addressing Protocol, dynamic routing, routing commands, and the network administrator's role and responsibilities. Emphasis is placed on the use of decision making and problem-solving techniques applying concepts of science, mathematics, communication and the study of social concepts to solve problems in the creation of a computer network. Proper care, maintenance, software management, tools, codes, and local and federal regulations related to the environment and physical plant in establishing a network are provided. This course requires the use of the Computer Center. 3 credits.

REDES 333 - ANALYSIS, DESIGN, AND IMPLEMENTATION OF COMPUTER NETWORKS. Theoretical concepts related to the development and planning process of an information system. Discussion of the phases of the life cycle of a system. Description and application of system analysis and design tools. Design of input and/or output forms, file design, program specifications and system documentation. Creation of a computerized system to satisfy information needs and requirements in an organization. 3 credits.

REDES 417 - NETWORKS III: NETWORK ADMINISTRATION. Prerequisite: NETWORKS 316. This is the third course of four designed to provide students with classroom and laboratory experiences based on current technology for computer networking. The course will prepare them to enter the workforce, higher education and training in the field of computer networking. The course includes: switches, virtual networks, network design, Internet Gateway Routing Protocol, Access Control Lists, Novell IPX, Wide Area Networks (WANs), Point-to-Point Protocol, Integrated Services Digital Network and Frame Relay. Emphasis is placed on the use of decision making and problem solving techniques applying concepts of science, mathematics, communication and the study of social concepts to solve problems in the creation of a computer network. Proper care, maintenance, software management, tools, codes, and local and federal regulations related to the environment and physical plant in establishing a network are provided. This course requires the use of the Computer Center. 3 credits.

REDES 418 - NETWORKS IV: COMPUTER NETWORK SECURITY. Prerequisite: NETWORKS 417. Topics related to computing, communications and electronic commerce will be covered. The goals and vulnerability of digital systems, elementary cryptography, communication with authentication, electronic commerce, software security, computer viruses and malicious code, operating system protection, network security, firewalls, network management policy and procedures, auditing, physical security of equipment and data, disaster recovery and reliability. Techniques to achieve security in multi-user computer systems and distributed systems. Physical security, discrete and mandatory access control, biometrics, information flow security models, covert channels, integrity models, electronic voting, risk assessment, secure web browsers. This course requires the use of the Computer Center. 3 credits.

REDES 426 - AUDITING OF INFORMATION NETWORKS. Theoretical concepts related to auditing information networks. Description of the internal audit process in a company. Application of techniques, operations, controls, standards, and regulations in the development of an audit. 3 credits.

REDES 438 - PROJECT PLANNING AND MANAGEMENT Prerequisite: NETWORK 333. Basic concepts of project management. Description of each of the areas of project management: integration, scope, time, cost, quality, human resources, communication, risks, and management procedures. Technologies and tools applied to project management. 3 credits.

REDES 439 - COMPUTER CENTER ADMINISTRATION. This course will expose the student to the administration processes in a computer center. Emphasis will be given to the fundamental principles of the administrative process and the basic functions of the administration of a computer center, the technological, economic, and human resources. Study of risk and change management, as well as the importance of a contingency plan for the proper functioning of a computer center. 3 credits.

RHUM 320 - HUMAN RESOURCE MANAGEMENT. Fundamentals of human resources administration. Legal aspects, impact of the external environment. Study of recruitment activities, training, performance evaluation, compensation administration. Personnel records. 3 credits.

RHUM 386 - ORGANIZATIONAL BEHAVIOR. Prerequisite: GER 110. Basic principles and dynamics of human relations integrated into the functioning of the firm to achieve business objectives. Organizational environment, group relations, motivation, communication, privacy rights, conflict management, stress are studied. Cases related to the integration of economic, social, moral, and philosophical aspects that impact the effectiveness of the company are analyzed. 3 credits.

RHUM 485 - PERSONNEL TRAINING AND EVALUATION. Prerequisite: RHUM 320. Survey of staff training needs, determination of learning objectives and training techniques. Design of a training and development plan. Fundamental elements of a performance appraisal system are also studied. Includes performance appraisal techniques, appraiser requirements and legal aspects. 3 credits.

RHUM 488 - WAGE AND FRINGE BENEFITS ADMINISTRATION. Prerequisite: RHUM 320. Study of basic concepts in the design, implementation, and administration of salaries. Laws governing personnel compensation. Analysis and study of employee benefit and service alternatives and their effect on the company. 3 credits.

RHUM 491 - COLLECTIVE BARGAINING. Prerequisite: GER 317. Study of the laws that regulate the collective bargaining process in Puerto Rico. Analysis and study of the areas subject to negotiation. Review of the structures and strategies used in the collective bargaining process. Study of the procedures to achieve an effective negotiation, conciliation, and arbitration mechanisms. Background of collective bargaining in Puerto Rico. 3 credits.

RHUM 492 - LABOR LAW. Prerequisite: RHUM 320. Study of state and federal laws protecting workers. Analysis of corporate legal liability. Included are anti-discrimination laws, wrongful termination, reasonable labor standards, minimum wage, working mothers, among others. 3 credits.

RHUM 493 - PERSONNEL CASE STUDIES IN THE ENTERPRISE. Prerequisite: RHUM 320. Analysis of the process of identifying and solving problems. Study and analysis of cases occurring in the company in the areas of recruitment, selection, training, performance evaluation, and salary administration, among others. 3 credits.

SOC 365 - GENERAL ANTHROPOLOGY. Prerequisite: CSOC 110. In accordance with the current catalog, the course will offer a study of the most important characterization: physical evolution, language, art, magic, religion, economic-social relations, and political behavior. Comparative cultures. 3 credits.

SOC 426 - SOCIO-CULTURAL CHANGES IN PUERTO RICO. Prerequisite: CSOC 110. Study of the socio-cultural changes in Puerto Rico during the 20th century and its impact on the Philosophy, Idiosyncrasy, Economy, Religion, and political life of the population. 3 credits.

TEAT 201 - BASIC ACTING. Introductory course to dramatic art in which the figure of the actor will be analyzed and the competencies of characterization, interpretation and construction of a character will be worked on. Training will be given in the abortion of the text from the perspective of the character and the preparation of the actor. There will be practice in the presentation of scenes. Further practice and rehearsal time may be required. 3 credits.

TEAT 240 - DRAMATIC WORKSHOP OF PUERTO RICAN THEATER. Study and analysis of a Puerto Rican theater piece to stage it. Characterization of the characters and acting practice. The final work will consist of the staging of the play. Further character study and rehearsal time is required. 3 credits.

TEDU 320 - COMPUTERS IN EDUCATION. This course is designed to introduce prospective teachers to computer technology in a practical and meaningful way. It is intended to cover a wide range of topics, to help you acquire the knowledge and skills necessary to integrate computers into the classroom in ways that will be of most use to you and of greatest service to your students. You will study the educational applications of computers, the use of networks and the Internet, as well as mobile technologies and social networks with an educational focus. You will work with the management and use of computer software packages to produce instructional materials and presentations for the classroom. General learning theories and research in educational technology will be covered.

TSOC 215 - INTRODUCTION TO SOCIAL WORK. Co-requisite: TSOC 333. This is an introductory course which will discuss the development of the Social Work profession in relation to the social welfare system, its changes and how it is practiced contemporarily. In addition, it will expose the student to visit a direct service program to learn and understand the roles, functions and ethical challenges faced by a social work

professional in the workplace. Finally, the course will analyze the values of the profession with emphasis on respect for diversity, social justice, and the contribution of professional organizations. 3 credits.

TSOC 220 - STATISTICAL METHODS. Prerequisites: MATE 106, TSOC 320. This course is geared for the student to develop basic skills in descriptive statistics and gain knowledge of its usefulness to the social worker. General concepts for understanding statistical terms in conjunction with types of data and their levels of measurement will be discussed. The student will practice ways to calculate or identify measures of central tendency, measures of dispersion or variability, standardized or typed scores, and the representation of data with graphs using the computer and other technologies. 3 credits.

TSOC 316 - SOCIAL POLICY AND PLANNING IN THE SOCIAL WELFARE SYSTEM. Prerequisite(s): TSOC 215 and TSOC 334. This course will be devoted to the critical study of social welfare laws, programs and services. The student will study the processes of formulation and implementation of public policy. The laws of major relevance to the Social Work profession will be analyzed. The Generic Social Planning Model will be discussed in the application of social policy design and implementation. Emphasis will be placed on the knowledge of human rights, located under the dimension of diversity and the identification and promotion of social and economic justice. 3 credits.

TSOC 320 - SOCIAL RESEARCH TECHNIQUES I. This course will discuss the basic concepts of research in the Social Sciences with special attention to the quantitative paradigm, its applicability to Social Work and the ethical principles concerning the protection of human beings. The different types and designs of positivist research will be presented. The student will study the steps of the research process and develop a research proposal. 3 credits.

TSOC 321 - SOCIAL RESEARCH TECHNIQUES II. In this course the student will apply the basic concepts of research under the qualitative model, with emphasis on the development of a research project. The student is directed to relate to the fundamental standards and requirements for the publication of a qualitative research article in a professional journal. The ethical principles that pertain to this professional activity will be integrated in this process. 3 credits.

TSOC 333 - HUMAN DEVELOPMENT AND SOCIAL FUNCTIONING I. Concurrent: TSOC 215. The course is directed to the study of the development of the human being from the stage of conception to middle childhood. It will consider the basic needs of the human being, applied to individual, family, group, community, and organizational dimensions, in accordance with different theoretical models, to understand their interaction with the environment. The development of the course will focus on the recognition of the diversity of the human being, the values and ethical aspects that govern the profession. 3 credits.

TSOC 334 - HUMAN DEVELOPMENT AND SOCIAL FUNCTIONING II. Prerequisite(s): TSOC 333. This course will study the development of the human being from the stage of adolescence to death and the theories that support each of them. It will consider the basic needs of the human being, applied to individual, family, group, community, and organizational dimensions, in accordance with diverse theoretical models, to understand their interaction with the environment. Emphasis will be given to the impact of the systems to the health and well-being of the human being, the values and ethical aspects that govern the profession. 3 credits.

TSOC 340 - MODELS IN SOCIAL WORK. Prerequisite: TSOC 334. The course aims to strengthen the student's understanding of theories related to the profession of Social Work, the generalist model and the

Person in their Environment. The content will allow the review of professional roles and functions, the intervention of Social Work with individuals, groups and families from a professional practice based on human rights, respectful of diversity and the identification and promotion of social and economic justice. The student will be motivated to incorporate the ethical standards of the profession in the course activities. 3 credits.

TSOC 341 - SOCIAL INTERVENTION I. Prerequisites: TSOC 334 and TSOC 316. The activities of this course will promote the critical analysis and application of the various models of intervention in the professional practice of Social Work, taking into consideration the development of sensitivity to diversity in all its dimensions. Students will understand the components and phases of the generalist intervention process, the professional relationship and its foundations. In addition, the student will apply the techniques of social intervention, such as interviewing, observation, weighting and analysis of the information gathered. The student will become familiar with the use of the dossier in the Social Work profession. The training activities will be carried out in accordance with the principles of confidentiality and the postulates of professional ethics. 3 credits.

TSOC 342 - SOCIAL INTERVENTION II. Prerequisite: TSOC 341. This course will encourage the study and application of various intervention theories in the professional practice of Social Work. The components and phases of the dossier writing process in professional intervention will be described from the generalist perspective and evidence-based practice of the participants. The student will develop a dossier containing: presentation of the participant system, weighting, intervention plan and evaluation of the professional performance. The student will use genogram and eco maps in social intervention. The management of files in agencies, security, sensitivity to human diversity and confidentiality will be discussed. In addition, students will perform practical exercises of situation studies. 3 credits.

TSOC 344 - SOCIETY AND VIOLENCE. The course will encourage the study of violence in its various manifestations and implications in today's society. The various theories that explain violence and its psychological, social and spiritual effects on individuals, families and diverse social groups will be studied. In addition, the legislation, professional resources and existing services to assist those affected by violence at different levels of society will be analyzed. 3 credits.

TSOC 346 - DIVERSITY AND SOCIAL MARGINALIZATION. Prerequisite: TSOC 334. This course will prepare the student about the dimensions of human diversity. It will analyze the factors and theories related to exclusion, oppression, marginalization, and discrimination of individuals and groups. It is expected that through this knowledge, students will recognize the rights of individuals and groups in social disadvantage developing empathy towards them, assuming a professional practice based on respect, equality, ethical values and solidarity. 3 credits.

TSOC 357 - INTERVENTION TECHNIQUES WITH CHILDREN AND ADOLESCENTS. The course activities will promote the study of the diverse intervention strategies with children and adolescents from the individual, family, group, community, and organizational dimensions. The student will analyze the theories that explain the diverse problems under study, the applicable legislation and the skills for intervention with this population. The knowledge and skills to be developed will be focused from a holistic perspective and taking into account the aspects related to human diversity. 3 credits.

TSOC 360 - GROUP AND COMMUNITY SOCIAL WORK. Prerequisites: TSOC 215. The course has as its purpose that the student relates to the fundamentals of social work with groups and community. It will promote the knowledge of the nature of groups, their models, intervention techniques and leadership. In addition,

special attention will be given to the basic processes of community organization. The student will be exposed to the analysis of group dynamics, to the realization of exercises based on the application of theories and ethical principles of the profession. 3 credits.

TSOC 410 - AGING AND SOCIAL WELFARE SERVICES. Course activities will encourage the study of the biological, psychological, economic, and spiritual aspects involved in the aging and old age process. The student will analyze the impact of these changes on the situation and behavior of aging persons and their family and social environment. Models of intervention in the process of assistance, laws that protect this population, the services available and those that should be established in the social welfare system to respond to their needs will be discussed. 3 credits.

TSOC 411 - SOCIAL WORK WITH GROUPS AND SOCIAL ACTION. This is an elective course aimed at reflecting on the social issue in Puerto Rico and how it requires the organization of groups to change the conditions of injustice and oppression. It will apply the basic concepts of working with groups for social action. In addition, the role of the Social Work professional as an organizer and the ethical aspects related to it will be examined. 3 credits.

TSOC 415 - SOCIAL WORK WITH WOMEN. Course activities will be devoted to the critical study of the history of the development of women's struggles in society, laws, programs and social welfare services related to Puerto Rican women. The student will relate to theories applicable to the study of gender and diversity. The student will recognize the importance of establishing and reviewing public policy that serves as a platform for the protection of women's rights. In addition, students will critically analyze the social problems that impact women and the possible solutions to ensure a better quality of life for women. 3 credits.

TSOC 446 - SUPERVISED PRACTICE I. *Must be authorized by the Coordinator.* Co-requisite: TSOC 448. The activities of this course will promote the integration and application of various theories, techniques, research, models, and intervention strategies in Supervised Practice I. They will promote the development of a needs study to design a social impact project in light of the Generalist approach in interventions with individuals, families, groups and communities. Professional conduct governed by the Code of Ethics of Social Workers of Puerto Rico and the competencies of the Council on Social Work Education (CSWE) will be required. 200 hours. 4 credits.

TSOC 447 - SUPERVISED PRACTICE II. Prerequisite: TSOC 446 and TSOC 448. Co-requisite: TSOC 449. This is the second course of the generalist practice experience in Social Work. It is a more complex course that will provide the student the opportunity to apply theoretical knowledge, strengthen intervention skills, reflect on ethical values and professional attitudes in a real scenario. It is expected that in this practice the student will critically understand the contexts in which the dynamics of violence, inequality, oppression, social exclusion are generated and identify ethical responses to them. Finally, the student practitioner must demonstrate the capacity to analyze and evaluate his or her professional performance. 200 hours. 4 credits.

TSOC 448 - SUPERVISED PRACTICE SEMINAR I. CO-REQUISITE: TSOC 446. Co-requisite: TSOC 446. To be enrolled in conjunction with the TSOC 446 course. This seminar will provide the space and time to review the competencies necessary for the student to begin Supervised Practice I. It will allow for discussion of issues related to their integration into the practice center. It will allow the discussion of issues related to their integration into the practice center. It will promote the use and discussion of the supervised practice manual. In addition, all forms to be used during the Supervised Practice I process will be discussed. Cases

assigned to students for which they may have intervention questions will be discussed. Course activities will emphasize teamwork and professional behavior in the practice setting. 2 credits. 30 hrs.

TSOC 449 - SUPERVISED PRACTICE SEMINAR II. Prerequisite: TSOC 448. Co-requisite: TSOC 447. This course is designed to strengthen knowledge about social problems, theoretical models and intervention processes. It is also designed to critically reflect on students' experiences in the application of theories and models of intervention in light of the ethical dimensions of professional intervention with real participant systems. 2 credits. 30 hrs.

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