

Catalog

2021-2025



UPR
CAROLINA

Revised April 2025

Catalog Committee

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Non-Discrimination Policy

The 2021-2025 Catalog of the University of Puerto Rico at Carolina (UPR-Carolina) is an official publication. It includes the programs of study, regulations, course descriptions, degree requirements, tuition fees, services, etc. Therefore, being officially enrolled in the UPR-Carolina entails the faithful compliance of all the [General Regulations of the University of Puerto Rico](#) and its internal rules. UPR-Carolina does not discriminate on the basis of sex, race, color, age, religion, politics, origin, or physical handicap in its employment or admission processes. If you believe you have been discriminated, you may file a complaint to the Office of the Equal Opportunity Officer of the University of Puerto Rico. To guarantee the content of the Federal Family Educational Rights and Privacy Act of 1974, every student has the right to examine his/her academic record and, in case of discrepancies, to request corrective remedies through the corresponding channels and procedures. Likewise, UPR-Carolina reserves the right to make the necessary changes in its academic offerings, academic requirements, calendars, courses, institutional policies, etc., at the request of the evaluating agencies of the University of Puerto Rico.

The Administration of the University of Puerto Rico at Carolina has made every effort to ensure the accuracy of the information presented in this catalog. However, if there are any errors or omissions, they are unintentional.

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About UPR Carolina

Accreditation

The University of Puerto Rico at Carolina (UPRCA) was founded in 1974 as part of the University of Puerto Rico (UPR) System. Currently made up of 11 units, this is the only public system of Higher Education in Puerto Rico. The Middle States Commission on Higher Education first accredited the Institution, known at that time as Carolina Regional College, in 1978. Twenty-one years later, Carolina became an autonomous campus within the UPR System. Accreditation was last reaffirmed in June 2019. Bachelor's and associate degree levels are included within the institutional accreditation scope. Carnegie classification categories describe UPRCA as a diverse field four-year primarily non-residential public baccalaureate institution. Accreditation was last reaffirmed in November 2022.

The School of Hotel and Restaurant Administration is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA).

The Department of Business Administration is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The Counseling Department is accredited by the International Accreditation of Counseling Services (IACS).

State Licensing Agency

The Board of Postsecondary Institutions of Puerto Rico approves the operating license for the University of Puerto Rico at Carolina. Approval was provided through Certification 2023-116 of the Office of Registry and Licensing of Education, Department of State of Puerto Rico.

Campus facilities

Carolina is located east of the capital city and is one of the largest and most developed on the Island. The UPRCA campus consists of multiple buildings built on a 57-acre field with teaching, sports, dining, and arts facilities. Adequate parking spaces and recreational areas are also available. The campus has a theatre as well as several computer laboratories on its academic's buildings and the library.

Mission

The University of Puerto Rico at Carolina is part of the public higher education system, and its services are available to all sectors in our society. It offers a unique quarter-term calendar program of studies focused on the arts, the sciences, hospitality, and technology that allows students to complete an academic degree in less time within the UPR System. The Institution is committed to provide students with a holistic education that enables them to enter the labor market or pursue advanced studies to strengthen their professional development and contribution to their homeland.

Vision

The Institution strives to impact a diverse, dynamic, changing, and globalized society. Recognized by employers for its academic excellence and services. Committed with the development of new knowledge through research from its faculty and students both national and internationally.



Values

Excellence: Excellence: High-quality level of teaching offered at the institution that enables our graduates to contribute to society.

Integrity, ethics, and academic honesty: Institutional rectitude that sets itself as an example to society in the process of creating new knowledge.

Diversity and social awareness: Contribution to the establishment of a society that respects diversity of ideas and fosters a humanistic education.

Culture of Service: The institutional performance to serve the educational process.

Goals

- Provide opportunities for academic, professional, and cultural development to students in and out of Puerto Rico.
- Increase the outreach of UPR-Carolina unique academic offerings.
- Provide efficient support for the completion of academic degrees in a shorter time frame.
- Offer a comprehensive education that helps transition its graduates into the labor market and advanced studies.



Message from the Chancellor



Welcome to the University of Puerto Rico at Carolina, Jaguar Zone in the City of Giants. We appreciate your visit, and we hope you will consider us as your first choice of study. Explore through this page the advantages that our Campus has for you. We are committed to your personal growth and academic development.

This Institution has successfully graduated high-caliber professionals for over forty years. Our goals are geared towards innovation, institutional transformation, and student success. The following are included among our objectives:

- Development of an Entrepreneurship Center to motivate and support the university community to generate projects that have a positive impact on society.
- Promoting institutional planning so that academic programs and administrative offices have performance indicators for continuous self-evaluation.
- Update the information and telecommunication technology infrastructure for the optimization of Distance Education projects, laboratories and administrative procedures online.
- Update existing laboratory facilities and equipment to support academic programs and student goals.
- Continuation of the permanent improvement program and maintenance of physical facilities to make our Campus resilient to any emergency.

Success is not improvised, it is built. Our agenda for a better country includes serving you as a guide during your years of comprehensive academic formation. Join the University of Puerto Rico at Carolina family! We are your best alternative.

José I. Meza Pereira, Ph.D.
Chancellor
UPR-Carolina

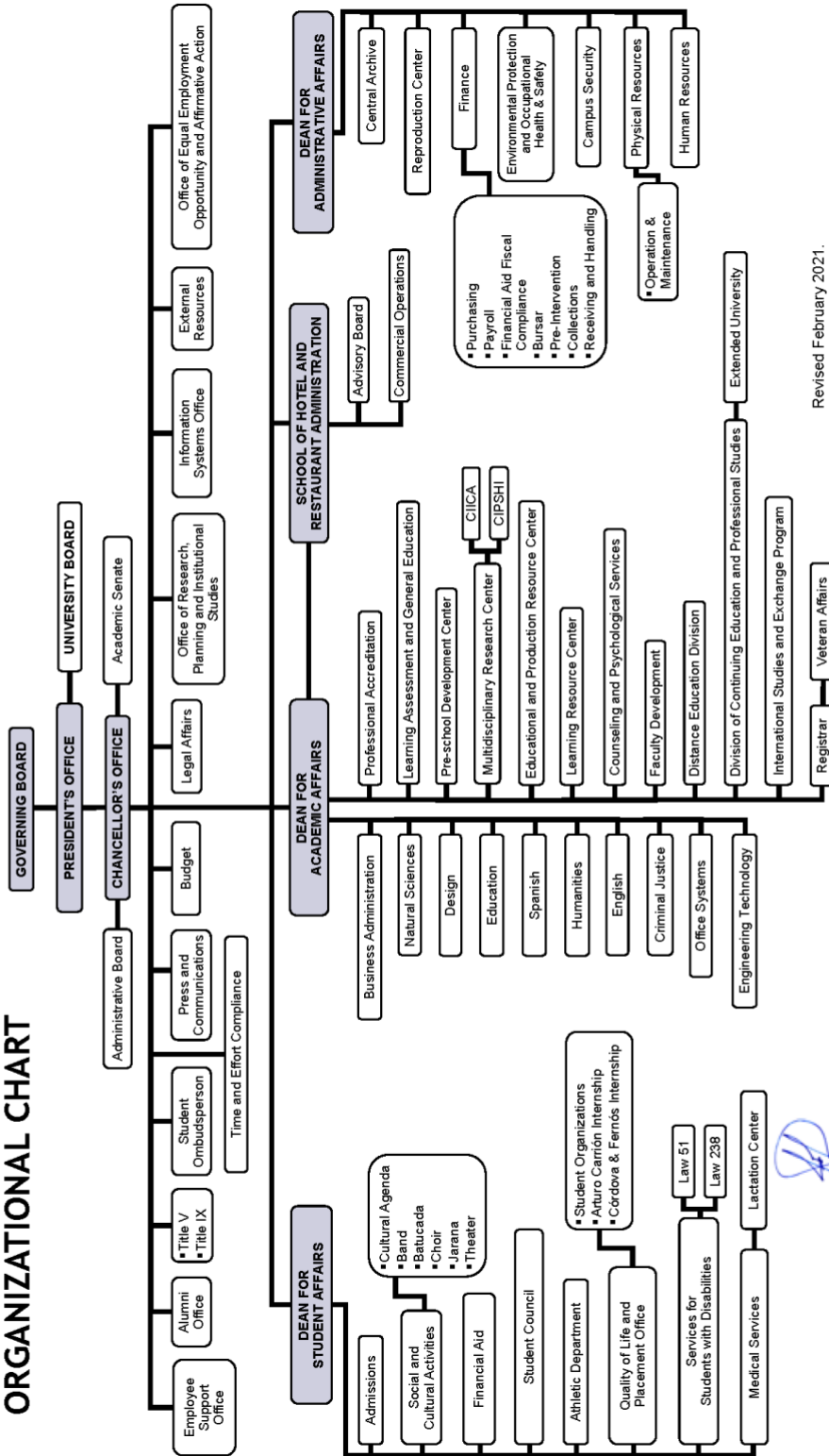
Organization chart



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UPR

ORGANIZATIONAL CHART



Revised February 2021.

Dr. José I. Meza Pereira
Chancellor

Internal Organization

Government of the University of Puerto Rico

Governing Board

President of the UPR

Chancellor of the UPR Carolina (*)

Administrative Board

Academic Senate

Department Directors and Coordinators

*The University of Puerto Rico in Carolina is governed by a chancellor and its advisory bodies: the Academic Senate and the Administrative Board. In addition, within its administrative structure there are three (3) basic units:

- Deanship of Academic Affairs
- Deanship of Student Affairs
- Deanship of Administrative Affairs

The Chancellor is recommended by the President of the University of Puerto Rico in consultation with the faculty of the Institution and with the approval of the Governing Board. He/she is responsible for all academic and administrative operations that take place in the Institution, in addition to presiding over faculty meetings, the Academic Senate, and the Administrative Board.

Deanship of Academic Affairs

The Dean of Academic Affairs is appointed by the Chancellor in consultation with the faculty. This Dean coordinates and supervises activities related to teaching, academic offerings, course scheduling, the Learning Resource Center, the Department of Counseling and Psychological Services, Admissions, Registrar, Continuing Education and Professional Studies, as well as educational research proposals, among others. Among its most important responsibilities is to recruit highly qualified faculty, encourage the development of new academic programs, review existing ones, and promote interest in the improvement of teaching-learning techniques and innovation in courses through a continuous process of evaluation. In addition, he/she promotes and supports academic programs eligible for accreditation. Staff, department and offices under the deanship are:

- Associate Dean
- Assistant Dean
- Department of Business Administration
- Department of Natural Sciences
- Department of Education
- Criminal Justice Department
- School of Hotel and Restaurant Management
- Design Department
- Spanish Department
- Humanities Department
- English Department
- Department of Engineering Technologies
- Office Systems Department
- Educational Resources and Production Center
- Learning Resource Center
- Counseling and Psychological Services
- Division of Continuing Education and Professional Studies
- Office of Distance Education
- Educational Services Program
- Registrar Office

Emblematic Projects

Motto: Proud to be a faculty, student and graduate of UPR-Carolina

Now is: Institutional Assessment

- Implement a systematic process to carry out the entire assessment cycle and meet the needs of academic programs and courses.
 - Systematic process
 - Responding to program needs
 - Comply with accrediting agency requirements
 - Closing the cycle (close the loop)

Unique with excellence: Quality vs. quantity

- Strengthen the accreditation process to support unique programs in meeting the standards required by the accrediting agency.
 - Acceptance of the accreditation agenda
 - Needs study to meet the standards
 - Transformative actions to meet excellence (program and academy)
- Multidisciplinary Research

Shared vision: Departments working and creating

- Creation of innovative academic programs
- Implementation of the General Education Program
- ALAAS Academic
 - Coordinate professional development activities for teachers, support staff and students.
 - Develop instructional modules for orientation of new teachers

A Look into the Future: Distance Education

- Train teachers in the use of technology and integrate it into their teaching work
- Development of distance learning offerings during evenings

Meeting My Expectations: Student Initiatives

- Provide an innovative educational service offering for talented students.
 - Talented Students on Escape (ETE)
- Train students in employability skills and work habits.
 - My first work experience

With us always - Recruitment, Retention and Support Program

- Redesign the admissions process to select the best candidates, according to their interests.
 - Improve program admission processes
 - Present alternatives to attract the best candidates
 - Follow-up per quarter-term to detect possible situations
 - Have alternatives to present according to their needs.
 - Support programs: counseling and psychology

Admissions

The Admissions Office processes the applications from high school students and other university level institutions recognized by the Puerto Rico Council of Education. This office receives and evaluates documentation of UPR Carolina admission candidates.

A. General Admission Requirements for incoming students

- Be a graduate or candidate for graduation from a public or private high school licensed to operate by the General Board of Education, or approval of the Department of Education equivalency examination.
- An official credits transcript.
- The College Admission Test, which is administered by the College Board.
 - The PAA consists of 3 parts - verbal, math and English which are used to evaluate the application for admission.
 - Scholastic Aptitude Test (SAT) - If you feel you are more proficient in English than in Spanish, you can take this test.
 - SAT I - equivalent to the proficiency part of the PAA
 - SAT II - Subject Test: Literature, Math I or II and Spanish" - equivalent to the achievement test.

Results must be sent to the Admissions Office.

- Complete the application for admission. You can complete it online at www.upr.edu/admisiones. **Applications are not accepted to begin studies in the third quarter term.**
- Meet the Minimum Entrance Index (IMI) of the selected program of study. This is the minimum score a student must have to be accepted into a particular academic program. This may vary from year to year.

If you want to know your score, you can access the website: students.upr.edu and calculate your Overall Grade Point Average (GPA) on the GPA calculator we provide by entering your College Board Verbal and Math or SAT I score and your cumulative GPA.

Once admitted, students must present a high school graduation certificate, immunization and other documents required by the Medical Services Office.

B. Admission of Students with Talent or Special Abilities

The University of Puerto Rico provides admission to a limited number of students based on special abilities and/or talents. If you are interested in being considered under this type of admission, the application provides space for you to indicate so.

You must meet the following requirements

- Approval of the high school graduation requirements or the equivalency exam of the Department of Education of the Commonwealth of Puerto Rico.
- Minimum high school GPA of 2.00.
- Completion of the required entrance exam (PAA or SAT).
- Selection of area of interest and/or skills.

Note: The student's IGS cannot be less than (20) points below the IMI that the program requires; such program must not be an articulated transfer.

C. Home Schoolers

Home schoolers must indicate their status on the application using code 3934 (in the space provided for high school code). Submission of PAA results is required along with a notarized Home-Schooling Certification.

For more information about the admission criteria for Home Schoolers, please visit www.upr.edu/admisiones.

D. Requirements for high school or equivalent applicants from abroad

- Submission of a secondary education transcript in the vernacular language and an additional one in English or Spanish, duly certified as an official copy by the institution of origin and validated by the Ministry of Education of the country of origin and by the American Consulate. In addition, the equivalency must be processed at the Office of Studies and Equivalencies of the Department of Education.
- Submit evidence of degrees or diplomas received.
- Submission of an official explanatory report on:
 - a. The grading system used in the evaluation of academic achievement.
 - b. The content and level of the courses taken.
 - c. The number of hours per week covered by each subject.
- Present evidence of proficiency in English and Spanish.
- Submit evidence of financial resources to study in Puerto Rico.
- Applicants from private educational institutions must submit official certification that the institution is officially recognized by the government of the country of origin.
- Arrange for approval of Form 1-20 at the Registrar's Office of the selected UPR unit.

All documents submitted will become the property of the University of Puerto Rico.

Transfers

Students from other universities outside of the University of Puerto Rico System.

A. Eligibility Criteria

- Applicants from private universities recognized by the Puerto Rico Council of Education are eligible for admission. They must meet the following criteria:
 - a. The applicant must be free of disciplinary sanctions in the institution of origin (a certification must be included).
 - b. A minimum of 30 credits with a GPA of 2.50 or higher or the applicants' general index (Certification #17 - 2004-05).

B. Procedure

Applications for admission by transfer must be submitted according to the deadlines established for each academic year.

1. Process two (2) official credit transcripts from the university of origin.
2. Manage the submission of the Certificate of Clarification Certification from the home university to the Dean of Students Office.
3. Pay the corresponding application fee at the Collections Office by the established deadline, in cash, money order or certified check made payable to the University of Puerto Rico. Late applications will incur a late fee.
4. A catalogue of the university of origin must be included with the application.
5. Foreign students must also comply with the requirements established in section B, for high school students.

Tuition fees and document requests

Credit Transcripts	\$5 each
Copy of class schedule	\$5 each
Dean's Recommendation	\$2
Cost per credit	\$157**
UNEX Fee	\$10 per credit***
Maintenance fee	\$100 per quarter-term \$50 per summer session
Technology fee per academic session	\$50 per quarter-term
Laboratory	\$100 each
Late Enrollment	\$20
Course repetitions	\$20 each
Admission fee (first quarter only)	\$30
Parking Permit	\$5
Identification Card	\$10
Certification of studies	\$5 each
Graduation Certification	\$5 each
Course Certification	1 to 2 courses \$5 3 to 4 courses \$10 5 to 6 courses \$15 7 courses and up \$20
Graduation Application	\$80
Duplicate diploma	\$25
*Readmission (on-time application)	\$35
*Readmission (late application)	\$52.50
*Reclassification (on-time application)	\$20
*Reclassification (late application)	\$30
*Special Permit (on-time application) This request requires (2) credit transcripts.	$\$30 + 10 = \40
*Special Permit (Late Application) This request requires (2) credit transcripts	$\$45 + 10 = \55
Articulated transfer Transcripts only	Requested for January (4 transcripts) \$20 Requested for August without studying in the 3rd quarter-term (4 transcripts) \$20 Requested for August studying in 3rd quarter-term (6 transcripts) \$30
*Regular transfer active student (on-time application)	Requested for January $\$25 + 20 = \45 Requested for August without studying in the 3rd quarter-term $\$25 + 20 = \45 Requested for August studying in the 3rd quarter- term $\$25 + 30 = \55

*Regular transfer active student (late application)	Requested for January $\$37.50 + 20 = \57.50 Requested for August without studying in the 3rd quarter-term $\$37.50 + 20 = \57.50 Requested for August studying in the 3rd quarter-term $\$37.50 + 30 = \67.50
*Regular inactive student transfer (on-time application) This request requires (2) credit transcripts	$\$30 + 10 = \40
*Regular inactive student transfer (late application) This request requires (2) credit transcripts	$\$45 + 10 = \55
*Transfer (on-time request)	\$50
*Transfer (late request)	\$75
Repeating classes	\$20
Partial withdrawals	\$10 each
Full withdrawals	\$15

*Dates for applications can be found in the academic calendar, published on the institution's website, under the students tab.

**Cost per credit, according to the Fiscal Plan of the University of Puerto Rico Certification 77 2020-2021, of the UPR Governing Board.

***Certification 08 2018-2019, UPR Carolina Academic Senate.

Refunds

- Students who withdraw during the second week of any term will be entitled to a refund of 50% of their basic tuition fees. They will be entitled to 100% of the total amount paid from the day of enrollment until the day before the beginning of the regular courses. These provisions do not extend to students of the Division of Continuing Education and Professional Studies.
- The student will have the right to be reimbursed 50% of the total amount paid for credits in tuition, if the tuition is not pending payment due to an extension; if this is the case, the tuition will be left with a zero balance (0). This covers the period of the first two weeks of any term.
- Refund requests must be petitioned by the student at the Collections Office.
- No refunds of fees paid by visiting students or students withdrawn for disciplinary offenses will be authorized.

Learning Resource Center

The José P. Fernández-Miranda Learning Resource Center (LRC) is a teaching unit that offers and provides services to the academic community and the public. Its purpose is to provide users with essential resources and services to support, complement and interact with academic programs. In addition, it contributes to the enrichment of the intellectual, cultural and educational heritage of students, professors, university staff and members of the community. The areas of the library are:

- Collection Management
Hours:
 - Monday – Friday 8:00 a.m. – 4:30 p.m.
- Public Services
 - Library Materials
 - Virtual Reference (Pregúntale a tu Bibliotecario)Hours:
 - Monday – Thursday 7:00 a.m. – 9:00 p.m.
 - Friday 7:00 a.m. – 4:30 p.m.
 - Saturday 9:00 a.m. – 1:00 p.m.
- Online Resources and Services
 - Databases
 - Electronic Books
 - Virtual Reference (Pregúntale a tu Bibliotecario)Hours:
 - Monday – Thursday 7:00 a.m. – 9:00 p.m.
 - Friday 7:00 a.m. – 4:30 p.m.
 - Saturday 9:00 a.m. – 1:00 p.m.
- Information and Technology Skills Program
 - Tutoring
 - Writing Center UPR Carolina EscribeHours:
 - Monday – Friday 8:00 a.m. – 4:30 p.m.
- Administrative Office
Hours:
 - Monday – Friday 8:00 a.m. – 4:30 p.m.

The library has a print and electronic collection that includes: books, magazines, newspapers and audiovisual materials. Most of the electronic resources can be used from off campus.



Business Administration Department

adem.carolina@upr.edu | Ext. 3259

The Department of Business Administration offers a baccalaureate degree in Business Administration with two concentrations: Finance and Management. This academic program develops to the maximum the intellectual wealth of the student by creating a culture that promotes links in the business world, the updating of the academic program, research and assessment as part of the development of a teaching-learning community. In addition, it trains students to face economic and social challenges in a globalized economy with emphasis on values and honesty in decision making.

Upon completion of their studies, graduates can excel as:

- Manager
- Business Owner
- Investment Consultant and others related to the field of Business Administration.

The Business Administration program is accredited by the Accreditation Council for Business Schools & Programs (ACBSP).



Curriculum Sequence – Bachelor in Business Administration with a concentration in Management

First Quarter		
Courses		Credits
ADMI4005	Introduction to Management and Business	3
MECU 3031	Quantitative Methods for Business Administration I	3
INGL 3101	Basic English I	3
SICI 3211	Computer Principles	3
		Credits 12
Second Quarter		
Courses		Credits
CONT 3005	Introduction to Fundamentals Elementary Accounting I	4
REHU 4409	Human Relations	3
MECU 3032	Quantitative Methods for Business Administration II	3
INGL 3102	Basic English II	3
		Credits 13
Third Quarter		
Courses		Credits
CONT 3006	Introduction to Fundamentals Elementary Accounting II	4
REHU 4416	Business Ethics	3
ESPA 3101	Basic Spanish I	3
ESTA 3041	Business Administration Statistics I	3
		Credits 13
Fourth Quarter		
Courses		Credits
HUMA 3101 CISO 3121	Humanities I and/or Social Sciences I	3
ESPA 3102	Basic Spanish II	3
ESTA 3042	Business Administration Statistics II	3
CONT 4006	Managerial Accounting	3
REHU 4405	Human Resources Management	3
		Credits 15
Fifth Quarter		
Courses		Credits
HUMA 3102 CISO 3122	Humanities II and/or Social Sciences II	3
REHU 4406	Labor-Management Relations	3
REHU 4419	Legislation / Labor Jurisprudence	3
EDFI 3XXX	Course in Physical Education	3
ECON 3021	Microeconomics	3
		Credits 15

Sixth Quarter		
Courses		Credits
INCO 3005	Business English I	3
ESCO 3001	Commercial Spanish I	3
MERC 3115	Marketing Principles	3
REHU 4407	Compensation Systems	3
ECON 3022	Macroeconomics	3
		Credits 15
Seventh Quarter		
Courses		Credits
FINA 3107	Markets and Financial Institutions	3
ESCO 3002	Commercial Spanish II	3
INCO 3006	Business English II	3
CIBI 3001 CIFI 3001	Biological Sciences I and/or Physical Sciences I	3
ADMI 4007	Strategic Management	3
		Credits 15
Eighth Quarter		
Courses		Credits
INCO 4006	English Report Writing	3
REHU 4426	Collective Bargaining	3
CIBI 3002 CIFI 3002	Biological Sciences II and/or Physical Science II	3
FINA 3106	Financial Management	3
		Credits 12
Ninth Quarter		
Courses		Credits
ADMI 4035	Small Business Administration	3
LEGA 4005	Legal Aspects in Business	3
XXXX	Free Elective	3
XXXX	Free Elective	3
		Credits 12
Tenth Quarter		
Courses		Credits
ADMI 4039	Business Research Methods (Capstone Course)	3
GEOP 4315	Operations Management	3
XXXX	Free Elective	3
XXXX	Free Elective	3
		Credits 12
		Total 134 credits

NOTE: Courses in the Minor and Second Concentration must be passed with a "C" or better. These must be requested at the **Registrar's office** using the appropriate form. Approved SA-CERT. 44 (2014-2015) and Vice President Academic Affairs 24june2015.

FINANCE (MINOR CONCENTRATION)		
Courses		Credits
CONT 4096	Financial Statement Analysis	3
FINA 4025	Advanced Managerial Finance	3
FINA 4037	Investments	3
FINA 4015	Banking Administration	3
		Total 12 credits
FINANCE (SECOND CONCENTRATION)		
Courses		Credits
CONT 4096	Financial Statement Analysis	3
FINA 4015	Banking Administration	3
FINA 4020	International Finance	3
FINA 4025	Advanced Managerial Finance	3
FINA 4037	Investments	3
FINA 4050	Financial Markets	3
FINA 3005	Introduction to Insurance	3
FINA 4066	Risk Management	3
FINA 4045	Seminar on Contemporary Trends in Financial Management	3
		Total 27 credits
BUSINESS INNOVATION (MINOR CONCENTRATION)		
Courses		Credits
ADMI 3155	Creativity and Business Innovation	3
ADMI 3100	New Business Development	3
ADMI 3150	Business Plan Development	3
ADMI 4335	Strategies for Change and Growth	3
		Total 12 credits

Curriculum Sequence – Bachelor in Business Administration with a major in Finance

First Quarter		
Courses		Credits
CONT 3005	Elementary Accounting	4
ADMI 4005	Introducing Management Activity (ADMI 3005)	3
ECON 3021	Microeconomics	3
INGL 3101	Basic English I	3
		Credits 13
Second Quarter		
Courses		Credits
CONT 3006	Elementary Accounting II	4
MECU 3031	Quantitative Methods in Business Administration I	3
INGL 3102	Basic English II	3
ECON 3022	Macroeconomics	3
		Credits 13
Third Quarter		
Courses		Credits
FINA 3107	Markets and Financial Institutions	3
ESPA 3101	Basic Spanish I	3
ESTA 3041	Elementary Statistics Business Administration I	3
MECU 3032	Quantitative Methods for Business Administration II	3
CONT 4006	Managerial Accounting	3
		Credits 15
Fourth Quarter		
Courses		Credits
HUMA 3101 CISO 3121	Humanities I and/or Social Sciences I	3
FINA 3106	Financial Management	3
ESTA 3042	Elementary Statistics Business Administration II	3
ESPA 3102	Basic Spanish II	3
SICI 3211	Computer Principles	3
		Credits 15
Fifth Quarter		
Courses		Credits
INCO 3005	Business English I	3
ESCO 3001	Commercial Spanish I	3
HUMA 3102 CISO 3122	Humanities II and/or Social Sciences II	3
CIBI 3001 CIFI 3001	Biological Sciences I and/or Physical Sciences I	3
FINA 4025	Advanced Commercial Finance	3
		Credits 15

Sixth Quarter		
Courses		Credits
INCO 3006	Business English II	3
ESCO 3002	Commercial Spanish II	3
CIBI 3002 CIFI 3002	Biological Sciences II and/or Physical Sciences II	3
FINA 4015	Banking Administration	3
		Credits 12
Seventh Quarter		
Courses		Credits
EDFI 3XXX	Course in Physical Education	3
INCO 4006	Report Writing	3
FINA 4037	Investments	3
XXXX	Free Elective	3
		Credits 12
Eighth Quarter		
Courses		Credits
FINA 3005	Introduction to Insurance	3
FINA 4020	International Finance	3
LEGA 4005	Legal Aspects in Business	3
XXXX	Free elective	3
		Credits 12
Ninth Quarter		
Courses		Credits
CONT 4096	Financial Statements Analysis	3
REHU 4405	Human Resources Management	3
FINA 4050	Financial Markets	3
MERC 3115	Marketing Principles	3
XXXX	Free Elective	3
		Credits 15
Tenth Quarter		
Courses		Credits
REHU 4416	Business Ethics	3
FINA 4066	Risk Management	3
XXXX	Free Elective	3
FINA 4045	Contemporary Trends in Financial Management Seminar (Capstone Course)	3
		Credits 12
		Total 134 credits

NOTE: Courses in the Minor and Second Concentration must be passed with a "C" or better. These must be requested at the **Registrar's office** using the appropriate form. Approved SA-CERT. 44 (2014-2015) and Vice President for Academic Affairs (June 2015).

FINANCIAL MANAGEMENT (MANAGERIAL FINANCE)		
Courses		Credits
FINA 4030	Company Valuation	3
FINA 4065	Financial Management for Small and Medium Enterprises.	3
FINA 4067	Stock Market and Fixed Income	3
FINA 4010	Finance for Entrepreneurs	3
		Total 12 credits
INVESTMENTS (INVESTMENT)		
Courses		Credits
FINA 4149	Investment Portfolio Management	3
FINA 4067	Stock Market and Fixed Income	3
FINA 4138	Derivatives Market	3
FINA 4270	Behavioral Finance	3
		Total 12 credits
FINANCIAL (PLANNING)		
Courses		Credits
FINA 4149	Investment Portfolio Management	3
FINA 4057	Personal Finance	3
FINA 4016	Introduction to Real Estate	3
FINA 4240	Retirement Planning	3
		Total 12 credits
MINOR CONCENTRATION IN MANAGEMENT		
Courses		Credits
ADMI 4007	Strategic Management	3
REHU 4406	Labor-Management Relations	3
REHU 4409	Human Relations	3
REHU 4419	Labor Legislation/Jurisprudence	3
		Total 12 credits
SECOND CONCENTRATION IN MANAGEMENT		
Courses		Credits
ADMI 4007	Strategic Management	3
ADMI 4035	Small Business Administration	3
ADMI 4039	Business Research Methods	3
GEOP 4315	Operations Management	3
REHU 4406	Labor-Management Relations	3
REHU 4407	Compensation Systems	3
REHU 4409	Human Relations	3
REHU 4419	Labor Legislation/ Jurisprudence	3
REHU 4426	Collective Bargaining	3
		Total 27 credits
BUSINESS INNOVATION (MINOR CONCENTRATION)		
Courses		Credits
ADMI 3155	Creativity and Business Innovation	3
ADMI 3100	New Business Development	3
ADMI 3150	Business Plan Development	3
ADMI 4335	Strategies for Change and Growth	3
		Total 12 credits

School of Hotel and Restaurant Administration

hotelera.carolina@upr.edu | Ext. 3318

The bachelor in Hotel and Restaurant Administration offers the opportunity to choose between two areas of emphasis: Hotel Administration and Food and Beverage Administration. The School of Hotel and Restaurant Administration was the first institution to offer degrees in this discipline on the island and the first to be accredited in Latin America and the Caribbean by the prestigious Accreditation Commission for Programs in Hospitality Administration (ACPHA).

The bachelor's degree in Hotel and Restaurant Administration consists of a broad and varied curriculum; it contains general education courses, core courses and courses directed to areas of emphasis for a total of 132 credits distributed in nine quarter-terms.

Also, an associate degree in Hotel and Restaurant Management is offered through the Universidad Extendida (UnEx), attached to the DECEP, which provides the opportunity for non-traditional students to complete an associate degree in extended hours and take some courses in the distance learning modality.

Studying this discipline creates opportunities for graduates to plan, direct, and coordinate administrative and managerial functions in work settings such as: lodging, restaurants, casinos, recreation, and tourism businesses. Also, our graduates are hired by companies dedicated to the import, sales and marketing of products and services, government agencies, cruise companies, airlines, theme parks and institutional segments related to food and beverage service, among others.

School Mission

To develop socially responsible hospitality industry leaders with outstanding operational and management skills while fostering a commitment to the local and global communities.

School Vision

To be recognized worldwide as a leader in hospitality industry education.

Program Learning Objectives

- Identify and apply the knowledge and skills necessary for hospitality and tourism operations.
- Develop and integrate a set of management skills to successfully operate a hospitality and tourism organization.
- Demonstrate competency in the communication skills necessary for hospitality and tourism management.
- Formulate business decisions in hospitality and tourism management.
- Evaluate leadership principles necessary in the globalized and diverse hospitality and tourism industry.
- Show proficiency in Spanish and English.



Curriculum Sequence – Bachelor in Hotel and Restaurant Administration
Area of emphasis: Hotel Administration

First Quarter		
Courses		Credits
ENGL 3101	Basic English I	3
ADEM 1005	Commercial Mathematics	3
EDFI 3675	Life, Health and Wellness	3
ADHO 3105	Hotel and Restaurant Management	3
ESPA 3101	Basic Spanish I	3
INTD 3001	Interdisciplinary Seminar I	1
		Credits 16
Second Quarter		
Courses		Credits
INGL 3102	Basic English II	3
ESPA 3102	Basic Spanish II	3
HUMA 3101	Introduction to Western Culture I	3
CIBI 3001	Fundamentals of Biology I	3
ADHO 3107	Sales and Marketing in the Hospitality Industry	3
		Credits 15
Third Quarter		
Courses		Credits
ENGL 3031	Conversational English First Level I	3
ESPA 4233	Puerto Rican Literature	3
HUMA 3102	Introduction to Western Culture II	3
CONT 3005	Introduction Fundamentals of Accounting I	4
CIBI 3002	Fundamentals of Biology II	3
		Credits 16
Fourth Quarter		
Courses		Credits
ADMI 4005	Introduction to Management Activity	3
REHU 4405	Personnel Administration	3
INGL 3032	Conversational English First Level II	3
ADHO 3135	Hotel Accounting	3
ADHO 3301	Hospitality Industry Practice I	3
INTD 3002	Interdisciplinary Seminar II	1
		Credits 16
Fifth Quarter		
Courses		Credits
CISO 3121	Introduction to Social Sciences I	3
ADHO 3132	Hotel Management Accounting	3
REHU 4406	Labor-Management Relations	3
ECON 3021	Principles of Economics I	3
ADHO 3302	Hospitality Industry Practice II	3
		Credits 15

Sixth Quarter		
Courses		Credits
ADHO 4105	Hotel Facilities Management and Maintenance	3
ADHO 4107	Hotel Law	3
ADHO 3106	Rooms Division Administration	3
HIST 3245	Compendium of Puerto Rico History	3
CISO 3122	Introduction to Social Sciences II	3
		Credits 15
Seventh Quarter		
Courses		Credits
ADHO 4415	Club and Vacation Hotel Management	3
ADHO 3108	Fundamentals of Tourism	3
ADHO 4106	Group and Convention Planning and Marketing	3
PSIC 3005	General Psychology	3
	Free Elective	3
		Credits 15
Eighth Quarter		
Courses		Credits
ADHO 3417	Housekeeping Dept. Admin.	3
ADHO 3419	Casino and Gaming Operation	3
ADHO 4135	Hotel Finance	3
	Free Elective	3
		Credits 12
Ninth Quarter		
Courses		Credits
ADHO 4305	Hospitality Capstone Course	3
ADHO 4417	Hotel Asset Management	3
	Free Elective	3
	Free Elective	3
		Credits 12
		Total 132 credits

Curriculum Sequence – Bachelor in Hotel and Restaurant Administration
Area of Emphasis: Food & Beverage Administration

First Quarter		
Courses		Credits
ENGL 3101	Basic English I	3
ADEM 1005	Commercial Mathematics	3
EDFI 3675	Life, Health and Wellness	3
ADHO 3105	Hotel and Restaurant Management	3
ESPA 3101	Basic Spanish I	3
INTD 3001	Interdisciplinary Seminar I	1
		Credits 16
Second Quarter		
Courses		Credits
INGL 3102	Basic English II	3
ESPA 3101	Basic Spanish II	3
HUMA 3101	Introduction to Western Culture I	3
CIBI 3001	Fundamentals of Biology I	3
ADHO 3107	Sales and Marketing in the Hospitality Industry	3
		Credits 15
Third Quarter		
Courses		Credits
ENGL 3031	Conversational English First Level I	3
ESPA 4233	Puerto Rican Literature	3
HUMA 3102	Introduction to Western Culture II	3
CONT 3005	Introduction Fundamentals of Accounting I	4
CIBI 3002	Fundamentals of Biology II	3
		Credits 16
Fourth Quarter		
Courses		Credits
ADMI 4005	Introduction to Management Activity	3
REHU 4405	Personnel Administration	3
INGL 3032	Conversational English First Level II	3
ADHO 3135	Hotel Accounting	3
ADHO 3301	Hospitality Industry Practice I	3
INTD 3002	Interdisciplinary Seminar II	1
		Credits 16
Fifth Quarter		
Courses		Credits
CISO 3121	Introduction to Social Sciences I	3
ADHO 3132	Hotel Management Accounting	3
REHU 4406	Labor-Management Relations	3
ECON 3021	Principles of Economics I	3
ADHO 3302	Hospitality Industry Practice II	3
		Credits 15

Sixth Quarter		
Courses		Credits
ADHO 4105	Hotel Facilities Management and Maintenance	3
ADHO 4107	Hotel Law	3
ADHO 3205	Introduction to Food and Beverage Operations Management	3
HIST 3245	Compendium of Puerto Rico History	3
CISO 3122	Introduction to Social Sciences II	3
		Credits 15
Seventh Quarter		
Courses		Credits
ADHO 3206	Food and Beverage Operations Purchasing Adm.	3
ADHO 3207	Nutrition and Safety	3
ADHO 3208	Food and Beverage Cost Control	3
PSIC 3005	General Psychology	3
	Free Elective	3
		Credits 15
Eighth Quarter		
Courses		Credits
ADHO 4205	Service Styles Management and Direction	3
ADHO 3211	Principles of Food Production	3
ADHO 3212	Food Production Laboratory	0
ADHO 4135	Hotel Finance	3
	Free Elective	3
		Credits 12
Ninth Quarter		
Courses		Credits
ADHO 4305	Hospitality Capstone Course	3
ADHO 4201	Advanced Food Production	3
ADHO 4202	Advanced Production Laboratory	0
	Free Elective	3
	Free Elective	3
		Credits 12
		Total 132 credits

Curriculum Sequence – Associate Degree in Hotel and Restaurant Administration through DECEP

First Quarter		
Courses		Credits
ENGL 3101	Basic English I	3
ADEM 1005	Commercial Mathematics	3
ADHO 3105	Hotel and Restaurant Management	3
ADHO 3435	Introduction to Hotel and Restaurant Data Processing Systems	3
		Credits 12
Second Quarter		
Courses		Credits
INGL 3102	Basic English II	3
CONT 3005	Introduction Fundamentals of Accounting I	4
ADHO 3106	Rooms Division Administration	3
ADHO 3205	Introduction to Food and Beverage Operations Management	3
		Credits 13
Third Quarter		
Courses		Credits
HIST 3245	Compendium of Puerto Rico History	3
ADHO 3135	Hotel Accounting	3
ADHO 3206	Food and Beverage Operations Purchasing Administration	3
ECON 3021	Principles of Economics I	3
		Credits 12
Fourth Quarter		
Courses		Credits
ESPA 3101	Basic Spanish I	3
ADHO 4107	Hotel Law	3
ADHO 3211	Principles of Food Production	3
ADHO 3212	Food Production Laboratory	0
ADHO 3132	Hotel Management Accounting	3
		Credits 12
Fifth Quarter		
Courses		Credits
ESPA 3102	Basic Spanish II	3
ADHO 4105	Hotel Facilities Management and Maintenance	3
ADHO 2015	Hotel Staff Management	3
ADHO 3107	Sales and Marketing in the Hospitality Industry	3
		Credits 12
Sixth Quarter		
Courses		Credits
ADHO 3208	Food and Beverage Cost Control	3
ADHO 3006	Hotel Labor-Management Relations	3
ADHO 3301	Hospitality Industry Practice I	3
		Credits 9
		Total 70 credits

Natural Sciences Department

cienciasnaturales.carolina@upr.edu | Ext. 4550, 4558, 4559

The Department of Natural Sciences of the University of Puerto Rico at Carolina comprises the areas of Forensic Sciences, Biology, Chemistry, Physics, and Mathematics. Its mission is to contribute efficiently and effectively to the integral formation of students by offering innovative and cutting-edge programs in science and mathematics that actively promote the solution of socioeconomic, environmental and ethical problems in our society.

Our commitment is to create an optimal environment through courses, laboratory activities, undergraduate research, seminars, symposia and other faculty-student interaction activities in both face-to-face and distance learning modalities. In line with this, our students can participate in scientific research at the undergraduate level in the areas of Biology, Neuroscience, Chemistry, Physics or Atmospheric Sciences.

Moreover, this Department offers the only Bachelor of Science with a concentration in Forensic Science in the University of Puerto Rico System. This innovative program began in January 2019. In addition, several articulated transfer programs in science are offered to other units of the University of Puerto Rico System.

Students admitted to any of the Natural Sciences programs offered at UPR Carolina can participate in scientific research at the undergraduate level in the areas of Biology, Neuroscience, Chemistry, Physics or Atmospheric Sciences, under the tutelage of a professor. These undergraduate research experiences provide students with a unique learning experience and the opportunity to increase their potential to continue graduate studies or obtain a better job in their field.

Bachelor of Science Program with a concentration in Forensic Science

This Program aims to contribute to the academic training of forensic scientists and researchers who will be part of the professionals at the service of global justice in their role of discovering the truth in the various scenarios of criminal and legal investigation.

Its mission is to provide students with an excellent education that will enable them to develop the competencies necessary to pursue professional careers as forensic scientists in crime, toxicology and forensic investigation laboratories, as well as in criminal and legal investigative agencies and divisions at the state, federal and international levels.

Graduates will be able to work as forensic investigators, evidence technicians, trace evidence specialists, serologists, deoxyribonucleic acid (DNA) analysts, toxicologists, controlled substance analysts, firearms and fingerprint examiners, among others.



Natural Sciences - Articulated Transfer Programs

Articulated transfer programs allow students to begin studies at UPR-Carolina and complete their degree in another campus within the UPR System.

Disciplines covered in transfer programs include, among others:

- Biology
- Chemistry
- Physics

The following transfer programs are available:

Articulated transfers to the Medical Sciences Campus

- [Bachelor of Science in Nursing](#)
- [Associate Degree in Dental Assistant with Expanded Duties](#)

Articulated transfers to the Río Piedras Campus

- [Bachelor's Degree in Biology](#)
- [Bachelor's Degree in Chemistry](#)

Articulated transfers to the University of Puerto Rico at Bayamon

- [Bachelor's Degree in Biology](#)
- [Bachelor's Degree in Biology Human Approach](#)

Articulated shuttle to the University of Puerto Rico at Cayey

- [Bachelor's Degree in Biology](#)

Articulated transfers to the University of Puerto Rico at Humacao

- [Bachelor's Degree in Biology](#)
- [Bachelor of Science in Microbiology](#)
- [Bachelor's Degree in Coastal Marine Biology](#)
- [Bachelor's Degree in Industrial Chemistry](#)
- [Bachelor's Degree in Physics Applied to Electronics](#)
- [Bachelor's Degree in Wildlife Management](#)

Curriculum Sequence - Sciences Forensic Science Concentration

First Quarter		
Courses		Credits
INGL 3101	Basic English I	3
MATE 3018	Pre-Calculus and Analytic Geometry	4
ESPA 3331	Critical Thinking and Argumentative Writing I	3
CISO 3121	Introduction to Social Sciences I	3
BIOL 3011	General Biology I	4
BIOL 3013	General Biology I Laboratory	0
		Credits 17
Second Quarter		
Courses		Credits
INGL 3102	Basic English II	3
MATE 3031	Calculus I	4
ESPA 3332	Critical Thinking and Argumentative Writing II	3
CISO 3122	Introduction to Social Sciences II	3
CIFO 3001	Introduction to Forensic Sciences	3
		Credits 16
Third Quarter		
Courses		Credits
QUIM 3001	General Chemistry I	4
QUIM 3003	General Chemistry I Laboratory	0
HUMA 3111	Compendium of Western Culture I and II	3
JUST 3005	Introduction to Criminal Justice	3
HIST 3245	Compendium History of PR	3
		Credits 13
Fourth Quarter		
Courses		Credits
QUIM 3002	General Chemistry II	4
QUIM 3004	General Chemistry II Laboratory	0
ESMA 3101	Applied Statistics I	3
HUMA 3112	Compendium of Western Culture III and IV	3
CIFO 3003	Issues in Criminal Procedure and Rules of Evidence Applicable to Forensic Science	3
XXXX	Free Elective	3
		Credits 16
Fifth Quarter		
Courses		Credits
QUIM 3031	Organic Chemistry I	4
QUIM 3033	Organic Chemistry I Laboratory	0
FISI 3011	University Physics	3
FISI 3013	University Physics Laboratory I	1
CIFO 4501	Forensic Investigation I	3
XXXX	Free Elective	3
		Credits 14

Sixth Quarter		
Courses		Credits
QUIM 3032	Organic Chemistry II	4
QUIM 3034	Organic Chemistry II Laboratory	0
FISI 3012	University Physics II	3
FISI 3014	University Physics II Laboratory	1
CIFO 4502	Forensic Investigation II	3
XXXX	Free Elective	3
		Credits 14
Seventh Quarter		
Courses		Credits
QUIM 3025	Analytical Chemistry	4
QUIM 3026	Analytical Chemistry Laboratory	0
BIOL 3349	Genetics	3
JUST 4308	Expert Testimony	3
BIOL 4545	Cell Biochemistry	3
XXXX	Free Elective	3
		Credits 16
Eighth Quarter		
Courses		Credits
QUIM 4015	Instrumental Analysis	4
QUIM 4016	Instrumental Analysis Laboratory	0
CIFO 3002	Forensic Chemistry	3
INGL 3236	Writing Scientific Material	3
CIFO 4035	Forensic Toxicology	2
CIFO 4036	Forensic Toxicology Laboratory	1
		Credits 13
Ninth Quarter		
Courses		Credits
CIFO 4045	Controlled Substance Analysis	3
CIFO 4046	Controlled Substances Analysis Laboratory	1
CIFO 4015	Forensic Serology and DNA Technology	2
CIFO 4016	Forensic Serology and DNA Technology Laboratory	1
CIFO 4055	Firearms Ballistics	2
CIFO 4056	Firearms Ballistics Laboratory	1
CIFO 4990	Capstone Seminar	3
		Credits 13
		Total 132 credits

Design Department

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The bachelor of arts degrees with concentrations in Graphic Arts, Commercial Advertising, and Interior Design promote a platform of education that emphasizes professional, entrepreneurial, creative, and humanistic competencies that will make students successful in their professions. Academic programs in design encourage collaboration in industrial processes, innovation in their areas of specialty, legal compliance, personal and environmental safety, and diversity. In addition, an associate degree in Interior Design is offered through the Universidad Extendida (UnEx), attached to DECEP.

Those interested in any of these design programs may apply.

Graduates of the graphic design area will be able to use the graphic elements that are applied in the development of a sketch and a design ready to be printed, use specialized programs to illustrate and design, as well as to manipulate and build images that are part of the design. They also have the knowledge and skills necessary to research product attributes and develop strategies to solve design problems in the conceptualization of packaging. In addition, he/she will know the appropriate strategies to create a Web page. You will be able to work as a graphic designer, art director, graphic arts technician, production manager, publications manager, web designer, design supervisor and packaging designer.

On the other hand, the graduate in advertising production design handles elements of the aesthetic language and terminology of the production processes and the genres of radio and television programming. Likewise, they write texts for advertising spots, radio programs and television programs. Designs, produces and directs radio and television projects, using the necessary elements for this purpose. They can work as account executives, communication specialists, marketing officers, copywriters, advertising photographers, advertising producers and advertising campaign planners.

Graduates in interior design will be qualified to plan spaces, select and acquire furniture and cladding materials. It also aims to qualify professionals capable of designing safe, efficient and aesthetically pleasing spaces, while conserving energy resources, water and materials, among others. You will be able to work in the design of residential, commercial and institutional interior spaces, interior space planning, develop your own business, work as a project manager, showroom manager, or be a member of a design or architectural team.

*To practice as an Interior Designer in Puerto Rico, it is required to obtain a license issued by the Examining Board of Interior Designers-Decorators of the Department of State of Puerto Rico. (See Law No. 125 of June 8, 1973; as amended).



Curriculum Sequence – Bachelor in Graphic Arts in Graphic Design

First Quarter		
Courses		Credits
AGRA 3005	Introduction to Communication	3
AGRA 3015	Introduction to Graphic Arts	3
AGRA 3018	Fundamentals of Graphic Design	3
ESPA 3101	Basic Spanish I	3
INGL 3101	Basic English I	3
		Credits 15
Second Quarter		
Courses		Credits
AGRA 3049	Digital Image Tracking and Management	3
ARTE 3115	Art Appreciation	2
ESPA 3102	Basic Spanish II	3
INGL 3102	Basic English II	3
PUCO 3035	Fundamentals of Drawing	3
		Credits 14
Third Quarter		
Courses		Credits
ESCO 3005	Compendium of Oral and Written Business Communications	3
HUMA 3111	Compendium of Western Culture I and II	3
ENGLISH 3116	Compendium of Commercial Communication	3
MERC 3115	Marketing Principles	3
PUCO 4055	Publication Design	3
		Credits 15
Fourth Quarter		
Courses		Credits
AGRA 3039	Fundamentals of Typography	3
ARTE 3116	History of Art	3
CISO 3121	Social Sciences I	3
HUMA 3112	Compendium of Western Culture III and IV	3
XXXX	Free Elective	3
		Credits 15
Fifth Quarter		
Courses		Credits
AGRA 4305	Supervised Practice AGRA I	3
ARTE 3165	Puerto Rico/Caribbean Visual Arts Trajectory	3
CISO 3122	Social Sciences II	3
XXXX	Free Elective	3
		Credits 12

Sixth Quarter		
Courses		Credits
AGRA 4066	Creative Strategic Design	3
AGRA 4069	Elements of Production Management	3
COPU 4365	Media Legislation and Information Deontology	3
HIST 3245	Compendium of Puerto Rico History	3
MATE 3001	Introductory Mathematics I	3
		Credits 15
Seventh Quarter		
Courses		Credits
AGRA 4070	Commercial Packaging Design	3
AGRA 4079	Paper and Ink Handling	3
CIBI 3001	Fundamentals of Biology I	3
PUCO 4007	Small and Medium Business Administration	3
XXXX	Free Elective	3
		Credits 15
Eighth Quarter		
Courses		Credits
AGRA 4059	Computations and Estimates	3
AGRA 4111	Research Methods AGRA I	3
AGRA 4335	Contemporary Art	3
MERC 4006	The Art of Selling	3
PUCO 4005	Introduction to the Study of Cultural Industries	3
		Credits 15
Ninth Quarter		
Courses		Credits
AGRA 4112	AGRA Research Methods II	3
AGRA 4115	Web Design and Creation	3
AGRA 4306	Supervised Practice AGRA II	3
XXXX	Free Elective	3
		Credits 12
		Total 128 credits

Curriculum Sequence – Bachelor in Commercial Advertising Technology in Advertising Production Design

First Quarter		
Courses		Credits
AGRA 3005	Introduction to Communication	3
ESPA 3101	Basic Spanish I	3
INGL 3101	Basic English I	3
MATE 3001	Introductory Mathematics I	3
PUCO 3025	Advertising Principles	3
		Credits 15
Second Quarter		
Courses		Credits
ARTE 3115	Art Appreciation	2
ESPA 3102	Basic Spanish II	3
ESTA 3001	Commercial Statistics I	3
INGL 3102	Basic English II	3
PUCO 4005	Introduction to the Study of Cultural Industries	3
		Credits 14
Third Quarter		
Courses		Credits
ESCO 3005	Compendium of Oral and Written Business Communication	3
HUMA 3111	Compendium of Western Culture I and II	3
ENGLISH 3116	Compendium of Commercial Communication	3
MERC 3115	Marketing Principles	3
PUCO 3045	Introduction to Computer Design	3
		Credits 15
Fourth Quarter		
Courses		Credits
CISO 3121	Social Sciences I	3
HUMA 3112	Compendium of Western Culture III and IV	3
PUCO 3046	Copywriting	3
PUCO 4086	Advertising Photography	3
XXXX	Free Elective	3
		Credits 15
Fifth Quarter		
Courses		Credits
CISO 3122	Social Sciences II	3
PUCO 4116	Editorial and Corporate Photography	3
PUCO 4305	Supervised Practice PUCO I	3
XXXX	Free Elective	3
		Credits 12

Sixth Quarter		
Courses		Credits
ARTE 3116	History of Art	3
ESIN 4077	Scientific Research in the Media	3
HIST 3245	Compendium of Puerto Rico History	3
PSIC 3006	Social Psychology	3
PUCO 4071	Advertising Radio Production	3
		Credits 15
Seventh Quarter		
Courses		Credits
ARTE 3165	Puerto Rican/Caribbean Visual Arts Trajectory	3
COPU 4365	Media Legislation and Information Deontology	3
PUCO 4007	Small and Medium Business Administration	3
PUCO 4089	Advanced Radio Advertising Production Techniques	3
XXXX	Free Elective	3
		Credits 15
Eighth Quarter		
Courses		Credits
AGRA 4335	Contemporary Art	3
CIBI 3001	Fundamentals of Biology I	3
PUCO 4072	Television Advertising Production	3
PUCO 4111	PUCO Research Methods I	3
PUCO 4115	Illustrative Advertising Photography	3
		Credits 15
Ninth Quarter		
Courses		Credits
PUCO 4079	Advanced Techniques of Advertising Television Production	3
PUCO 4112	PUCO Research Methods II	3
PUCO 4306	Supervised Practice PUCO II	3
XXXX	Free Elective	3
		Credits 12
		Total 128 credits

Curriculum Sequence – Bachelor in Interior Design

First Quarter		
Courses		Credits
DESI 3005	Fundamentals and Theory of Design	3
DINT 3005	Technical Drawing	3
ESPA 3101	Basic Spanish I	3
INGL 3101 or 3103	Basic English I or Intermediate English I	3
SICI 3017	Introduction to Electronic Data Processing	3
		Credits 15
Second Quarter		
Courses		Credits
DINT 3105	Fundamentals of Green Design	3
DINT 3101	Design Complements I	3
ESPA 3102	Basic Spanish II	3
INGL 3102 or 3104	Basic English II or Intermediate English II	3
	Mathematics Course*.	3
		Credits 15
Third Quarter		
Courses		Credits
DINT 3111	Green Interior Design I	3
DINT 3115	Certification for buildings, codes and regulations	3
DINT 3102	Design Complements II	3
HUMA 3111	Compendium of Western Culture I and II	3
	Science Course*.	3
		Credits 15
Fourth Quarter		
Courses		Credits
DINT 3112	Green Interior Design II	3
DINT 3121	History of Art I	3
DINT 3125	Digital Technical Design	3
HUMA 3112	Compendium of Western Culture III and IV	3
	Science Course*.	3
		Credits 15
Fifth Quarter		
Courses		Credits
DINT 3135	Interior Design Technology	3
DINT 3131	Design Styles I	3
DINT 3122	History of Art II	3
ESPA 3015	Grammar and Composition	3
INGL 3116	Compendium of Commercial Communication	3
		Credits 15

Sixth Quarter		
Courses		Credits
DINT 3132	Design Styles II	3
DINT 4113	Green Interior Design III	3
HIST 3245	Compendium History of Puerto Rico	3
PUCO 4007	Small and Medium Business Administration	3
SOCI 3245	Principles of Sociology	3
		Credits 15
Seventh Quarter		
Courses		Credits
DINT 4114	Green Interior Design IV	3
DINT 4005	Furniture Design	3
EDFI 3675	Life, Health and Wellness	3
MERC 3115	Marketing Principles	3
	Free elective	3
		Credits 15
Eighth Quarter		
Courses		Credits
DINT 4105	Landscape Design	3
DINT 4115	Design Portfolio	2
DINT 4131	Research Methods in Interior Design I	3
REHU 4416	Business Ethics	3
	Free elective	3
		Credits 14
Ninth Quarter		
Courses		Credits
DINT 4135	Interior Design Supervised Practice	3
DINT 4132	Research Methods in Interior Design II	4
	Free Elective	3
	Free Elective	3
		Credits 13
		Total 132 credits

Associate degree available in Interior Design through the Extended University (UnEx), attached to DECEP.

* Students may select from the following courses to complete the General Education requirement in Mathematics and Science: CIFI3001: Introduction to Physical Science I or CIBI3001: Fundamentals of Biology I, CIFI3002: Introduction to Physical Science II or CIBI3002: Fundamentals of Biology II, MATE3001: Introductory Mathematics I or MATE3171: Pre-Calculus I.

Curriculum Sequence – Associate Degree Interior Design through DECEP

First Quarter		
Courses		Credits
DINT 1001	Interior Design I	3
DINT 1005	Interior Decoration I	3
ENGL 3101	Basic English I	3
PUCO 3035	Fundamentals of Drawing	3
		Credits 12
Second Quarter		
Courses		Credits
DINT 1002	Interior Design II	3
DINT 1006	Decoration Complements	3
DINT 1007	Decoration Styles I	3
INGL 3102	Basic English II	3
		Credits 12
Third Quarter		
Courses		Credits
DINT 2001	Interior Design III	3
DINT 2005	Decoration Styles II	3
DINT 2006	Decoration Complements II	3
DINT 2015	CAD Technical Design	3
		Credits 12
Fourth Quarter		
Courses		Credits
ESPA 3101	Basic Spanish I	3
DINT 2016	Digital Representation Techniques for Interior Design	3
DINT 2011	History of Art I	3
PUCO 3045	Introduction to Computer Design	3
		Credits 12
Fifth Quarter		
Courses		Credits
PUCO 4007	Small Business Administration	3
DINT 2007	Exterior Design and Landscaping	2
ARTE 3157	Compendium of Visual Arts	3
DINT 2008	Commercial Decoration	2
ESPA 3102	Basic Spanish II	3
		Credits 13
Sixth Quarter		
Courses		Credits
DINT 2002	Interior Design IV	3
DINT 2009	Decoration Practice	3
DINT 2012	History of Art II	3
ARTE 3165	Trajectory Visual Arts, Caribbean and Latin America	3
		Credits 12
		Total 73 credits

Education Department

educacion.carolina@upr.edu | Ext. 3313

The Bachelor of Arts in Secondary Education with concentration in Technology Education (formerly Industrial Arts) and in Occupational Education (formerly Vocational Education) are oriented to prepare teachers capable of organizing, administering, and teaching technology and occupational education programs in public and private secondary schools, as well as in technological institutes. As the only programs of the university system in the country that serve these specialties, students and teachers are received from all over the island with the purpose of pursuing a bachelor's degree, an additional specialty, or completing the teacher certification requirements established by the Puerto Rico Department of Education. Those interested in obtaining the PRDE Teacher Certification must have a minimum GPA of 2.50 and pass the Teacher Certification Exam (PCMAS).

UPRCA's Department of Education prepares teachers capable of organizing, administering and teaching Occupational Technical Education programs in public and private secondary schools and technological institutes. The program offers educational and occupational experiences to meet the growing demand for personnel with the skills and competencies necessary to acquire and maintain employment in the field of technology.

Secondary Education Concentration in Technology Education

The Technology Education program of the UPRCA Department of Education prepares teachers capable of organizing, administering, and teaching Technology Education programs in secondary schools. It offers educational and occupational experiences to meet the growing demand for personnel with these skills.

Secondary Education Concentration in Occupational Education

Consists of a baccalaureate degree in Occupational and Industrial Education. The curricular offerings meet the university degree and Puerto Rico's teacher certification requirements. The technical component is accredited to candidates who have studied a trade in an occupational school or technological institute. The trades regulated by the Department of State require the candidate to have a current license to practice and evidence of having worked full-time for two years. Candidates who have not obtained occupational experience enroll in a supervised occupational internship in industry during the semester.

Interested students may apply to the Department of Education as educators in Occupational Education or Technology.

Graduates of the program will acquire extensive theoretical and practical knowledge in the field of Occupational and Technology Education.

Graduates of the program may be employed with the Department of Education in the public or private system.



Education - Articulated Transfer Program

The Articulated Transfer program to the UPR-Bayamón, trains students to adapt physical education to the needs, abilities and interests of each child or youth with or without special needs through practical, clinical, and theoretical experiences. Students in the program develop expertise in physical education and psychomotor skills for people with special needs (0-21 years old) and children at the elementary and school level.

Program graduates qualify for the certifications offered by the Puerto Rico Department of Education (PRDE): Adapted Physical Education and Elementary Physical Education. Those interested in obtaining the PRDE Teacher Certification must have a minimum GPA (Grade Point Average) of 2.50 and pass the Teacher Certification Exam (PCMAS).

Articulated transfer to the University of Puerto Rico at Bayamón

- [Bachelor's Degree in Elementary and Special Physical Education](#)

Curriculum Sequence – Bachelor in Occupational Education

First Quarter		
Courses		Credits
ESPA 3101	Basic Spanish I	3
INGL 3101	Basic English I	3
EDFU 3001	Human Growth and Development I	3
HUMA 3101	Introduction to Western Culture I	3
EDFU 3007	Social Foundations of Education	3
		Credits 15
Second Quarter		
Courses		Credits
ESPA 3102	Basic Spanish II	3
INGL 3102	Basic English II	3
EDFU 3002	Human Growth and Development II	3
HUMA 3102	Introduction to Western Culture II	3
EDIN 3005	Basic Foundations of Occupational Education	3
		Credits 15
Third Quarter		
Courses		Credits
ESPA 4221	Introduction to Spanish American Literature I	3
CISO 3121	Introduction to Social Sciences I	3
CIBI 3001	Fundamentals of Biology I	3
EDIN 3006	Special Methods in Trades and Tasks Analysis	3
HIST 3115	United States History	3
		Credits 15
Fourth Quarter		
Courses		Credits
CISO 3122	Introduction to Social Sciences II	3
EDIN 3020	Introduction to the Study of Technology	3
MATE 3041	Introduction to Mathematics I	3
CIFI 3001	Introduction to Physical Sciences I	3
	Free Elective 1	3
		Credits 15
Fifth Quarter		
Courses		Credits
HIST 3241	History of Puerto Rico I	3
*EDIN 3105	Occupational Internship	6
EDFU 4019	Philosophical Foundations of Education	3
EDIN 4029	Workshop Organization and Administration	3
		Credits 15

Sixth Quarter		
Courses		Credits
EDIN 4006	Labor Relations	3
EDPE 4255	Language Arts in the Curricular Areas of the Secondary Level.	3
EDIN 3107	Occupational Curriculum Development	3
	Free Elective 2	3
EDIN 3025	Introduction to Occupational Technology	3
		Credits 15
Seventh Quarter		
Courses		Credits
EDFU 4007	Research Principles	3
EDIN 4106	Training Design and Evaluation	3
EDIN 4035	Industrial Safety and Occupational Health	3
EDES 4006	Nature and Needs of Exceptional Learners	3
TEED 4018	Introduction to Computers in Education	3
		Credits 15
Eighth Quarter		
Courses		Credits
EDPE 4205	Theory and Methodology of Occupational Education Teaching in Secondary Schools	3
ARTE 3276	Art Appreciation	3
EDFU 3017	Learning Assessment	3
EDIN 4065	Curriculum and Methodology for Teaching Occupational Education to Exceptional Adolescents	3
	Free Elective 3	3
		Credits 15
Ninth Quarter		
Courses		Credits
*EDPE 4206	Teaching Practice	6
	Free Elective 4	3
		Credits 9
		Total 129 credits

*The student must have an occupation that is in accordance with the Puerto Rico Department of Education's Teaching Personnel Regulation No. 8146. Please request advice from the director of the Department of Education of the UPR-Carolina.

Curriculum Sequence – Bachelor in Technology Education

First Quarter		
Courses		Credits
ESPA 3101	Basic Spanish I	3
INGL 3101	Basic English I	3
HUMA 3101	Introduction to Western Culture I	3
EDFU 3001	Human Growth and Development I	3
EDFU 3007	Social Foundations of Education	3
		Credits 15
Second Quarter		
Courses		Credits
ESPA 3102	Basic Spanish II	3
INGL 3102	Basic English II	3
HUMA 3102	Introduction to Western Culture II	3
EDFU 3002	Human Growth and Development II	3
EDIN 3015	Technical Drawing	3
		Credits 15
Third Quarter		
Courses		Credits
ESPA 4221	Introduction to Spanish American Literature I	3
CISO 3121	Introduction to Social Sciences I	3
CIBI 3001	Fundamentals of Biology I	3
EDIN 3020	Introduction to the Study of Technology	3
EDFU 3017	Learning Assessment	3
		Credits 15
Fourth Quarter		
Courses		Credits
CISO 3122	Introduction to Social Sciences II	3
MATE 3041	Introduction to Mathematics I	3
CIFI 3001	Introduction to Physical Sciences I	3
EDFU 4007	Research Principles	3
XXXX XXXX	Elective Course 1	3
		Credits 15
Fifth Quarter		
Courses		Credits
HIST 3241	History of Puerto Rico I	3
EDIN 4019	Construction Technology	3
EDFU 4019	Philosophical Foundations of Education	3
ARTE 3276	Art Appreciation	3
EDIN 3106	Technological Innovations	3
		Credits 15

Sixth Quarter		
Courses		Credits
EDIN 4025	Introduction to Electronics	3
EDIN 4045	Art and Design Applied to Technologies	3
EDPE 4255	Language Arts in the Curricular Areas of the Secondary Level.	3
EDIN 4030	Industrial Materials Technology	3
XXXX XXXX	Elective Course 2	3
		Credits 15
Seventh Quarter		
Courses		Credits
EDIN 4028	Manufacturing Technology	3
EDIN 4049	Graphic Communication Technology	3
TEED 4018	Introduction to Computers in Education	3
HIST 3115	United States History	3
EDES 4006	Nature and Needs of Exceptional Learners	3
		Credits 15
Eighth Quarter		
Courses		Credits
EDIN 4059	Force Technology	3
EDIN 4085	Curriculum and Methodology for Teaching Technology to Exceptional Adolescents	3
EDIN 4105	Transportation Systems Technology	3
EDPE 4195	Methodology of the Teaching of Technologies in Secondary Schools	3
	Elective Course 3	3
		Credits 15
Ninth Quarter		
Courses		Credits
EDPE 4196	Teaching Practice	6
XXXX XXXX	Elective Course 4	3
		Credits 9
		Total 129 credits

Humanities Department

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culturaturistica.carolina@upr.edu

The Bachelor's Degree in Multidisciplinary Studies with a concentration in Tourism Culture, attached to the Humanities Department, is a multidisciplinary program focused on the tourism industry, one of the most important and fastest growing economic sectors in the world. Its success depends largely on the quality of academic training, professionalism, commitment of human resources and the service they provide.

This academic program is designed to provide students with the professional competencies, skills and attitudes essential to perform effectively in the main branches of the specialty such as: tour guides, tour programmer, incoming tourism agencies, tourist information centers, Tourist Offices, Museums, Parks (historical or natural) and Concierge, and others.

The multidisciplinary nature of the program provides students with academic preparation in the areas of cultural tourism, humanities and history, among others. Our graduates have been our best letter of introduction for more than 20 years, successfully representing us nationally and internationally.

The degree consists of 129 credits distributed in nine quarter-terms; students enrolled in the program can complete their degree in three years.

In turn, our Department provides service to students of the different academic programs of our institution by providing the academic offerings of general education requirements and others. Our academic offerings include required courses in Western Culture, History, Art, Theater, Music and Languages.

Certificate in Visual Arts with an Entrepreneurial Perspective

The Certificate in Visual Arts with an Entrepreneurial Perspective is a non-credit certificate offered through DECEP. It is aimed at artists, visual arts amateurs and professionals who wish to become entrepreneurs in the visual arts labor market. They will have the necessary knowledge to coordinate and manage their own exhibition spaces or in collaboration with galleries and/or museums. This certificate is composed of seven modules:

- Fundamentals of Visual Arts I
- Drawing I
- Painting Processes I
- Sculpture Processes I
- Photography and Video: body, action and space
- Design and Self-management of Artistic Projects
- Creative Research Workshop



Curriculum Sequence - Multidisciplinary Studies concentration in Tourist Culture

First Quarter		
Courses		Credits
HUMA 3101	Introduction to Western Culture I	3
INGL 3101	Basic English I	3
ESPA 3101	Basic Spanish I	3
ARTE 3116	History of Art (Compendium)	3
TURI 3005	History, Present and Future of Tourism	3
		Credits 15
Second Quarter		
Courses		Credits
HUMA 3102	Introduction to Western Culture II	3
INGL 3102	Basic English II	3
ESPA 3102	Basic Spanish II	3
TURI 3109	Tourist and Cultural Geography of the Caribbean	3
INTD 3001	Interdisciplinary Seminar I	1
		Credits 13
Third Quarter		
Courses		Credits
CISO 3121	Social Sciences I	3
EDFI 3675	Life, Health and Wellness	3
HIST 3241	History of Puerto Rico I	3
HIST 3505	Contemporary Caribbean History	3
ESGE 3007	Problems of Human Ecology	3
		Credits 15
Fourth Quarter		
Courses		Credits
CIBI 3001	Fundamentals of Biology I	3
HIST 3242	History of Puerto Rico II	3
ENGLISH 3116	Commercial Communication (Compendium)	3
HUMA 3055	Professional Ethics	3
CISO 3122	Social Sciences II	3
		Credits 15
Fifth Quarter		
Courses		Credits
TURI 3105	Introduction to Ecotourism in PR and the Caribbean	4
MATE 3001	Introductory Mathematics	3
FRAN 3201	Functional French I	3
CIBI 3002	Fundamentals of Biology II	3
INTD 3002	Interdisciplinary Seminar II	1
		Credits 14

Sixth Quarter		
Courses		Credits
ENGLISH 3031	Conversational English First Level I	3
ADHO 3105	Hotel and Restaurant Management	3
TURI 3006	Tourist Geography of Puerto Rico	3
FRAN 3202	Functional French II	3
	Free Elective	3
		Credits 15
Seventh Quarter		
Courses		Credits
INGL 3032	Conversational English First Level II	3
ESPA 4233	Contemporary Puerto Rican Literature	3
TURI 3007	Monuments and Historic Sites of the Tourist Areas of PR and the Caribbean	3
MERC 3115	Marketing Principles	3
ARTE 3165	Trajectory of the Visual Arts in PR, the Caribbean and Latin America	3
		Credits 15
Eighth Quarter		
Courses		Credits
TURI 3107	Tour Guide Development	3
ESCO 3205	Oral Communication in Spanish with a Sense of Universal Expression	3
PUCO 4007	Small and Medium Business Theory and Management	3
MUSI 3155	Music Trajectory of PR, Latin America and the Caribbean	3
	Free Elective	3
		Credits 15
Ninth Quarter		
Courses		Credits
REHU 4409	Human Relations	3
TURI 3200	Internship and Seminar	0
HIST 3115	United States History (Compendium)	3
	Free Elective	3
	Free Elective	3
		Credits 12
		Total 129 credits

Criminal Justice Department

Extension 3309 | 3211

The Department of Criminal Justice, in keeping with its interest and mission to serve the Puerto Rican community from an academic and educational perspective, has developed a curriculum leading to a Bachelor of Arts degree in Criminal Justice with a concentration in Forensic Psychology and Law and Society. This Program offers a modern interdisciplinary curriculum consisting of 127 credits. It is characterized by theoretical and methodological training in the field of Criminal Justice within a humanistic approach. The program is offered in two modalities: distance or face-to-face. Students have the option of combining both modalities. Graduates of the program can be employed in any of the basic components of the criminal justice system, namely: courts of justice, correctional institutions, juvenile institutions, Puerto Rico Police, Parole Board, community correctional programs, private rehabilitation programs, and service programs. They may also serve as liaisons between components of the system and the full range of agencies and services related to the criminal justice system, both public and private.



Curriculum Sequence - Bachelor of Social Science in Criminal Justice with a concentration in Law and Society

First Quarter		
Courses		Credits
CISO 3121	Introduction to Social Sciences I	3
HUMA 3101	Introduction to Western Culture I	3
ESPA 3015	Grammar and Composition I	3
INGL 3101	Basic English I	3
		Credits 12
Second Quarter		
Courses		Credits
CISO 3122	Introduction to Social Sciences II	3
HUMA 3102	Introduction to Western Culture II	3
ESPA 3331	Critical Thinking and Argumentative Writing	3
INGL 3102	Basic English II	3
		Credits 12
Third Quarter		
Courses		Credits
SOCI 3245	Principles of Sociology	3
PSIC 3003	Introduction to Psychology	4
JUST 3005	Introduction to the Criminal Justice System	3
ESPA 3332	Critical Thinking and Argumentative Writing	3
		Credits 13
Fourth Quarter		
Courses		Credits
JUST 3015	Introduction to Police Science	3
JUST 3016	Civil Rights	3
MATE 3001	Introductory Mathematics	3
CIBI 3001 or CIFI 3001	Biological Sciences I or Physical Sciences I	3
		Credits 12
Fifth Quarter		
Courses		Credits
JUST 3017	Introduction to the Correction System	3
CISO 3155	Statistical Reasoning Foundation	3
SOCI 3005	Criminology	3
CIBI 3002 or CIFI 3002	Biological Sciences II or Physical Sciences II	3
		Credits 12
Sixth Quarter		
Courses		Credits
LESO 3205	Criminal Law	3
SOCI 3265	Social Research Techniques	3
SICI 4010	Computer Statistical Analysis Application	3
XXXX	Language Elective	3
		Credits 12

Seventh Quarter		
Courses		Credits
LESO 3207	Criminal Procedure	3
CISO 3225	Social Morality	3
LESO 3208	Evidence	3
XXXX	Arts and Humanities Elective	3
		Credits 12
Eighth Quarter		
Courses		Credits
CISO 3227	Drug Use and Abuse Seminar	3
LESO 4001	Criminal Investigation I	3
PSIC 4061	Interview and Interrogation	3
JUVE 4005	Juvenile Justice	3
		Credits 12
Ninth Quarter		
Courses		Credits
JUST 3255	Victimology	3
LESO 4002	Criminal Investigation II	3
PSIC 4062	Crisis Intervention	3
XXXX	Directed Elective	3
		Credits 12
Tenth Quarter		
Courses		Credits
SOCI 3285	Group Dynamics	3
XXXX	Free Elective	3
XXXX	Free Elective	3
XXXX	Free Elective	3
		Credits 12
Eleventh Quarter		
Courses		Credits
JUST 4905	Criminal Justice Practice	3
XXXX	Free Elective	3
		Credits 6
		Total 127 credits

Curriculum Sequence - Bachelor of Social Science in Criminal Justice with a concentration Forensic Psychology

First Quarter		
Courses		Credits
CISO 3121	Introduction to Social Sciences I	3
HUMA 3101	Introduction to Western Culture I	3
ESPA 3015	Grammar and Composition I	3
INGL 3101	Basic English I	3
		Credits 12
Second Quarter		
Courses		Credits
CISO 3122	Introduction to Social Sciences II	3
HUMA 3102	Introduction to Western Culture II	3
ESPA 3331	Critical Thinking and Argumentative Writing	3
INGL 3102	Basic English II	3
		Credits 12
Third Quarter		
Courses		Credits
SOCI 3245	Principles of Sociology	3
PSIC 3003	Introduction to Psychology	4
JUST 3005	Introduction to the Criminal Justice System	3
ESPA 3332	Critical Thinking and Argumentative Writing	3
		Credits 13
Fourth Quarter		
Courses		Credits
PSIC 3015	Theories of Personality	3
JUST 3015	Introduction to Police Science	3
SOCI 3005	Criminology	3
JUST 3016	Civil Rights	3
		Credits 12
Fifth Quarter		
Courses		Credits
PSIC 3016	Psychopathology	3
MATE 3001	Introductory Mathematics	3
LESO 3205	Criminal Law	3
CIBI 3001 or CIFI 3001	Biological Sciences I or Physical Sciences I	3
		Credits 12
Sixth Quarter		
Courses		Credits
PSIC 3206	Psychology and Law	3
JUST 3017	Introduction to the Correction System	3
CISO 3155	Fundamentals of Statistical Reasoning	3
CIBI 3002 or CIFI 3002	Biological Sciences II or Physical Sciences II	3
		Credits 12

Seventh Quarter		
Courses		Credits
CISO 3227	Drug Use and Abuse Seminar	3
PSIC 3205	Introduction to Forensic Psychology	3
PSIC 4061	Interview and Interrogation	3
PSIC 4001	Research Methods in Psychology I	3
		Credits 12
Eighth Quarter		
Courses		Credits
PSIC 4062	Crisis Intervention	3
PSIC 4002	Research Methods in Psychology II	3
SICI 4010	Computer Statistical Analysis Application	3
XXXX	Language Elective	3
		Credits 12
Ninth Quarter		
Courses		Credits
PSIC 4155	Behavioral Analysis	3
CISO 3225	Social Morality	3
XXXX	Arts and Humanities Directed Elective	3
XXXX	Directed Elective	3
		Credits 12
Tenth Quarter		
Courses		Credits
JUST 3255	Victimology	3
XXXX	Directed Elective	3
XXXX	Directed Elective	3
XXXX	Directed Elective	3
		Credits 12
Eleventh Quarter		
Courses		Credits
JUST 4905	Criminal Justice Practice	3
XXXX	Directed Elective	3
		Credits 6
		Total 127 credits

Office Systems

The bachelor's degree in office systems focuses on preparing a professional according to the needs demanded by the society of the XXI Century. It provides students with skills, technological and administrative knowledge; it also develops essential ethical attitudes to be able to perform effectively as a professional in different occupational scenarios. To provide all these skills, knowledge and attitudes, the program offers courses in different modalities: classroom, hybrid and distance. The curriculum is revised according to business needs and the new modalities and changes in labor scenarios.

Graduates of the Office Systems Program work in a variety of public and private settings in areas such as: education, legal, banking, finance, insurance, health, and in the different branches of state and federal government.

The Bachelor of Science in Office Systems has served as a foundation for our graduates to pursue other career goals and pursue graduate studies in the areas of education, legal, health, human resources, among others.



Curriculum Sequence - Office Systems

First Quarter		
Courses		Credits
INGL 3101 or INGL 3103	Basic English I* Intermediate English I*	3
ESPA 3101	Basic Spanish I	3
HUMA 3111	Compendium of Western Culture I and II	3
SOFI 3004	Introduction to Document Processing and Design	3
SOFI 3017	Interpersonal Relationships	3
		Credits 15
Second Quarter		
Courses		Credits
INGL 3102 or INGL 3104	Basic English II * Intermediate English II*	3
ESPA 3102	Basic Spanish II	3
HUMA 3112	Compendium of Western Culture III and IV	3
SOFI 3115	Note-taking Techniques with Abbreviations and Signs	3
SOFI 3121	Commercial Document Processing and Design I	3
		Credits 15
Third Quarter		
Courses		Credits
INCO 3005	Commercial Communication I (English)	3
COEM 3001	Business Communication	3
HIST 3245	History of Puerto Rico	3
SOFI 3116	Transcribe Commercial Documents	4
SOFI 3122	Commercial Document Processing and Design II	3
		Credits 16
Fourth Quarter		
Courses		Credits
INCO 3006	Commercial Communication II (English)	3
COEM 3006	Seminar on Spanish Writing and Analysis of Business Documents	3
SOFI 3355	Administrative Office Procedures	3
SOFI 3240**	Information Processing Spreadsheets and Charts	3
SOFI 3357	Elementary Accounting Procedures	3
		Credits 15
Fifth Quarter		
Courses		Credits
CISO 3121	Introduction Social Sciences I	3
CIBI 3001/ CIFI 3001	Biological Sciences or Physical Sciences	3
SOFI 4005	Electronic Information Processing Software Integration	4
SOFI 3230**	Document and Database Management	4
		Credits 14

Sixth Quarter		
Courses		Credits
CISO 3122	Introduction Social Sciences II	3
CIBI 3002/ CIFI 3002	Biological Sciences or Physical Sciences	3
SOFI 4030	Publication Design	3
SOFI 4038	Office Administration	3
SOFI XXXX	SOFI I Directed Elective (or Medical Billing Emphasis Course)	3
		Credits 15
Seventh Quarter		
Courses		Credits
SOFI 3505	Ethics and Professional Development	3
SOFI 4037	Advanced Document Production	4
SOFI XXXX	SOFI II Directed Elective (or Medical Billing Emphasis Course)	3
MATE 3001	Introductory Mathematics I	3
XXXX XXXX	Free Elective I (or Medical Billing Emphasis course)	3
		Credits 16
Eighth Quarter		
Courses		Credits
SOFI 4505	In-Service Training Techniques	3
SOFI XXXX	SOFI II Directed Elective (or Medical Billing Emphasis Course)	3
ADMI 3676	Fundamentals of Finance, Economics and Marketing	3
INCO 4015	Advanced Conversational English	3
XXXX XXXX	Free Elective II	3
		Credits 15
Ninth Quarter		
Courses		Credits
SOFI 4985	Internship and Seminar	5
XXXX XXXX	Free Elective III	3
XXXX XXXX	Free Elective IV	3
		Credits 11
		Total 132 credits
SOFI Directed Electives		
SOFI 3007	Personal Use Keyboard Operation	3
SOFI 3416	Coding of Diagnoses and Procedures	3
SOFI 3417	Manual and Electronic Medical with Audit Procedures	3
SOFI 3415	Principles of Medical Terminology	3
SOFI 3245**	Word Processing with Microsoft Word®.	3
SOFI 3250**	Effective Presentations with Microsoft Power Point®	3
SOFI 3419	Administrative Procedures in the Medical Office	3
SOFI 4036	Legal Office Procedures	4
SOFI 4305	Evaluation and Selection of Programs and Equipment	3
SOFI 4999	Undergraduate Research	4
* The student will be placed according to the results obtained on the PAA (College Board) achievement test.		
**Recommended courses for those interested in taking Microsoft® MOS Certification		

Engineering Technology Department

Extension 4963

One bachelor's degree in Mechatronics Engineering Technology and three associate degrees are offered: Instrumentation and Control Systems Engineering Technology, Mechanical Engineering Technology and Automotive Technology.

Mechatronics Engineering Technology is a multidisciplinary field of study that takes a hands-on approach covering the most applicable topics in electrical, mechanical, software and computer engineering to prepare a student for technical jobs.

A mechatronics engineering technologist uses a combination of mechanical, electrical, computer and software skills to work with: intelligent technologies, such as robots, automated guided systems and computer-integrated manufacturing equipment. Technologist can:

- Assist in the design of robotic and intelligent equipment.
- Integrate electrical, mechanical, hydraulic/pneumatic, control and computerized systems to improve manufacturing and/or shipping and handling processes.
- Test and install new equipment.
- Program equipment or systems to automate a process.

This is a unique program in the UPR System and can be completed in 10 semesters, equivalent to 3 years and 3 months (124 hours/credits). Its curriculum focuses on Industry 4.0 - advanced manufacturing, the general education courses (ESPA, INGL, HUMA) are offered in the online or face-to-face educational modality. 60% of the concentration courses entail practice lab and the capstone course, allows a deeper approach of the student with industry, research, entrepreneurship or academic practice.



The **Instrumentation and Control Systems Engineering Technology** program is based on a general review of education as a fundamental element of our society. The knowledge that our students will acquire will contribute to the economic development of the country, since we aspire to prepare personnel that will respond to the demands of an increasingly automated industry, from a humanistic perspective. This program provides competent technologists in the field of industrial automation and with a solid technical education in programmable logic controllers (PLC) to achieve success in both local and international industry.

Upon completion of your studies, you can work in one of the following areas:

- Own business in control systems programming
- Instrumentation technician
- Calibration technician

The **Mechanical Engineering Technology (TIME)** program has been designed with the main objective of training students to fully understand the operation and repair of equipment, machinery and accessories used in modern industry. They are also trained to recognize and diagnose difficulties that affect the proper functioning and productivity of the industry, as well as to make decisions on how to solve the problems. Students selected for the program are considered based on academic index, tests, aptitudes and preferences.

One of the most important particularities of the Mechanical Engineering Technology program is that it is not specifically oriented to any industry. Rather, the program covers those elements or aspects that are common denominators in most industries. This represents a great advantage for our graduates, as they can choose to work in a wider variety of industries or companies than those who complete very specialized programs.

The graduate of the program can be employed in any industry in the maintenance area. In this phase, he assigns, directs and supervises the work of mechanics and their assistants, orders the repairs he deems necessary, performs those requiring greater expertise, makes requisitions for new parts, informs his supervisor about equipment replacement needs and reports on the work performed by the employees under his charge. He may also work as an industrial equipment salesman.

The **Automotive Technology** Program has been at the forefront of technological advances and has been introducing those elements into current offerings to prepare students for the demands of the modern shop. Its curriculum includes courses that describe modern automotive developments, a hands-on experience in a real work environment, and the management of a service shop. Some elements of self-employment are also incorporated to encourage the establishment of private businesses offering automotive repair and maintenance services. Upon completion of your studies, you can work in the following areas:

- Own business in automotive mechanic workshops
- Repair and sale of auto parts
- Automotive appraiser
- Service technician

Curriculum Sequence - Mechatronics Engineering Technology

First Quater-term		
Courses		Credits
MATE 3171	Precalculus I***	3
INGL 3101 or INGL 3103	Basic English I or Intermediate English I*	3
MECA 31X1	Introduction to Mechatronics Engineering Technology	3
MECA 31X2	Computer Aided Design	3
		Credits 12
Second Quater-term		
Courses		Credits
MATE 3172	Precalculus II***	3
INGL 3102 or INGL 3104	Basic English II or Intermediate English II *	1
ESPA 3101	Basic Spanish I**	3
MECA 31X3	Basic Electricity and Electronics	1
MECA 31X4	Basic Electricity and Electronics Laboratory	3
		Credits 13
Third Quater-term		
Courses		Credits
MATE 3031	Calculus I	4
FISI 3011	University Physics I	3
FISI 3013	University Physics Laboratory I	1
MECA 32X1	Industrial Electricity and Electric Motors	3
MECA 32X2	Industrial Electricity and Electric Motors Laboratory	1
MECA 31X5	Blueprint Reading and Electrical Diagrams	3
		Credits 15
Fourth Quater-term		
Courses		Credits
MECA 33x3	Statistical Methods and Quality Control	3
MECA 32X3	Object Oriented Programming	3
MECA 32X4	Statics and Dynamics	3
ESPA 3102	Basic Spanish II**	3
		Credits 12
Fifth Quater-term		
Courses		Credits
MECA 32X5	Digital Circuits	3
MECA 32X6	Data Bases	3
MECA 32X7	Mechanical Systems	3
XXXX	Free Elective	3
		Credits 12

Sixth Quater-term		
Courses		Credits
MECA 32X8	Hydraulic and Pneumatic Technology	3
MECA 32X9	Hydraulic and Pneumatic Technology Laboratory	1
MECA 32X0	Fundamentals of Instrumentation and Controls	3
MECA 32Y1	Fundamentals of Instrumentation and Controls Laboratory	1
MECA 32Y2	Introduction to Networks	3
XXXX	Free Elective	3
		Credits 14
Seventh Quater-term		
Courses		Credits
MECA 33X1	Programmable Controllers I	3
MECA 33X2	Industrial Robotics	3
SOCIOHUMA I		3
XXXX	Free Elective	3
		Credits 12
Eighth Quater-term		
Courses		Credits
MECA 34X1	Programmables Controllers II	3
MECA 34X2	Motion Control	3
MECA 34X3	Technologica Innovation Management	3
SOCIOHUMA II		3
XXXX	Free Elective	3
		Credits 15
Ninth Quater-term		
Courses		Credits
MECA 34X4	Manufacturing Process Planning	3
MECA 34X5	Automated Manufacturing Systems	1
MECA 34X6	Machine Vision Systems	3
MECA 34X7	Applied Economic Analysis	3
MECA 33X5	Occupational Health and Safety	3
		Credits 13
Tenth Quater-term		
Courses		Credits
MECA 34X8	Mechatronic Systems Maintenance	3
MECA 34X9	Capstone	3
		Credits 6
		Total 124 Credits
<p>* The student will be placed according to the results obtained in the PAA (College Board) test. ** The six (6) credits of English and/or Spanish may be validated by passing the advanced AP English and/or Spanish tests (College Board). *** The six (6) credits of pre-calculus may be validated by passing the advanced AP mathematics test (College Board). Courses coded with MECA are approved with a grade of C or better.</p>		

Curriculum Sequence - Technology in Instrumentation and Control Systems Engineering

First Quarter		
Courses		Credits
INGL 3101	Basic English I	3
MATE 1001	Technical Mathematics I	4
MAIN 2007	Basic Electricity	4
MAIN 2017	Lab. Basic Electricity	1
AUTI 1005	Introduction Automation	1
AUTI 1010	Control Circuit Design in AutoCad	3
		Credits 16
Second Quarter		
Courses		Credits
ESPA 3101	Basic Spanish I	3
INGL 3102	Basic English II	3
AUTI 2017	Industrial Economics	3
AUTI 2010	Applied Programming	3
MAIN 2025	Industrial Electricity	3
MAIN 2037	Industrial Electricity Laboratory	1
		Credits 16
Third Quarter		
Courses		Credits
ESPA 3102	Basic Spanish II	3
FISI 1001	Technical Physics I	3
FISI 1002	Technical Physics Laboratory I	1
AUTI 1012	Sensors and Actuators	3
AUTI 1015	Sensors and Machine Vision Laboratory	1
AUTI 1013	Wiring Programming PLC Troubleshooting	4
		Credits 15
Fourth Quarter		
Courses		Credits
AUTI 2023	Fundamentals of Digital Circuits	3
AUTI 2020	Industrial Substance Technology	3
AUTI 2005	PID Control P.W.D.	3
AUTI 2006	PLC Communication Programming	3
MAIN 2220	Robotics	3
ELECTIVE	Partner Huma Literature	3
		Credits 18
Fifth Quarter		
Courses		Credits
AUTI 2015	Computer System Validation	3
AUTI 2016	Analysis of an Industrial Automation Process	2
MAIN 2029	Industry Work Experience	3
		Credits 8
		Total 73 credits

Curriculum Sequence - Mechanical Engineering Technology

First Quarter		
Courses		Credits
INGL 3101	Basic English I	3
MATE 1001	Technical Mathematics I	4
ESPA 3101	Basic Spanish I	3
TECI 1005	Technical Drawing	3
MAIN 1005	Engineering Materials	3
		Credits 16
Second Quarter		
Courses		Credits
INGL 3102	Basic English II	3
FISI 1001	Technical Physics I	3
FISI 1002	Technical Physics Laboratory I	1
ESPA 3102	Basic Spanish II	3
MAIN 2005	Blueprint Reading	2
MAIN 2007	Basic Electricity	4
MAIN 2017	Basic Electricity Laboratory	1
		Credits 17
Third Quarter		
Courses		Credits
MAIN 2220	Robotics	3
TEME 2008	Hydraulics and Pneumatics	3
TEME 2026	Hydraulics and Pneumatics Laboratory	1
MAIN 2025	Industrial Electricity	3
MAIN 2037	Industrial Electricity Laboratory	1
MAIN 2015	Refrigeration and Air Conditioning	3
MAIN 2018	Refrigeration and Air Conditioning Laboratory	0
MAIN 2027	Machine Shop	2
		Credits 16
Fourth Quarter		
Courses		Credits
MAIN 2009	Instrumentation and Controls	3
MAIN 2019	Laboratory. Instrumentation and Controls	1
COEN 1005	Energy Audit Techniques I	3
MAIN 2016	Boilers and Auxiliaries	3
MAIN 2030	Welding Workshop	1
MAIN 2036	Programmable Controllers	3
MAIN 2020	Industrial Quality Control	2
MAIN 2021	Quality Control and Machine Vision Systems Laboratory	1
		Credits 17
Fifth Quarter		
Courses		Credits
MAIN 2029	Industry Work Experience	3
HUMA 3111	Compendium of Western Culture I and II	3
		Credits 6
		Total 72 credits

Curriculum Sequence - Automotive Technology

First Quarter		
Courses		Credits
INGL 3101	Basic English I	3
MATE 3041	Introduction to Mathematics	3
MAIN 2030	Practice in Welding	1
TEAU 2021	Basic Electricity and Electronics	4
TEAU 2022	Basic Electricity and Electronics Laboratory	1
TEAU 1000	Internal Combustion Engine Repair	4
		Credits 16
Second Quarter		
Courses		Credits
INGL 3102	Basic English II	3
TEAU 2026	Engine Performance I	3
TEAU 2005	Brake Systems and ABS	3
TEAU 2045	Automotive Management	3
FISI 1001	Technical Physics	9
FISI 1002	Technical Physics Laboratory	1
		Credits 16
Third Quarter		
Courses		Credits
ESPA 3101	Basic Spanish I	3
TEAU 2091	Automotive Technology Laboratory	4
MAIN 2027	Practice in Machinery	2
TEAU 2025	Diesel Engines	3
TEAU 2015	Suspension, Steering and Alignment System	3
		Credits 15
Fourth Quarter		
Courses		Credits
ESPA 3102	Basic Spanish II	3
TEAU 2009	Automobile Climate Control System	3
TEAU 2027	Engine Performance II	4
TEAU 2008	Manual, Automatic and Transaxle Transmissions	3
		Credits 13
Fifth Quarter		
	Socio-Humanistic Elective	3
	Elective	3
TEAU 2092	Supervised Internship in Automotive Technology	3
		Credits 9
		Total 69 credits

Spanish Department

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The Spanish Department aims to develop language skills such as: listening, speaking, reading and writing. Literature courses offer an approach to historical, literary and cultural periods to focus on critical and creative thinking. Knowledge in language and literature assists students in acquiring the necessary skills for the application of learned precepts, both in the academic and professional areas.

The Spanish Department serves as a center for academic offerings to the baccalaureate and associate degree programs. It aims to develop students in the areas of linguistics, both oral and written. As well as foster the ability to interpret literary works in the historical, social and cultural contexts in which they are produced, and aesthetic and humanistic values.

English Department

The English Department provides services to students registered in every baccalaureate and associate degree program. Courses include basic English, business, conversational, reading and composition. To be at the forefront of any discipline, it is essential to understand texts, guides, manuals and other documents that are written in the English language. Modern business communication requires a full command of English so that efficient global communication can be established with co-workers who use other languages as a vehicle of expression. In Puerto Rico, where Spanish is the prevailing language, a solid knowledge of English can be a determining factor in acquiring a higher paying job.

As a service department, our goal is to provide English courses for all students admitted to UPR Carolina. Specialized courses are also offered in the areas of conversational English, business English, composition, and reading and literature to meet the baccalaureate and associate degree requirements of academic programs.

General Education Program

General Education promotes the development of competencies and skills, attitudes, and concepts that all graduates must possess for their full development and to perform effectively and responsibly in a democratic society in a process of continuous change.

It is the component of the baccalaureate program common to all students that consists of a set of teaching, research and curricular activities in which students participate beyond their concentration.

General courses constitute approximately 25% to 30% of the total credits of baccalaureate programs, depending on the program of study. The curricular design of each program guarantees the achievement of the expected learning outcomes.

General Education Requirements by Bachelor's Degree Programs

Business Administration: Finance / Management

CODING	COURSE TITLE	CREDITS
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
INCO 3005	Commercial Communication I	3
INCO 3006	Commercial Communication II	3
ESCO 3001	Psychology of Communication I	3
ESCO 3002	Psychology of Communication II	3
CISO 3121	Intro. to Social Sciences I and/or	3
CISO 3122	Intro. to Social Sciences II	
HUMA 3101	Intro. to Western Culture I and/or	3
HUMA 3102	Intro. to Western Culture II	
ESPA 4233	Puerto Rican Literature	3
SICI 3211	Intro. to Information Systems	3
CIBI 3001	Fundamentals of Biology I and/or	3
CIFI 3001	Intro. to Physical Sciences I	
CIBI 3002	Fundamentals of Biology II and/or	3
CIFI 3002	Intro. to Physical Sciences II	
EDFI 3675	Life, Health and Wellness	3
Total:		45

Hotel and Restaurant Management

CODING	COURSE TITLE	CREDITS
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
ESPA 4233	Contemporary Puerto Rican Literature	3
ADEM 1005	Commercial Mathematics	3
EDFI 3675	Life, Health and Wellness	3
HUMA 3101	Intro. to Western Culture I	3
HUMA 3102	Intro. to Western Culture II	3
INTD 3001	Interdisciplinary Seminar I	1
INTD 3002	Interdisciplinary Seminar II	1
CIBI 3001	Fundamentals of Biology I	3
CIBI 3002	Fundamentals of Biology II	3
CISO 3121	Intro. to Social Sciences I	3
CISO 3122	Intro. to Social Sciences II	3
HIST 3245	Compendium History of PR	3
	Total:	44

Natural Sciences concentration in Forensic Sciences

CODING	COURSE TITLE	CREDITS
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
ENGLISH 3236	Writing Scientific Material	3
ESPA 3331	Critical Thinking and Argumentative Writing I	3
ESPA 3332	Critical Thinking and Argumentative Writing II	3
HUMA 3111	Compendium of Western Culture I and II	3
HUMA 3112	Compendium of Western Culture III and IV	3
CISO 3121	Introduction to Social Sciences I	3
CISO 3122	Introduction to Social Sciences II	3
HIST 3245	Compendium History of Puerto Rico	3
MATE 3018	Pre-Calculus and Analytic Geometry Preparatory Course	4
	Total:	34

Design: Graphic Arts / Commercial Advertising

CODING	COURSE TITLE	CREDITS
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
HUMA 3111	Compendium of Western Culture I and II	3
HUMA 3112	Compendium of Western Culture III and IV	3
HIST 3245	Compendium History of Puerto Rico	3
CISO 3121	Intro. to Social Sciences I	3
CISO 3122	Intro. to Social Sciences II	3
MATE 3001	Introductory Mathematics I	3
CIBI 3001	Fundamentals of Biology I	3
	Total:	33

Interior Design

CODING	COURSE TITLE	CREDITS
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
ESPA 3015	Grammar and Composition	3
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
ENGLISH 3116	Compendium of Commercial Communication	3
SICI 3017	Intro. to Electronic Data Processing	3
HUMA 3111	Compendium of Western Culture I and II	3
HUMA 3112	Compendium of Western Culture III and IV	3
HIST 3245	Compendium of Puerto Rico History	3
PUCO 4007	Small and Medium Business Management Theory	3
SOCI 3XXX	Sociology of Design	3
EDFI 3675	Life, Health and Wellness	3
MERC 3115	Marketing Principles	3
REHU 4416	Business Ethics	3
MATE 3001 or MATE 3171	Introductory Mathematics I or Pre- Calculus I	3
CIFI 3001 or CIBI 3001	Introduction to Physical Sciences I or Fundamentals of Biology I	3
CIFI 3002 or CIBI 3002	Introduction to Physical Sciences II or Fundamentals of Biology II	3
	Total:	54

Secondary Education: Occupational / Technological

CODING	COURSE TITLE	CREDITS
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
HUMA 3101	Intro. to Western Culture I	3
HUMA 3102	Intro. to Western Culture II	3
CISO 3121	Intro. to Social Sciences I	3
CISO 3122	Intro. to Social Sciences II	3
CIBI 3001	Fundamentals of Biology I	3
CIFI 3001	Intro. to Physical Sciences I	3
ESPA 4221	Intro. to Spanish American Literature I	3
MATE 3041	Mathematics	3
HIST 3115	U.S. History (Compendium)	3
HIST 3241	History of Puerto Rico I	3
ARTE 3276	Art Appreciation	3
	Total:	45

Multidisciplinary Studies with Concentration in Tourist Culture

CODING	COURSE TITLE	CREDITS
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
ESPA 4233	Contemporary Puerto Rican Literature	3
MATE 3001	Introductory Mathematics I	3
EDFI 3675	Life, Health and Wellness	3
HUMA 3101	Western Culture I	3
HUMA 3102	Western Culture II	3
INTD 3001	Interdisciplinary Seminar I	1
INTD 3002	Interdisciplinary Seminar II	1
CIBI 3001	Fundamentals of Biology I	3
CIBI 3002	Fundamentals of Biology II	3
CISO 3121	Intro. to Social Sciences I	3
CISO 3122	Intro. to Social Sciences II	3
HIST 3241	History of PR I	3
HIST 3242	History of PR II	3
HUMA 3055	Professional Ethics	3
	Total:	50

Criminal Justice: Forensic Psychology / Law and Society

CODING	COURSE TITLE	CREDITS
CISO 3121	Intro. to Social Sciences I	3
CISO 3122	Intro. to Social Sciences II	3
HUMA 3101	Intro. to Western Culture I	3
HUMA 3102	Intro. to Western Culture II	3
ESPA 3015	Grammar and Composition	3
ESPA 3331	Critical Thinking and Writing Arg. I	3
ESPA 3332	Critical Thinking and Writing Arg. II	3
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
MATE 3001	Introductory Mathematics	3
CIBI 3001 or CIFI 3001	Fundamentals of Biology I Introduction to Physical Sciences I	3
CIBI 3002 or CIFI 3002	Fundamentals of Biology II Introduction to Physical Sciences II	3
Total:		36

Office Systems

CODING	COURSE TITLE	CREDITS
INGL 3101	Basic English I	3
INGL 3102	Basic English II	3
ESPA 3101	Basic Spanish I	3
ESPA 3102	Basic Spanish II	3
ESPA 4233	Puerto Rican Literature	3
HUMA 3111	Compendium of Western Culture I and II	3
HUMA 3112	Compendium of Western Culture III and IV	3
HIST 3245	History of Puerto Rico Compendium	3
CIBI 3001 or CIFI 3001	Fundamentals of Biology I or Intro. to Physical Sciences I	3
CIBI 3002 or CIFI 3002	Fundamentals of Biology II or Intro. to Physical Sciences II	3
MATE 3001	Introductory Mathematics I	3
CISO 3121	Intro. to Social Sciences I	3
CISO 3122	Intro. to Social Sciences II	3
EDFI 3675	Life, Health and Wellness	3
	Total:	42

Division of Continuing Education and Professional Studies

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The Division of Continuing Education and Professional Studies (DECEP) of the University of Puerto Rico provides innovative academic programs and activities of excellence, with and without credit, aimed at facilitating lifelong learning. DECEP makes viable, guarantees, and perpetuates the UPR's mission of service, its insertion in the globalization of education, and its contribution to socioeconomic and cultural development, responding quickly and effectively to the immediate needs of diverse sectors in Puerto Rico and its environment that it serves.

Description of DECEP Programs:

Short Courses and Professional Certificates

Short courses and professional certificates are training courses offered without university credits. Topics range from general areas, exam reviews, design and decoration, professional development, technology, among others. These courses are offered in face-to-face or online mode, with evening and Saturday schedules, meeting the needs of adult professionals and young people. In addition, summer camps are offered for young people between the ages of 12 and 17.

Training for Agencies and Companies

The DECEP of the UPR in Carolina aims to respond to the operational needs identified by public agencies and private companies, designing training and emerging activities. Our training programs fulfill the main mission of promoting and contributing to efficiency and professional development. Training categories include business administration, education, languages, human resources and technology. These trainings are customized and tailored to the needs of the agencies, and in most cases are offered on-site during business hours.

Pre-College Jaguars

The Jaguares Pre-University program allows high school students to advance college credits. Courses are offered online or face-to-face in the evenings or on Saturdays.

Professional Enhancement

Under the Professional Enhancement program, individuals who have completed a minimum baccalaureate degree may apply for transitional admission to take credit-bearing courses at the institution. The objective of this admission is to update and improve professional knowledge, take courses related to areas of personal interest, or fulfill prerequisites necessary to achieve future academic goals.

Summer Session Courses

Summer session credit courses are offered in July. Students from throughout the UPR system may take courses at UPR Carolina by requesting special permission.

Pre-basic Courses

The pre-basic courses program provides academic support to incoming UPR Carolina students who need to strengthen their English, Spanish and mathematics skills. The courses are offered in the summer before the beginning of their first term. Our institution's regulations require that all admitted students have a minimum score in the University Admission Test (PAA) in order to take the basic courses in Spanish, English and mathematics. If they do not reach the minimum score, students must take one or two preparatory courses to strengthen the academic skills necessary to succeed in the core courses and in their university life.

Special Projects:

UPR-OATRH Alliance

The University of Puerto Rico (UPR) and the Office of Administration and Transformation of Human Resources (OATRH) established a collaborative agreement in which the UPR offers training services and technical assistance to train and retrain public employees. Since 2018, the Division of Continuing Education and Professional Studies of the UPR in Carolina has trained public servants from various government agencies.

UPR-DEPR Collaborative Agreement

The Puerto Rico Department of Education (PRDE) and the University of Puerto Rico (UPR) have developed the Programa Certificate y Evolucion con el DEPR (Certify and Evolve with the DEPR Program), whose purpose is to update, renew and offer formal university education to PRDE personnel through a varied offering designed specifically for this population. With this initiative, participants can complete university sequences for their professional development.

Jaguar Tech Academy

Jaguar Tech Academy is a proposal of the Division of Continuing Education and Professional Studies and the Department of Engineering Technologies of the University of Puerto Rico at Carolina, in alliance with the Department of Economic Development and Commerce of Puerto Rico (DDEC). This project seeks to develop professional certificates in topics related to computer science and technical fields such as automation, cybersecurity, mechatronics, industrial electricity, among others. After completing the credentials, participants receive a certificate of contact hours signed by the rector of the university, in addition to a unique educational experience that will allow them to update their knowledge in high-demand topics.

Adelanta 180° Program

The Adelanta 180° Program is an initiative of the University of Puerto Rico and the Department of Education under the UPR-DEPR Collaborative Agreement where basic courses at the undergraduate level are offered free of charge to DEPR students. This initiative seeks to strengthen high school students' path towards post-secondary education, improving their academic performance in the process.

Office of Distance Education

The purpose of the Distance Education Office of the University of Puerto Rico in Carolina is to aid the university community in the development of distance education programs, courses, and professional certifications at the Institution. Among the services offered are the following:

- support in the use of the Moodle platform and other technologies
- design and evaluation of distance learning courses
- workshops and conferences on the learning management platform, technological tools, and distance teaching/learning strategies, among others.

Currently, an online Bachelor of Arts in Criminal Justice is offered with majors in Law and Society and Forensic Psychology. Additional courses from many departments are offered online. The following link contains the list of [distance courses](#).

Registrar's Office

The main purpose of the Registrar's Office is to safeguard students' academic information. In addition, it is responsible for compliance with the academic regulations instituted by the university authorities. Among the main functions of the Office are coordinating the enrollment process, validating study programs, protecting student documents, evaluating the academic progress of students for the granting of different financial aid, certifying enrollment for student loans, medical insurance, field trips, and income contributions, among others. It also evaluates and analyzes the records of students who are candidates for graduation and establishes final examination schedules. On the other hand, this office continuously processes requests for credit transcripts, reclassifications, readmissions, transfers, special permissions, partial and total withdrawals, and offers service to students, faculty, administrative staff, and the public.

Course selection

It is the process by which the student indicates the courses and sections he/she is interested in taking in an academic session. The course selection process is carried out during the period stipulated by the University in the [academic calendar](#), published on the institution's website, below the students tab. The student who does not make the course selection will not have courses reserved for the following term.

Process

1. Conduct Academic Advising.
2. Search for a personal code in your academic department.
3. Start your course selection process online or visit available computer labs.

Tuition Payment

The registration payment process is the process by which students register and pay for the courses or services to which they will be entitled during the quarter-term. Registration and changes to it will take place during four (4) working days and one (1) additional day for late registration.

No student will be allowed to enroll after the first day of classes of the quarter-term or the summer session, except in exceptional cases upon the recommendation by the Chancellor or his/her representative.

Procedure

Students must complete the forms provided. Incoming students must submit the Certificate of Admission and High School Graduation Certificate. Also, prior to their enrollment, they must submit the Immunization Certificate and the Medical Services documents. In addition, they must activate their institutional e-mail in the Information Systems Office.

Enrollment confirmation and payment may be processed through scholarships, Visa, MasterCard, or American Express via the Internet. Certified checks and money orders are also accepted. Personal checks are not accepted. If you are making changes or did not make course selections,

you may select your courses online or in the available classrooms and then stop by the designated collection area for payment. If necessary, you may request an extension.

Honor Students

Honor students are exempt from registration costs if they qualify according to specific criteria. At the end of each quarter-term, the cumulative academic index of each student is computed. Students in the top 4% of their cohort are evaluated. To be eligible, they must be full-time sophomores and above and have earned no less than twelve (12) credits during the previous session. Those who qualify for this privilege must complete the FAFSA®. The student must enroll and approve a minimum of 12 credits per quarter-term.

Category	Financial aid	Financial Assistance Process
Honor students	<p>If they receive a full Pell Grant, their tuition will be covered by federal aid. They will also be eligible to receive an additional grant of up to \$1,000.</p> <p>If they receive a partial Pell Grant or do not qualify for a Pell Grant but have an adjusted family income of up to \$100,000, the remainder of the cost of credits not covered by the Pell Grant will be defrayed.</p> <p>In addition, they may receive scholarships of up to \$1,600 for merit, regardless of financial need.</p>	<p>This process will be evaluated by the registrars, as usual.</p>

Regular Academic Program

The regular academic programs (in accordance with the academic year definition established in Certification #47, 2019-2020, GB) consist of a group of courses with a value that fluctuates between twelve (12) to a maximum of eighteen (18) credits per quarter-term. These are subject to an increase with the prior authorization of the Dean of Academic Affairs, but under no circumstances may they exceed 21 credits. In addition, some practicum courses are considered as a full program, which are specified in Certification #032 (2010-2011) of the Academic Senate of the UPR-Carolina, but not for tuition exemptions, according to Certification #47, 2019-2020 of the Governing Board of the UPR.

Student Classification

Full program students:

Those who are pursuing a regular program of twelve (12) or more credits per quarter-term and, in addition, are pursuing a degree, diploma, or certificate from the University.

Incomplete program students:

Students pursuing a program of less than twelve (12) credits per quarter-term, who are pursuing a degree, diploma, or certificate from the University.

Visiting students (listener):

Those who, with the authorization of the director of the academic department of the University, and upon payment of applicable special fees, attend classes without receiving credit for the work done in the courses they attend.

Special Permits

(Students with Special Authorizations):

Those who come from a campus or college or go to a campus or college and/or accredited private institution and, with the authorization of the dean of academic affairs, are allowed to enroll in certain courses during a quarter-term and are entitled to enroll in up to 50% of the credits of their academic program.

Professional improvement students:

Students following a class schedule with no more than six (6) credits per quarter-term for their professional or academic improvement. Only the Dean of Academic Affairs may authorize a higher academic load in special cases.

Special students:

Teaching or non-teaching staff of the University of Puerto Rico and who, with the permission of the Chancellor, study with the purpose of improving their academic preparation. Non-faculty personnel may study a program of eighteen (18) hours per quarter-term, seven (7) of which may be taken during working hours. Faculty may enroll in two (2) or more courses per quarter-term, if the total number of credits does not exceed six (6).

Individualized studies

A. Eligibility

- The candidate must be a bona fide student of the UPR at Carolina. This institutional policy on individualized sections will not apply to students studying for professional improvement or under special permission.
- Internship courses, with laboratory, practicum, or any other course that the Academic Department or the Dean of Academic Affairs does not consider appropriate, will not be authorized to be taken for individualized studies.

- The student must be a candidate for graduation.
- When the course is a requirement and is part of their curricular sequence, but has been cancelled due to curricular changes, the student will be allowed to take the individualized course.
- If the course is not offered in that quarter.
- When the student has not previously failed the course.
- In the case that the student has not dropped the course, or if the student has dropped the course, the student must demonstrate and submit evidence that it was due to reasons of force majeure and not due to the degree of difficulty of the subject.
- The student shall justify and explain to the Department Director the reason why he/she did not enroll in the course when it corresponded to him/her, according to the sequence of the Curriculum of his/her program.
- The student shall present to the Department Director evidence that he/she cannot take the course in another unit of the University of Puerto Rico, using special permission. The Department Director, in turn, will verify if the credits have not expired and will submit the evidence to the Dean of Academic Affairs.
- Students may enroll in only two (2) individualized sections during their years of study at UPR Carolina (Certification No. 23, 2009-2010 of the Academic Senate).
- The Department Director, Academic Counselor or professor with whom the student has taken classes will indicate in writing if the student may study in an individualized section of one (1) regular course.
- Individualized courses that are prerequisites for each other, such as English 3101 and English 3102, will not be allowed to be taken simultaneously.
- The student will have to adapt to the professor's schedule and commit to comply with all the requirements established by the professor.

B. Mechanisms for assuring the quality of teaching in individualized studies

At the end of the course, teachers must submit the following evidence to their department:

- Attendance sheets - Each time the student meets with the professor, he/she must sign the attendance sheet.
- Record of grades
- Final grade
- List of assigned work
- Availability of the assigned papers

Partial withdrawal

A partial withdrawal consists of leaving an enrolled course during the dates established in the [academic calendar](#), published on the institution's website, under the students tab.

Partial Withdrawal Procedure

1. Go to portal.upr.edu
2. Select UPR-Carolina
3. Enter your institutional email address and password.
4. Click on the Course Drop link.
5. Select the course(s) to be partially withdrawn and then select Continue. Partial withdrawal dates can be found in the [academic calendar](#), published on the institution's website, under the students tab.
6. If partially withdrawing, select Process; otherwise select Cancel.
7. Once you press Process you have completed the Partial Withdrawal process, and a confirmation email will be sent to your UPR account.

Make sure the confirmation email shows Process in green. A red color means that the process was not completed and must be repeated.

The deadline for submitting partial withdrawals from classes is indicated in the academic calendars approved by the Administrative Board of our University and published by the Registrar's Office in each academic session. These documents can be found under the student's tab on the [institution's web page](#). The student has the right to receive information about his/her academic performance before that date.

Full Withdrawal

This is the process by which a student withdraws from all courses in their class schedule. If the student has only one class enrolled and wishes to withdraw, this is considered a Full Withdrawal.

Procedure for Filing a Full Withdrawal

1. Look for the full withdrawal form at the Registrar's Office.
2. Fill it out in all its parts, sign it and look for the signature of the professors who offer the classes, the director of the Academic Department to which the student belongs or the Academic Advisor.
3. Seek authorization from the Learning Resource Center, the Fiscal Office, and the Collector.
4. Submit the signed document to the Registrar's Office, where you will be given a copy of the form as evidence of its filing. The student will retain and present this evidence in cases of claims related to the grades of the quarter-term.

The deadline to file total withdrawals is the last day of classes of each quarter-term.

If the student wishes to continue his/her studies in the following term, he/she does not have to submit a readmission application. However, if the student remains out of school for a quarter-term or more, then he/she will have to file a readmission application on the dates established in the [academic calendar](#), published on the institution's website, under the Students tab.

Class Attendance

Class attendance is compulsory. Faculty members will record class attendance and send a report to the Registrar, including grades for the quarter-term. Frequent absences affect the final grade and may result in the total loss of credits.

Review Period

A period of one to two days of review will be allotted at the end of the academic term and before the start of final exams. During this period, students will be free of any academic obligations so that they can devote that time to studying for their final exams.

Final Exams

The Registrar's Office prepares the final exam schedule specifying the time and day each exam will be administered. The date of final examinations may not be altered without the permission of the Registrar and the Dean of Academic Affairs. Final examinations shall be in writing unless the nature of the examination precludes it or the dean of academic affairs authorizes another type of examination. In evaluating the student's work, the professor may use whatever method he or she deems most appropriate, provided that in determining the grades he or she may provide evidence of objectiveness.

Instructional Unit

At UPR-Carolina, one (1) university credit is equivalent to 15 hours of class or its equivalent (lecture, discussion or laboratory).

Grading

Grades awarded by the UPR-Carolina are as follows:

- A - Outstanding
- B - Good
- C - Satisfactory
- D - Passing, but deficient
- F - Failed
- P - Passed, but not computable for Academic Index determination.
- NP - Not Approved
- W - Authorized withdrawal
- I - Provisional or Incomplete Grading

Provisional Grading / Incomplete

A student may receive a provisional grade if the professor believes there are compelling reasons that prevent the student from meeting all course requirements set forth in the syllabus. The provisional grade is determined by the work the student has completed, plus zero (0) for work not done. The awarding of this grade constitutes a privilege (not a right) for the student, after the course instructor has analyzed the situation.

Students who receive a provisional grade will have twenty (20) working days from the first day of classes of the following quarter-term to schedule an itinerary with the professor to fulfill course requirements. Before the end of the following academic quarter-term, the professor must inform the Registrar's Office, by means of a form, the final grade once the student has completed the requirements established to remove the incomplete. The final grade cannot be lower than the provisional grade. If the professor does not report any change in the provisional grade by the date indicated in the [academic calendar](#), published on the institution's web page, under the Students tab, the provisional grade will become the final grade.

Report Card

At the end of each quarter-term, students will be able to check their final grades online. Any student who believes that an error has been made on his or her grade report should contact the professor during the first week of classes of the following quarter-term.

Change of Grade

After a grade has been reported on the official lists, any alteration to the official lists is a change of grade. Students requesting a grade change from a professor must do so in writing. In case there is an error, the professor will proceed to rectify it according to procedure.

Academic Index

The academic index is a measure of student achievement. It is calculated by dividing the total number of honors points by the total number of credits accumulated in the subjects in which the student has received a final or provisional mark. The evaluation in points for each grade is as follows:

A=4 B=3 C=2 D=1 F=0

Example: Courses	Credits	Quarter-term Notes	Total Honor Points
English		C	
English		B	
Biology		C	
Humanities		A	
$33 \div 12 = 2.75$		Academic Index = 2.75	

A- General Index

It is calculated taking into consideration all the grades in the courses the student have completed at the Institution. Courses marked with "W" are not counted for the overall index.

B- Graduation Index

It is calculated by taking into consideration all grades earned in the required courses in the curriculum of the program in which students are officially admitted. All students must have a grade point average of no less than 2.00 to be eligible for graduation.

C- Concentration Index

It is calculated taking into consideration the grades in the courses of the concentration of the degree requested. All students must have a grade point average of no less than 2.00.

Course Repetition

Courses with grades of "D", "F", or "Fail" may be repeated without restriction. If a student repeats a course, only the highest grade will be counted toward the student's academic index, but the lowest grades must appear on the student's transcript. The department chairperson may authorize the repetition of courses with a grade of "C", at the student's request by way of exception, upon analysis of the student's academic circumstances, and must inform the Registrar of the authorization, by means of written communication. At the end of the academic year, the Registrar will submit to the Chancellor and the Dean of Academic Affairs a report on the cases of exception.

Probation and Academic Suspensions

The minimum index at the end of the academic year is based on the number of credits taken by the student, as established in the Retention Rate Table specified in Academic Senate Certification #6 (2009-2010). A student who does not meet the minimum index at the end of each year will be suspended for academic deficiency.

Retention Rate Standards

1. A retention rate is adopted according to the number of credits taken by the student, as shown in the table below:

Table for Retention Rate

Credits	Cumulative Academic Index
0 - 24	1.70
25 - 30	1.80
31 - 35	1.90
36 onwards	2.00

2. At the end of each quarter-term, if the cumulative academic index is lower than the corresponding retention rate, the student will be notified by letter or report from the Registrar's Office. A copy will be sent to the director of the academic program to which the student is assigned so that he/she may proceed with academic counseling.
3. At the end of the academic year, each student's cumulative index will be compared to the corresponding minimum retention rate.
 - a. When for the **first time** the cumulative index **does not exceed** 0.20 of the corresponding Minimum Retention Index, the student will be granted an **automatic** academic probation for the subsequent academic year. The Registrar's Office will

- notify the student of this decision in writing. A notation will be made on the student's transcript.
- b. When for the **first time** the cumulative index **exceeds** 0.20 of the corresponding Minimum Retention Index, the student will be suspended for one year. The Registrar's Office will notify the student of this decision in writing. In addition, the student will be notified by an electronic grade report.
Students may request academic probation to the Academic Achievement Committee. He/she must go to the Dean's Office for Academic Affairs, where he/she will be given the instructions to prepare the communication addressed to the Committee. The Committee will evaluate the petition and notify the student of its decision through the Registrar. The student who has requested probation and is not satisfied with the action taken in his/her case by the Committee may appeal the same to the Chancellor.
 - c. When for the **second time** the student does not comply with the established Minimum Retention Rate, the Registrar's Office will notify the student in writing that he/she will be suspended for one year. In these cases, the student will **not have the right** to request academic probation before the Academic Achievement Committee.
 - d. When for the **third time** the student does not meet the established Minimum Retention Rate, he/she will be suspended for three (3) years, **without the right to probation** during that period.
 - e. When for the **fourth time** the student does not meet the established Minimum Retention Rate, the student will be suspended for four (4) years, **without the right to probation** during that period. Upon returning, he/she may not be admitted to the same academic program to which he/she was enrolled before the suspension. He/she may choose any other academic program to which he/she qualifies according to the General Application Index (GIA).
 - f. A student who studies only one quarter-term of an academic year and does not meet the Minimum Retention Rate will be subject to the above items, as applicable (3b-3e).
4. The student **on probation** must meet the following requirements:
- a. Attending Counseling and Psychological Services Department counseling sessions before and after enrollment.
 - b. Repeat courses with "D" or "F" until the Minimum Retention Rate is achieved, with the approval of the academic advisor or department chairperson.
 - c. Enroll in no less than nine (9) or more or thirteen (13) credits per quarter-term during the probationary period.
 - d. Must approve the credits enrolled with a minimum grade point average of 2.00 or achieve the retention rate.
 - e. Must approve no less than nine (9) credits per term, equivalent to 75% of the total credits per term.
 - f. He/she may not withdraw partially or completely without the prior recommendation of the professional advisor or director of the department to which he/she is assigned.
 - g. When, due to special circumstances, the professional counselor or the director of the department to which the student is assigned authorizes the student to withdraw completely, the student will be relieved from complying with subsection 4(e) and may

request the reinstatement of his/her probation. Probation shall be reinstated for two quarter-terms if the total withdrawal occurs in the first one. When the total withdrawal occurs in the second quarter-term, the reinstatement will be for one term, if the Academic Achievement Committee authorizes.

5. Students who have been suspended may apply for readmission if they meet the following requirements:
 - a. Be nearing the end of a year of academic suspension.
 - b. Apply for readmission to probation in the same program. Except as provided in paragraph 3(e).

Note: These students, upon requesting readmission, will not have to be evaluated by the Academic Achievement Committee.

6. Courses taken by the student in other units of the system, or in private institutions, during the periods of suspension will not be credited.

Approval of Courses by Non-Traditional Means of Instruction

The UPR-Carolina has established mechanisms to authorize the approval of courses beyond the traditional methods of university teaching to provide greater educational opportunities for its students. This policy is described below:

Advanced Level Exams

Accreditation of **Advanced Placement Exams** in the subjects of Spanish, English and Mathematics (4 or more), offered by the College Entrance Examination Board on a five (5) point scale. Only tests offered by that Agency to high school students prior to their admission to the Unit will be credited.

Course Validation

The UPR-Carolina reserves the right to determine the number of courses that will be validated. Only courses approved with a grade of "C" or higher that comply with the requirements of this Institution may be validated.

Reclassifications

It is the change from one program of study to another in the same unit in which the student is enrolled. Students may file a request for such purposes in the Registrar's Office. The general eligibility requirements are: IGS for the program he/she applied for or 24 credits and satisfactory academic progress according to the Retention Table. In addition, you must meet the specific requirements established for the program applied for.

Readmissions

It is the procedure through which a student at the University of Puerto Rico re-applies for admission to the System after having suspended his or her studies for one term or more. It is also the mechanism used by those students who have completed their university studies and wish to

enter the University to continue additional studies, either a bachelor's or associate degree in another field, or for professional improvement.

The student will apply for readmission at the Registrar's Office, complete the application and pay the appropriate fees. A late application will incur a late fee. The Registrar's Office will notify the student of the outcome of the evaluation of his/her application.

**Transfer to UPR-Carolina
(Cert. #32, 2020-2021, SA)**

The process through which a student who has not completed an academic degree at the campuses or units of the University of Puerto Rico, applies for studies in the associate or baccalaureate degree programs offered at the UPR-Carolina. According to Certification Number 43 (2019-2020) and as amended in Certification 63 (2020-2021) of the Governing Board, the minimum requirements for evaluation as a candidate for reclassification between units are:

Less than 24 credits approved at the University of Puerto Rico

- Satisfactory academic progress as required in Academic Senate Certification Retention Table Number 06 (2009-10).
- An overall application rate (GSR) value for new admissions equal to or greater than the minimum established for the year the student was admitted.

More than 24 approved credits at the University of Puerto Rico:

- Satisfactory academic progress as required in Academic Senate Certification Retention Table Number 06 (2009-10).
- Meet other criteria required by the admitted program.

In both cases, qualified applicants will be admitted in descending order of GPA if there is room at the level of study at which they would be admitted to the program. Receiving units may establish additional requirements that allow them to categorize applicants by the level of progress (or equivalent year of study) they exhibit toward the new degree, but under no circumstances are they authorized to establish requirements that discriminate or distinguish among applicants by unit of origin.

**Transfer to another Campus or Institutional Unit
(Cert. #115, 1996-97, JS)**

All candidates who have completed 48 credits by the end of the academic term in which they apply will be considered for transfer. This includes the course requirements established by the campus of their choice. Transfer students who have selected a program of study for which their campus does not offer a complete second-year program will be required to have passed 30 credits, including those courses that are required by the faculty or department of their choice. The student must meet the retention rate required by the institutional unit to which he/she is applying.

Students must submit their transfer request on the dates announced in the [academic calendar](#), published on the institution's website, under the students tab. He/she will request the transfer at the Registrar's Office, fill out the application and pay the corresponding fees.

Authorization to Take Courses at Other Institutions

(See Institutional Policy of May 31, 1996, and ratified in January 2012).

Such permission will only be granted in special circumstances. 1. Request the Special Permission form from the Registrar's Office. 2. Obtain authorization from the department director. 3. Obtain the signature of the dean of academic affairs. 4. Meet the minimum retention rate. 5. The academic load may be up to a maximum of 15 credits and its acceptance will depend on the availability of space on the requested courses.

Course Expiration

(Cert. #15, 2005-06, SA)

Course expiration for the daytime Baccalaureate Degree Program extends up to 10 years, extended (evening) hours up to 12 years. For the daytime associate degree Program, up to 5 years, and extended hours (evening) up to 6 years.

Graduation Requirements

To qualify as a candidate for a degree, diploma, or certificate, the student must meet the following requirements:

- Be officially classified in the program from which he/she is to receive the degree.
- Have passed the prescribed courses in the program of your choice with a Graduation and Concentration Rate of 2.00 or higher.
- Approve at the University of Puerto Rico the last 28 credits required in the final phase of their studies. In exceptional cases, compliance with this rule may be waived by agreement of a committee formed by the program director, the dean of academic affairs, the dean of student affairs, and the registrar.
- Have been recommended by the corresponding faculty for the degree, diploma or certificate for which you are applying.
- Not be under disciplinary action.
- Having paid off all debts owed to the Institution.

Students completing graduation requirements

(Cert. #09, 2019-2020, SA)

Students are conferred the award of a degree upon completion of graduation requirements, subject to transcript verification and payment of tuition and fees. This determination includes students who complete their requirements during the summer session.

UPR-Carolina holds graduation ceremonies once a year during the month of June. Candidates who are close to completing their degree requirements must file an application for graduation at the Registrar's Office including the academic advising form from their department or school.

Upon completion of the graduation requirements, you will receive a certification with the degree and the date awarded, and you will be eligible to participate in the next graduation ceremony.

Automatic Graduation

(Cert. #85, 2005-2006, JS)

The UPR-Carolina will automatically confer the degree to all students who have met the requirements. The payment of the corresponding graduation fee will be required for this process. Graduates under this policy who are interested in continuing studies in any program or discipline at the University of Puerto Rico will have to apply for readmission to the corresponding unit.

Awarding of Honors

(Cert. #3, 2012-2013, SA)

The Academic Senate approved:

1. Adopt a fixed scale with a minimum index of 3.50 with the following distribution:
 - Cum Laude 3.50 - 3.69
 - Magna Cum Laude, 3.70 - 3.94
 - Suma Cum Laude, 3.95 - 4.00
2. Residence
 - a. Students admitted by Transfer:
 - Approve fifty percent (50%) of the concentration credits and 36 of the last 48 credits at the University of Puerto Rico.
 - Count only grades earned at the University of Puerto Rico for the graduation rate.
 - b. Students of the System:
 - For the purposes of the academic norms related to residency, once the transfer student is accepted, all courses taken by the student in any UPR unit or exchange sponsored by the UPR will be considered as taken in the unit that confers the degree. This is provided for in Certification #115 (1996-97) of the Board of Trustees.
 - c. Course Repetition
 - not have repeated more than fifteen (15) credits of those required for the degree, including courses dropped, nor include courses repeated as a result of an initial full withdrawal.

Posthumous Degrees

(Cert. #32, 2005-2006, SA)

For the awarding of a posthumous degree, please refer to the above-mentioned certification.

Changes in Graduation Requirements

The University of Puerto Rico reserves the right to make any changes in the different programs and requirements for degree, diploma or certificate. In general, students have the right to graduate in accordance with curriculum applicable requirements at the time of admission. Students who do not complete graduation requirements within the time limits set for their respective curriculum, and students who resume studies after a period of absence, will be governed by the regulations that apply to the class in which they graduate. The time limit required to complete a regular program shall be 1.5 times the minimum time required for the academic program.

Academic Eligibility Guidelines for Participation in UPR Financial Assistance Programs (Cert. #44, 2005-2006, BT, Cert. #111, 2012-2013 BT)

Academic eligibility for participation in the financial aid programs of the University of Puerto Rico will be determined according to the following rules:

- **Classification in degree program**
To participate in financial aid programs, a student must be officially classified in a degree-granting program of study.

- **Minimum Academic Index**
To achieve academic eligibility from the qualitative point of view, the student must achieve at least the general academic retention rate for their program of study, as established in each unit of the System. This minimum rate will never be less than 1.40 for first year students; 1.60 second year; 1.80 third year; and 2.00 fourth year and above.

- **Progress towards the degree**
To achieve academic eligibility from a quantitative point of view, students must pass 57 percent (57%) of the credits attempted during the academic year prior to the time of evaluation for new candidates, and for sophomores and above the 67 percent (67%) required under these rules. The result of the computation shall always be rounded down to the lowest whole number. The evaluation shall be carried out according to the provisions of subsection M.

- **Maximum credits that may be attempted**
The student may pursue up to 150 percent (150%) of the credits required by his/her academic program. The Institution will ensure that the student achieves his/her degree without exceeding this limit. If the annual evaluation determines that the student will not be able to complete his/her degree without exceeding the maximum of 150 percent (150%), the student will not be able to continue participating in the financial aid program. The maximum 150 percent (150%) of the credits allowed for participation in financial aid will apply even if the student has not previously received financial assistance.

- **Additional sequences and courses to the student's concentration**

Students may receive financial aid for courses required by their program of concentration, including faculty requirements, general education, and free electives, and may receive financial aid for the following sequences and courses, under the conditions indicated:

1. Additional required courses (prerequisite, skills courses and remedial courses)

- Financial aid may be awarded up to a maximum of 30 credits in additional courses required by the institution.

2. Curriculum sequences

- Students who are admitted to a duly authorized curriculum sequence under current regulations will have 150 percent (150%) of the credits required for their major program plus 100 percent (100%) of the credits required for the curriculum sequence as the maximum number of credits they may attempt without losing their academic eligibility.
- Provided, however, that for purposes of Title IV financial aid program participation, the U.S. Department of Education regulations do not allow curriculum sequences leading to teacher licensure to be included under this heading if the student's institutional unit of study offers a complete teacher preparation program in the student's concentration.

- **Transfers, inter-unit reclassifications and internal reclassifications**

In the case of students who reclassify from another institutional unit or within a single unit or come to the unit by transfer from another licensed or accredited institution of higher education, academic eligibility will be determined as follows:

1. In cases of one and up to a maximum of two (2) transfers or reclassifications:

- The determination of academic eligibility will be based only on the credits students are credited with for the academic program to which they have been admitted or reclassified.

2. Upon a third (3rd) transfer or reclassification:

- All courses taken by students in the above program will be counted toward the maximum 150 percent (150%) of the credits allowed by these rules.
- The University of Puerto Rico has the obligation to carry out any validation or equivalency process prior to the enrollment of the referred students, so that the margin of credits that each student will have to participate in the financial aid program is known in advance.

- **Articulated transfers**

For purposes of participation in financial aid programs, students enrolled in articulated transfer programs will be evaluated in accordance with the requirements stipulated in the appropriate agreements between the participating institutional units.

- **Readmissions**

A student who is readmitted to the faculty or program in which he/she was previously classified will be evaluated according to the standards in effect at the time of readmission. Students readmitted to the same academic program will be evaluated at the end of the subsequent academic year. All students who are readmitted to a new faculty or program will be subject to the same criteria as those established above for reclassification.

- **In Case of Curriculum Review**

Curriculum revisions are not retroactive. The requirements in the revised curricula are only applicable to students admitted as of the effective date of the revision. However, cases of students who freely choose to take the revised curriculum, rather than the curriculum in effect at the time of admission, will be processed as reclassifications.

- **Discharges and Incompletes**

For purposes of determining academic eligibility, all courses with a provisional grade of incomplete (I) with A, B, C, or D will be considered passed. Courses with (IF) and dropped courses (W) will be counted as attempted and not passed, as will courses with a grade of F. Dropped courses will not be used in computing the academic index.

- **Summer session credit in institutional units where summer is not part of the regular academic year.**

By means of the credits approved during the summer sessions, the student will be able to remedy both the deficiencies of the academic index, and the percentage of credits approved during the previous academic year.

- **Repeated Courses**

For purposes of receiving financial aid benefits, a student may repeat courses in accordance with current regulations, if he/she does not exceed 150 percent (150%) of the total credits required to obtain the degree to which he/she aspires.

- **Evaluation**

The evaluation of academic eligibility will take place at the end of each academic year, as defined in each institutional unit.

- **Failure to Meet Academic Eligibility and Probationary Standards**

- Students who do not meet these academic eligibility standards will receive written notification from the institutional unit Registrar's Office and will be placed on probationary status for a period of one academic year.
- For more details on financial aid during the probationary period, see **Failure to Comply with Academic Eligibility Standards; Probation and Review under the Dean of Student Affairs; Financial Aid.**

Transcripts

The transcript is a confidential document, copies of which are sent only at the request of the student. Official copies are sent directly by the University to the agency or institution designated by the applicant. Those provided to the student are for his or her personal use and are so noted. For delivery to other people, written authorization will be required to be duly signed by the student. The payment of the established fee for the processing of this document will be made by money order or certified check payable to the University of Puerto Rico. You may also pay in cash, by means of an official receipt from the Collector, if the payment is made in person. Likewise, the process can be done online, through the web page www.uprc.edu under Quick Links, Request Transcript of Credits. Any check that is not certified will be returned to the applicant. Transcripts are issued free to veterans, widows of veterans, spouses of veterans, and their minor children, as provided for in Act 203 of 2007. Requests must be filed with the Registrar's Office at least two (2) weeks prior to the date the transcript is needed.

Buckley Law

(General Aspects of the Buckley Act)

Every student has the right to access or deny the release of his or her confidential academic information. You may request access to your education records by written request to verify the accuracy of your education records. Also, under the protection of this Act, he/she has the right to be notified prior to or at the same time of the requirement to administer information by court order or by the Comptroller of Puerto Rico.

The University may disclose, without the student's consent, directory information such as the student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, the student may request that his or her information not be released by the Registrar's Office.

Veterans

Activation to military service in the quarter-term or session in which the activation to military service occurs, all courses enrolled by the student will be cancelled, so that the student's record and academic progress will not be affected. Upon completion of active military service, students so identified may return to their studies without the need to pay the application for readmission or go through the evaluation process of their department. This form will be placed in their file in the Registrar's Office only as evidence of their intent to return to school.

Office of Veterans Affairs

The Certifying Officer of the Veterans Services Office of the University of Puerto Rico at Carolina has the authorization of the Veterans Educational Services Approving Agency, to processing the corresponding forms and certifications of persons eligible to receive benefits to pay for their tuition. Eligible students must appear in person and receive orientation related to the study programs and benefits offered by the office.

The Office of Veterans Services, attached to the Academic Dean's Office and located in the Registrar's Office, collaborates with the Veterans Administration (VA) so that eligible students can receive educational benefits.

The school is approved by the Puerto Rico State Approving Agency to provide academic training to the students under the various GI Bill® programs. The GI Bill® benefits are as follows:

Montgomery GI Bill® Selected Reserve (MGIB-SR)

The Montgomery GI Bill® Selected Reserve (MGIB-SR) program offers up to 36 months (about 3 years) of education and training benefits if you are a member of the Army, Navy, Air Force, Marine Corps or Coast Guard Reserve, Army National Guard, or Air National Guard.

Montgomery GI Bill® Active Duty (MGIB-AD)

The Montgomery GI Bill® Active Duty (MGIB-AD) can help you pay for education and training programs, if you have served at least 2 years on active duty.

Post-9/11 GI Bill® (Chapter 33)

The Post-9/11 GI Bill® (Chapter 33) helps you pay for school or job training if you have served on active duty after September 10, 2001.

Survivors' and Dependents' Educational Assistance (DEA)

If you are the child or spouse of a Veteran or service member who has died, is captured or missing, or has disabilities, you may be able to get help paying for school or job training through the DEA program, also called Chapter 35.

To determine eligibility for these programs, the student must apply for benefits through his or her unit if they are Chapters 1606.

For more detailed information about GI Bill® Chapters, please visit va.gov or contact the Veterans Administration directly at 1-888-442-4551.

Law 203

The Puerto Rican Veteran's Bill of Rights 21st Century Act No. 203 of December 14, 2007

Categories	Tuition Fees	Fees	Books and Materials
Veterans who have exhausted their GI Bill® benefits.	100%		
Children of living Veterans.	50%	50%	50%
Spouses of living Veterans.	50%	50%	50%
Children of Veterans killed in action or whose death is active duty related.	100%	100%	100%
Spouses of Veterans killed in action or whose death is active duty related.	100%	100%	100%

The Puerto Rican Veteran's Bill of Rights for the 21st Century, Act No. 203 of December 14, 2007, provides as follows:

For dependents:

- "Spouses and children of veterans receive a 50% discount on tuition, fees, books and expenses up to graduate and/or professional level."
- "Children and/or surviving spouses of veterans killed on active duty and who are service related, have full exemption in the UPR up to professional degree".

For military or veterans:

- "Free tuition at the UPR, after GI Bill® benefits are exhausted, if any, to complete a bachelor's or professional degree.

To apply for benefits, **veteran students** must present the following documents:

- Copy of the DD-214 (indicating that the discharge is honorable)
- Copy of photo ID
- Original certification issued by the Office of Veterans Affairs (Chardon Avenue) indicating that the GI Bill® benefit has been exhausted or is about to be exhausted and the final study objective under the said benefit.

Dependent students of veterans (spouse and/or children) must present a:

- Copy of the DD-214 (indicating that the discharge is honorable)
- Copy of photo ID
- Copy of birth certificate (Veteran's children)
- Copy of recent marriage certificate (Spouses)

Note: Original documents may be required for verification or because they are not very legible.

Those students who receive the GI Bill® benefit at another institution and are **transferring or have special permission and** wish to continue receiving the GI Bill® benefit at the University of Puerto Rico at Carolina (except Chapter 35), must fill out the form: **VA Form 22-1995 Request for Change of Program or Place of Training.**

If the GI Bill® benefit they receive is Chapter 35, they must fill out **VA Form 22-5495 Dependents Request for Change of Program or Place Training.**

These forms can be accessed and completed through the GI BILL®: [Handouts and Forms](#) page.

Course repetition

The Veterans Administration, governed by Title 38 CFR (Code of Federal Regulations), does not pay for retakes of courses passed with a grade of A, B, C or D. The Veterans Administration will only pay for repeats of failed courses (F) and/or courses that the student withdrew from (W).

Time limit for degree completion

The Veterans Administration states that beneficiaries must complete their education within the regular program time frame. If they do not comply with this provision, they will not be able to continue receiving veterans' benefits from the Montgomery GI Bill®. However, they may be able to receive other financial assistance available to them.

Out of class time requirement for students to take assignments outside of class time

According to the Federal Department of Education, out of class time includes the time a student spends on assignments and other work required as part of their coursework.

It is recommended that, for each hour of the course, the student should spend a minimum of two (2) hours or twice the time (twice in-class time) preparing complementary work for the course. In practicum, internship, workshop, or laboratory courses, the additional time may be greater and will depend on the requirements of the program of study (34 CFR Section 600.2).

A full-time student (12 credits) will be required to spend approximately 360 hours per term (36 hours per week) on work or assignments outside of class time.

A part-time student (e.g., 6 credits) must spend approximately 180 hours per term (18 hours per week) on work or assignments outside of class time.

Public Law Section 702 PL 113-146 Approved 7/8/2014

The Veterans Access, Choice, and Accountability Act of 2014, Section 702, defines covered persons as:

- A veteran benefiting from Chapter 30 (Montgomery G.I. Bill®-active duty program) or Chapter 33 (Post-9/11 GI Bill®), Title 38, United States Code, educational assistance who lives in Puerto Rico while attending an educational institution located in Puerto Rico (regardless of formal residency status) and enrolls in the institution within three years prior to his or her discharge or completion of a period of active duty of 90 days or more. Any individual who transfers Post-9/11 GI Bill® benefits (38 U.S.C. §3319) and lives in Puerto Rico while attending an educational institution located in Puerto Rico (regardless of formal residency status) and enrolls in the educational institution within three years prior to his or her discharge or completion of active duty of 90 days or more. Any individual who uses post-9/11 GI Bill® carryover benefits and lives in the state in which he or she is attending school (regardless of his or her formal state of residence) and enrolls in school within three years of discharge from a qualifying period of active duty of 90 days or more.
- Any person so described while he or she remains continuously enrolled (except during regular breaks between courses, semesters, or terms) in the same educational institution.

The person so defined must have enrolled in the educational institution prior to the expiration of the three-year period of exemption or compliance as described above and must be using educational benefits under Chapter 30 or Chapter 33, under Title 38, United States Code.

- A spouse or child using Marine Gunnery Sergeant John David Fry Scholarship benefits who lives in the state where he or she attends school (regardless of legal state of residence) and enrolls in school within three years after the death of the servicemember in the line of duty, following a period of active duty of 90 days or more.

Students who meet these requirements will retain covered individual status as long as they are using 9/11 GI Bill® or Montgomery GI Bill®-Chapter 30 benefits and remain continuously enrolled. Continuous enrollment is not interrupted by regularly scheduled breaks between terms. Students do not have to enroll for summer terms to remain eligible.

Veterans Benefits and Transition Act, Section 103 PL 115-407

A student who is eligible for educational assistance under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33 Post-9/11 GI Bill® will be allowed benefits for attending or participating in the course of education during the period beginning on the date the individual provides the educational institution with a Certificate of Eligibility for entitlement to educational assistance under Chapter 21 or 33 (a "Certificate of Eligibility" may also include a "Statement of Benefits" obtained from the Department of Veterans Affairs website (eBenefits, or a GAW Form 28-1905 for Chapter 31) and ending on the earlier of the following dates:

- The date the VA payment is made to the institution.
- 90 days after the date the institution certified tuition and fees following receipt of the Certificate of Eligibility.

The University will not impose any penalties, including the assessment of late fees, denial of access to classes, libraries, or other institutional facilities, or require the student to borrow additional funds to meet financial obligations to the institution due to the late disbursement of VA funds under Chapters 31 or 33.

Section 301 of Public Law 115-251 further amended 38 U.S.C. 3679(c) to require that persons using educational assistance under Chapter 31, Vocational Rehabilitation and Employment, also be charged the resident fee.

Effective for courses, semesters, or terms beginning after March 1, 2019, a public institution of higher education must charge the resident rate to Chapter 31 participants, as well as to the other categories of persons described above. When an institution charges these individuals more than the resident student rate, VA must disapprove the VA-sponsored education programs.

Public Law 117-68

Known as the "Colonel John M. McHugh Tuition Fairness for Survivors Act 20 2021," signed into law in November 2021, and which amends 38 U.S.C. § 3679(c).

This bill adds to the definition of covered individuals those who receive benefits under Chapter 35 (DEPENDENTS' EDUCATIONAL ASSISTANCE (DEA), requiring that beginning August 1st, 2022, they be charged in-State rates, just as Chapter 33 students (Post-9/11 G.I. Bill[®]) and other beneficiaries of VA educational programs, previously included as "covered individuals," are charged in-state rates.

If the institution is not in compliance with the requirements, the approval to certify students will be withdrawn, as it is established in the Law.

Effective on August 1, 2022, University of Puerto Rico, Carolina Campus, add to the definition of covered individuals to be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes to:

- Anyone using educational assistance under chapter 35, Survivors' and Dependents' Educational Assistance Program (DEA), who lives in Puerto Rico while attending a school located in Puerto Rico (regardless of his/her formal State of residence).
- A Veteran using educational assistance under either chapter 30 (Montgomery GI Bill[®]-Active-Duty Program) or chapter 33 (Post-9/11 GI Bill[®]), of title 38, United States Code, who lives in Puerto Rico while attending a school located in Puerto Rico (regardless of his/her formal State of residence).
- Anyone using transferred Post- 9/11 GI Bill[®] benefits (38 U.S.C. § 3319) who lives in Puerto Rico while attending a school located in Puerto Rico (regardless of his/her formal State of residence).
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Puerto Rico while attending a school located in Puerto Rico (regardless of his/her formal State of residence).
- Anyone using transferred Post-9/11 GI Bill[®] benefits (38 U.S.C. § 3319) who lives in Puerto Rico while attending a school located in Puerto Rico (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- Anyone using educational assistance under chapter 31, Vocational Readiness and Employment (VR&E), also be charged the resident rate.

GI Bill[®] is a registered trademark of the Department of Veterans Affairs (VA).

Office of the Student Ombudsman

Extension 4583

The Student Ombudsman's Office is a neutral entity committed to promoting healthy coexistence in the university community through dialogue and communication. To contribute to the solution of conflict situations that affect the student body, we use formal and informal mechanisms such as mediation, intercession, negotiation and conciliation.

The principles of confidentiality, independence, neutrality and accessibility, as well as our powers and functions as Student Advocates allow us to defend your rights as a student and ensure that you are treated fairly, justly and free from retaliation.

Although it is part of our commitment and responsibility to maintain the confidentiality of the information we handle, it is difficult for us to deal with anonymous matters; that is why we encourage you to visit us or request an appointment to learn about the remedies available in the handling of conflictive situations, orient you about the services of the Student Ombudsman's Office and advise you about your rights as part of the UPR-Carolina university community.

Department of Counseling and Psychological Services

consejeria.carolina@upr.edu | Ext. 4001

The Counseling Department of the University of Puerto Rico at Carolina responds to the Dean of Academic Affairs of the Institution.

It offers excellent counseling services to promote and strengthen the personal, educational, occupational and social development of students to successfully achieve their goals. These are aimed at assisting students in their development human beings.

Our Counseling and Psychological Services Department has been accredited by the International Association of Counseling Services (IACS) since 2012.

Center for Educational Resources and Production (CREP)

In the Center for Educational Resources and Production (CREP) our main goal is to strengthen the quality and excellence of the teaching-learning methods of our institution through the integration of innovative strategies, production of multimedia materials and the effective use of these in the classroom. We want all our students and teachers to have the opportunity to learn how to use new technologies. With CREP, the Institution will have a place where students and professors can go for support and advice to produce didactic materials to be used in their courses. These materials can be incorporated into printed materials, computerized presentations, CD-ROMs, videos, digital photos and other applications.

Institutional Development Office

The Office of Institutional Development is attached to the Chancellor's Office of the UPR-Carolina. It was created to provide information, advice and technical assistance to members of the university community for the articulation and processing of proposals and other initiatives for external resources and funding, which are consistent with the priorities of institutional development. It contemplates among the donation markets: federal funds, foundations, corporations, alumni and individuals as potential donors.

It offers workshops on proposal research and preparation and facilitates the recruitment of practitioners to advise municipalities and third sector agencies on proposal development, monitoring and evaluation.

Functions:

- Identify and disseminate potential sources of resources external to UPRCA faculty and staff (federal funds, foundations, corporations, alumni, and individuals as potential donors).
- Assist in the conceptualization of projects and initiatives to raise these funds.
- Provide technical assistance in the writing of proposals and their review prior to submission.
- Process and submit proposals in accordance with established guidelines and standards.
- Provide support in the administration of proposals once they are approved.

Information Systems Office

osi.carolina@upr.edu | Ext. 3263

The Office of Information Systems (OSI) is attached to the Office of the Chancellor of the UPR-Carolina. OSI oversees the various stages of implementation of information technology to carry out teaching-learning operations, research, service delivery, creative work, administrative procedures, and internal and external access to information technologies.

OSI provides support for administrative and instructional systems and presents diagnostic and troubleshooting solutions, system design, programming, and technical equipment support.

It provides technological support and technical services to the entire university community in an equitable and efficient manner, thereby contributing to the integration of new computer technologies and improving academic offerings.

Technical support is provided to faculty, and students are assisted in the operation of technological equipment and software.

At the UPR-CA there are computer labs available for students who need them, both in groups and individually. They can do their course work, access the Internet and use a variety of software programs. Service hours are from 7:00 a.m. to 9:00 p.m.

Teachers have tools in their classrooms to integrate technology into the educational curriculum: digital screen, camera, speakers and computer with up-to-date schedules and Internet access. These are necessary facilitators to integrate the curricula into more dynamic presentations and activities in the teaching process.

Institutional Committee for the Protection of Human Subjects in Research at the University of Puerto Rico at Carolina (CIPSHI-CA)

The Institutional Committee for the Protection of Human Subjects in Research at the University of Puerto Rico at Carolina (CIPSHI-CA) is the Institutional Review Board (IRB) of UPR-Carolina.

CIPSHI-CA is charged with safeguarding the rights and welfare of human subjects participating in research conducted at the Institution. To achieve this mandate, CIPSHI-CA reviews, makes recommendations and authorizes protocols for research involving human research subjects and keeps the university community informed about current regulations, procedures and ethical issues pertaining to this research. In addition, CIPSHI-CA evaluates and weighs the potential risks against the expected benefits of the research.

This committee is responsible for ensuring that research projects carried out at the UPR-Carolina guarantee the voluntariness and privacy of the individual and minimize the risks of physical, mental, emotional, social, economic and legal harm, among others.

The CIPSHI-CA is composed of faculty members (scientific members) who represent the different areas of research that are developed in our campus and members of the community who watch over the rights of the different social groups and vulnerable populations that participate in the research. It also has a Compliance Officer who oversees all administrative procedures related to research protocols.

Dean of Student Affairs

The Dean of Student Affairs develops, coordinates and supervises all programs and services that are aimed at the welfare of students. These respond to our educational philosophy of conceiving the teaching-learning process. University education is not limited to the classroom or the laboratory; in its universal projection, it encompasses the set of different relationships that the student can establish within the university community.

The services offered by the Dean of Student Affairs promote the individual development of the student and, in turn, contribute to the process of their academic formation. The goal is to form an integral citizen in his or her individual facet, in congruence with his or her collective responsibility. Among the services offered by the Dean's Office are the following: Financial Aid, Athletic Activities Student Organizations, Choir, Band, Theater, Social and Cultural Activities, Placement Office, Office of Quality of Life, Office of Medical Services, Office of Services to Students with Disabilities, and Law 51 Liaison Office. The Dean of Student Affairs is responsible for facilitating and ensuring that these services are provided in an efficient manner.

Financial Assistance

The main purpose of the Financial Aid Office is to meet the financial needs of students and help them cover part of their educational expenses.

These grants are based on the following programs: Pell Grant, Federal Supplemental Education Opportunity Grant (FSEOG), Student Loans, and the Work-Study Program.

General Requirements

These requirements vary according to the grants applied for and awarded.

I. High School Students

- Create your FSA ID account (username and password) for student and parent.
- Fill out your Free Application for Federal Student Aid (FAFSA®) electronically at <https://studentaid.gov>. Include UPR Carolina code 030160.
- Log in to the portal: www.portal.upr.edu using your institutional email (include @upr.edu) to find out the following information:
 - If your scholarship was received.
 - If any corrections are needed.
 - Who is your Financial Assistance Officer?
 - Verify the date and time for document submission on the portal in your financial aid.

I. Regular Students

- Complete your Pell Grant Application (FAFSA®) electronically <https://studentaid.gov>. Include UPR Carolina code 030160.
- Remember to use your FSA ID (username and password) for student and parent.
- Log in to the portal: www.portal.upr.edu using your institutional email (include @upr.edu) to find out the following information:
 - If your scholarship was received.
 - If any corrections are needed.
 - Who is your Financial Assistance Officer?
 - Verify the date and time for document submission on the portal in your financial aid.

II. Financial Aid Available

- Pell Grant
Financial aid offered by the Federal Government for undergraduate studies. It is the basis on which the amount of other aid offered is calculated. Among its requirements are:
 - Be a U.S. citizen or eligible resident.
 - Demonstrate financial need.
- Federal Supplemental FSEOG Grant
Supplementary aid to the Pell Grant
- Federal Work-Study Program
The student is assigned to an academic office or department. Will work a stipulated number of hours per week, which are paid at the equivalent of the federal minimum. Your requirements are:
 - Complete the FAFSA® application.
 - Comply with the academy progress policy.
 - Have submitted the scholarship documents and be activated in the system.
- Student Loans
They are considered financial aid, even if the student must pay it after completing the academic degree, enrolls in less than 6 credits or drops out of school. They are granted by the Federal Government and the amount you receive will depend on the academic year in which you are enrolled, up to a maximum of \$5,500.00 per

year. The requirements are:

- Be enrolled in 6 credits or more.
- Meet academic progress.
- Complementary Grants
To receive the complementary aid, describe above, the following requirements must be met:
 - Complete the FAFSA® application.
 - Demonstrate financial need.
 - Some aid depends on GPA and credits enrolled.

III. Failure to Comply with Academic Eligibility, Probation and Review Standards

- A student on probationary status will be eligible for the financial aid program. At the end of the probationary period, a student who meets the academic eligibility standards may continue to participate in the financial aid program. If, at the end of one academic year on probationary status, the student has not met these standards (attain a minimum grade point average of 1.40 for freshmen, 1.60 for sophomores, 1.80 for juniors, and 2.00 for seniors and above), 57 percent (57%) of the credits attempted during the academic year prior to the time of evaluation for freshmen, and for sophomores and seniors and 67% of the credits attempted during the term), the student will lose eligibility to participate in the financial aid program.
- If a student has not attempted 150 percent (150%) of the required number of credits for his or her academic program, as provided in these rules, he or she may be evaluated under these provisions with a view to regaining eligibility to participate in financial aid programs.
- Students who have attempted 150 percent (150%), as provided above, will not be eligible to participate in the financial aid program.

IV. Review and appeal procedures

- A student who has lost eligibility for financial aid under these rules may request a reconsideration from the Review Committee that will be constituted in the institutional unit for those purposes.
- If a student receives a denial of his/her request for reconsideration and wishes to appeal the denial, he/she may file his/her appeal with the dean of students of the institutional unit within ten (10) business days from the postmark date of the

notice. To do so, you will request an interview with the dean of students or his/her authorized representative, who will resolve the appeal within 30 days. The student will be informed of the decision in writing at the address on file with the Financial Aid Office. A copy of the decision will be forwarded to this office and to the Registrar's Office for appropriate action and will be placed in the student's file.

- If the student is dissatisfied with the decision of the dean of students, **he/she** may appeal to the provost.

Athletic Activities

The UPR Carolina Athletic Activities Program encourages student participation in sports. It promotes the practice of sports as a fundamental aspect that leads to a healthy quality of life, in physical, mental, social and emotional aspects. To fulfill this mission, it organizes and develops athletic and recreational activities in which students can demonstrate their athletic skills.

Currently, the Institution participates in the Intercollegiate Athletic League (LAI), in which our student athletes represent us in the sports disciplines of Athletics, Basketball, Basketball, Dance, Baseball, Relays, Cheerleading, Weightlifting and Volleyball, among others. The Athletic Activities Program offers a merit scholarship (sports scholarship) to students who meet the established requirements and are part of the teams that represent the Institution.

Student Organizations

The student organizations of the UPR-Carolina have the objective of guaranteeing the constitutional right of full freedom of association of the student community. To make this right viable, the Office of the Dean of Students orients those students who wish to join a student organization and those who are interested in promoting the creation of others. Student organizations foster student leadership, creative debate and tolerance towards the diversity of thoughts and interests of the student body. On the other hand, it serves the academic, social, cultural, athletic, artistic, religious, recreational, professional and political needs of the entire student body. The participation of the student community in university life is of paramount importance; therefore, the student body is encouraged to actively participate in any association of the Institution. The associations are accredited in accordance with Law 179 of July 30, 1999 (P. del S. 1297).

Social and Cultural Activities

Considering the importance of social and cultural activities in the development of the educational process, students are encouraged to actively and passively participate in them. This program constitutes an educational, social and cultural complement of vital importance for academic affairs. This office coordinates conferences, seminars, musical and cultural activities, such as: plays, concerts, recitals, dances, choir festivals, cultural and musical trips, special band and choir presentations, as well as art exhibitions. All this according to the needs and interests of the

students. On the other hand, it promotes student participation in institutional activities (intramural sports activities, the Inter-University Theater Festival, the Voice Festival, and the Choral Festival of the entire University of Puerto Rico system with the participation of all the choirs of the different units-presented by the UPR Carolina Choir). The program allows the talented student to participate in the Choir, the Band, and the Collegiate Theatrical Circle. All participants receive the benefit of tuition exemption, once they have completed their first academic year (Institutional Policy on Tuition Exemptions at UPR, Certification #50 (2011-2012).

Placement Office

The UPR Strategic Plan, the Chancellor's Work Plan, the Philanthropy Work Plan, and the Academic Transformation Plan establish as a priority to strengthen the placement and employability offices and services of our campuses.

The main objective of the UPR-Carolina Placement Office is to prepare students for integration into the labor market, offering placement services, even if there is a situation of quarantine or total closure of the institution, through the electronic platform that our campus has.

The UPR Carolina Jobs & Careers electronic platform is based on Symplicity, which is an employability web solution specialized in helping Higher Education Institutions in the preparation of the student community integrated by their students and graduates; to lead them to success in their professional life, allowing and facilitating the interrelation of the student body with employers.

Quality of Life

The Office of Quality of Life directs all its efforts to foster a healthy and safe climate that allows for the full well-being of the university community. It develops and implements preventive education programs. Among them, the following are of major interest: crime, violence, aggression, sexual harassment, use and abuse of alcohol and other drugs. In addition, it actively collaborates in the creation, revision and compliance of institutional policies and processes, in accordance with state, federal and institutional laws and regulations.

Medical Services

The Office of Medical Services is a key player in the well-being of the University community. We direct our efforts towards raising awareness of the importance of prevention in maintaining good health. Therefore, we have developed strategies that promote health education. We offer medical services to enrolled students by hiring a physician and two graduate nurses on an extended schedule. The University of Puerto Rico has a contract with a recognized insurance company that provides students who do not have a medical plan with this benefit at a moderate cost. In our office you can find out about the coverage, eligibility requirements, applicable conditions, and obtain information about the premiums corresponding to the coverage.

Office of Student Services for Students with Disabilities (OSEI)

The Office of Services to Students with Disabilities (OSEI), attached to the Dean of Student Affairs, offers academic and auxiliary services to the population with functional diversity that is studying at the UPR in Carolina.

The objectives of OSEI are:

- Identify the needs of students with functional diversity or disabilities.
- Evaluate and channel requests for reasonable accommodation, academic and support services.
- Advise the university community on the process of implementing reasonable accommodations; in addition to training and raising awareness on issues related to the population of people with disabilities or functional diversity.
- Protect and guarantee the rights and confidentiality of students with disabilities or functional diversity enrolled at the University of Puerto Rico at Carolina.
- Maintain updated statistics of the enrollment served.

To learn about the documents required to request a reasonable accommodation visit www.uprc.edu.

Córdova y Fernós Congressional Internship Program

The Córdova y Fernós Congressional Internship Program was established by the Legislative Assembly of Puerto Rico, through Act 59-1993, to provide an opportunity for outstanding students from Puerto Rico's universities to interact with the processes of the U.S. Congress and the Federal Government.

At the University of Puerto Rico in Carolina, students who participate in the program receive 12 credits while working and studying during an academic period in Washington, DC.

- INTD 4000 – 9 credits
- INTD 4010 – 3 credits.

See the [general requirements](#) of the program.

Student Standards of Conduct

Chapter II - Rights and Duties of Students

Part B - Academic Aspects

Article 2.9 - Classroom Discipline

The primary jurisdiction over classroom discipline and over student conduct related to academic work, such as participation in daily assignments, preparation of work, laboratories, exams, interviews, grading, and other similar activities, rests with the professor. This is without prejudice to the professor's responsibility to report a student's conduct to the Dean, Department Chair, or other university authorities who are responsible for determining whether to initiate disciplinary proceedings under Chapter VI of these Regulations. See also Article 6.14 of the Regulations.

Chapter VI - Disciplinary Rules and Procedures

Part B - On Conduct Subject to Sanctions and Disciplinary Measures

Article 6.2 - Student Conduct Subject to Disciplinary Sanctions

It shall be subject to disciplinary sanctions:

Academic dishonesty: Any form of dishonesty or lack of academic integrity, including, but not limited to, fraudulent actions, obtaining grades or academic degrees by false or fraudulent pretenses, copying in whole or in part the academic work of another person, plagiarizing in whole or in part the work of another person, copying in whole or in part another person's answers to questions on an examination, taking or procuring another to take any oral or written test or examination on your behalf, and aiding or facilitating another person to engage in such conduct.

2. Fraudulent Conduct: Conduct with intent to defraud, including, but not limited to, malicious alteration or falsification of grades, transcripts, identification cards, or other official documents of the University or any other institution. Any act of passing on or circulating as genuine and true any of the above-specified documents knowing them to be false or altered shall also be subject to disciplinary action.

3. Damage to university property: Painting, printing, mutilating or causing damage to university property, but not limited to the walls, columns, floors, ceilings, windows, doors or stairs of the buildings, statues, pedestals, trees, benches, fences, or structures of the University of Puerto Rico, by means of signs, banners, legends, notices, stains, tears and other marks, drawings, writings, or any other markings, drawings, writings or any another medium.

The foregoing shall also apply regardless of the nature of the property, whether tangible or intangible, movable or immovable, and including intellectual property, as well as electronic spaces and media, such as Internet networks and portals.

The president, the chancellor, principal, or his or her designee, as appropriate, in consultation with the General Student Council, shall expressly identify and arrange for appropriate visible surfaces or areas that may be used by any student to post notices and

expressions on any matter, which shall be subject to the rules set forth in these Regulations.

4. Inappropriate use of university property: The use of University of Puerto Rico property or facilities for a purpose other than the use or purpose for which they were intended by university authorities that could result in damage to such property or facility, or to any person, including the user.

5. Obstruction of duties and activities: The obstruction of regular duties, such as teaching, research, and administration or the holding of official activities, taking place on or off university premises, including student assemblies.

6. Obstruction of free access to the facilities: The partial or total obstruction of the free access of persons from university facilities and the classrooms or buildings that form part thereof, as well as the transit of vehicles to, within, or from university facilities.

7. Conduct against persons: Conduct that infringes on the life, liberty, property, dignity, health, and safety of persons, including, but not limited to, the employment, employment of a person in the course of employment.

or inciting the use of force or violence against any person on university premises with the intent to cause harm or to impede the use of resources and services or the discharge of responsibilities, by any means whatsoever.

8. Commission of Offenses: Any act committed on university premises or on premises leased or loaned to the University that may constitute a crime under the laws of the Commonwealth of Puerto Rico or the United States of America, as of the date of commission.

9. Obscenity: The commission of any obscene, lewd, or lascivious act on campus.

10. Violations of rules and regulations: Violations of these Regulations or other regulations adopted by university authorities, including, but not limited to, regulations regarding sexual harassment or harassment, illegal use of drugs or controlled substances, use of information technology, and any other regulations.

11. Felony Conviction: Being convicted of a misdemeanor involving moral turpitude or a felony under the laws of the Commonwealth of Puerto Rico or the United States of America.

12. Failure to comply with sanctions: Failure to comply with sanctions imposed for violation of the rules of these Regulations. Failure by a student to comply with his/her duties and responsibilities will be sanctioned in accordance with the disciplinary procedure established in these Regulations.

Part D - Informal Procedures

Article 6.13 - Lack of Academic Integrity

Notwithstanding the provisions of this part and in accordance with the provisions of Article 2.9 of these Regulations, cases of academic misconduct that are limited to a course may be dealt with directly by the professor in charge of the course. The professor, in any case, shall report the matter to the department chair or the dean of the faculty or the academic dean who shall determine whether to initiate disciplinary proceedings under the provisions of these Regulations.

The chancellor and academic senates shall be responsible for developing a clear policy on what constitutes academic integrity in the disciplines and subjects of study taught in their unit, as well as in the research, publications, and other knowledge dissemination activities conducted in their unit.

Articles 6.14 - Effects of Repeated Offenses

Repeated disciplinary offences by a student would be taken into consideration in assessing the possibility of imposing more serious sanctions in both informal and formal processes.

Dean of Administrative Affairs

The Dean of Administration is responsible for coordinating and supervising the work of the Offices of Human Resources, Finance (Collections, Purchasing, Property, Payroll, Accounts Payable, Fiscal Office, Collections and Claims, and Receipt and Delivery), Records Management, Reproduction and Printing Center, Security and Safety, Environmental Protection Office, Occupational Health and Safety, and Physical Resources.

It is also responsible for applying, interpreting, and ensuring compliance with current laws, regulations, and institutional norms. Establish mechanisms and administrative means that promote rapid and effective communication with the Offices of the Central Administration of the University of Puerto Rico. Therefore, the tasks performed in the Office of the Dean of Administrative Affairs, although they have a connotation of administrative autonomy, in law, are subject to the General System of the University of Puerto Rico. Likewise, it maintains a complete system of records of everything concerning the phases, in accordance with the provisions of the Office of the Comptroller of Puerto Rico and the internal auditing agencies that oversee the economic operations of the Institution.

Faculty

Álvarez Cuellar, José H.

Assistant Investigator

B.A., Mathematics and Physics, INEM-Julián Motta Salas; M.A., Physics, University of Puerto Rico (RUM); Ph.D. in Education in Curriculum and Instruction, University of Puerto Rico (RRP); Research, Planning, and Institutional Effectiveness Office.

Andino Barbosa, Lourdes

Research Associate

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Apesteguía Larráyo, Alejandro

Associate Professor

Licentiate in Theology, University of Comillas, Madrid; Licentiate in Canon Law, University of Navarra, Spain; Department of Humanities.

Aponte Torres, Bianca M.

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B.A., Multidisciplinary Studies with concentration in Tourist Culture, Department of Humanities, University of Puerto Rico at Carolina; Master of Arts in Education with concentration in Museology; Ph.D. in Puerto Rican and Caribbean History, Centro de Estudios Avanzados de Puerto Rico y el Caribe, San Juan; Department of Humanities.

Aquino Núñez, Luz N.

Counsellor III (Associate Professor)

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Ayala Pérez, José Luis

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G.A., Interior Design, University of Puerto Rico at Carolina; B.A., Graphic Arts, University of Puerto Rico at Carolina; M.A., Graphic Arts, Atlantic University College; Diploma in Advanced Studies in Audiovisual Communication, Universidad Autónoma de Barcelona, Spain; M.A., Research in Advertising and Public Relations, Universidad Autónoma de Barcelona, Spain; Ph.D. in Audiovisual Communication and Advertising, Universidad Autónoma de Barcelona, Spain; Department of Design.

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Professor

B.A., History, University of Puerto Rico (PRR); MBA, Human Resources, University of Phoenix; Juris

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Carranza Quipuzco, Jorge

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Castillo Cintrón, Christopher

Instructor

B.A., Environmental Design/Architecture, School of Architecture, University of Puerto Rico at Río Piedras; MArch., Architecture, School of Architecture, University of Puerto Rico at Río Piedras; Department of Design.

Claudio Rodríguez, Ramón

Professor

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Cordero Meléndez, Gloria

Professor

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Cruz Vega, José A.

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Delgado Maldonado, Jorge L.

Instructor

B.A., Public Communication - Public Relations, University of Puerto Rico (RRP); M.A., Public Communication - Communication Theory and Research, University of Puerto Rico (RRP); Department of Design.

Díaz Lamboy, Eileen L.

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Bachelor of Architecture, Polytechnic University of Puerto Rico; MS Interior Design, Pratt Institute, New York; Department of Design.

Encarnación Meléndez, Mayra R.

Professor

B.A., Secondary Education in Spanish, University of Puerto Rico (RRP); M.A., Spanish, University of Puerto Rico (RRP); Ph.D. in Puerto Rican and Caribbean Literature, Centro de Estudios Avanzados de Puerto Rico y el Caribe; Department of Spanish.

Esquilín López, Eunice

Associate Professor

B.A., Advertising Designer, Trenton State College, New Jersey; M.A., Educational Computing, Inter-American University (S.J.); M.S., Additional Studies in Graphic Arts Publishing, Rochester Institute of Technology, New York; Certificate in Web and Digital Design, New York; Ed.D. Instructional Technology and Distance Education, Nova Southeastern University; Department of Design.

Falcón Emmanuelli, Ana E.

Professor

B.S., Secretarial Science; Inter-American University (S.J.); M.A., Business Education, Inter-American University (S.J.); Ph.D., Vocational Education, Ohio State University; Department of Office Systems.

García Colón, José O.

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B.S., Biology with Human Focus, University of Puerto Rico at Bayamón; Ph.D. in Physiology,

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González González, Felipe

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G.A. Culinary Arts, Johnson and Wales University, Rhode Island, (USA); Certification in Pastry and Confectionery, Ecole Gregoire Ferrandi, Paris, France; B.A., Hotel and Restaurant Management, University of Massachusetts; M.A., Executive Management, Interamerican University of Puerto Rico (SJ); Ph.D., Nutrition and Food Science, University of the Balearic Islands; School of Hotel and Restaurant Management.

González Nieves, Karilys

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G.A., Natural Sciences, University of Puerto Rico at Carolina; B.S. Chemistry, University of Puerto Rico (RRP); Ph.D. in Chemistry, University of Puerto Rico (RRP); Department of Natural Sciences (Chemistry).

Guzmán Mercado, Helvia

Instructor

B.A., Drama, University of Puerto Rico (RRP); M.A. English as a Second Language, University of Phoenix.

Hernández Calcerrada, Eldra G.

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B.B.A., Human Resources, University of Puerto Rico (RRP); M.P.A., Personnel Administration and Labor Relations, University of Puerto Rico (RRP); Ph.D. in Business Administration, Pontificia Universidad Católica de Puerto Rico; Department of Business Administration.

Hernández Ralat, Magaly

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B.A.A., Accounting, University of Puerto Rico at Bayamon; M.B.A., Finance, University of Puerto Rico (RRP); CPA; Department of Business Administration.

Lasso Valencia, Javier I.

Professor

B.S., University of Colombia; M.S., Chemistry, University of Puerto Rico (RRP); Ph.D. in Educational Technology and Distance Education, Nova Southeastern University; Department of Natural Sciences (Chemistry).

Lladó Ortega, Mónica

Professor

M.A., Spanish Literature and Romance Languages, University of Michigan; Ph.D. in Spanish Literature and Romance Languages; University of Michigan; Department of Spanish.

Llenza Lugo, Fermina
Professor

B.A., University of Puerto Rico; M.S., Psychology, Centro de Estudios Caribeños (S.J.); Ph.D., Clinical Psychology, Centro de Estudios Caribeños (S.J.); Department of Criminal Justice.

López Padilla, Lizaida
Associate Professor

B.A., Psychology, Mental Health, University of Puerto Rico (Cayey); M.A., Clinical Psychology, University of Puerto Rico (RRP); Ph.D. in Psychology, Clinical Psychology, Carlos Albizu University; Post-Graduate Certification in Forensic Psychology, University of Turabo; Department of Criminal Justice.

Maldonado Irizarry, Ángel
Professor

B.A., Education, Physical Education, University of Puerto Rico (RRP); M.A., Physical Education, Interamerican University (S.J.); Ph.D., Teaching, Metropolitan University, Department of Education.

Marcano Aguayo, Walbert
Instructor

B.A., Vocational Industrial Education, University of Puerto Rico (RRP); M.A. Education - Management, Administration and Supervision, University of Phoenix; Ph.D. in Curriculum - Teaching and Learning Environments (in progress), University of Turabo; Department of Engineering Technologies.

Martínez Rosado, José M.
Associate Professor

B. A., Communication: Journalism, Universidad del Sagrado Corazón, (S.J.); M. A., Criminal Justice, Universidad Interamericana de PR (S.J.); Ph.D., Philosophy, Behavioral Sciences and Society, Universidad Complutense de Madrid (Spain); Certified Mediator by the General Court and Supreme Court of Puerto Rico; Department of Social Sciences.

Maura Pérez, Mario J.
Professor

B.B.A., Business Administration, Finance, University of Puerto Rico (RRP); M.B.A., Finance, University of Puerto Rico (RRP); M.S., Research, Business Administration, Universidad Autónoma, Madrid; Ph.D. in Finance, Universidad Complutense and Universidad Autónoma de Madrid; Department of Business Administration.

Méndez Tejeda, Rafael
Professor

B.Sc. in Physics, Universidad Autónoma de Santo Domingo; M.S.C., Physics, University of Puerto Rico (RRP); Ph.D. in Atmospheric Sciences, Universidad Complutense, Madrid, Spain; Postdoctoral Fellow, University of Florida; Department of Natural Sciences (Physics).

Meza Pereira, José I.

Assistant Professor

B.S. D., Mechanical Engineering, Technological University of Bolivar, Colombia; M. S., Mechanical Engineering, University of Puerto Rico (RUM); Ph. D., Science-Mechanical Engineering, University of Puerto Rico (RUM); Doctor of Philosophy, Chemical Engineering, (RUM); Department of Engineering Technologies.

Meza Venencia, Narcisa

Instructor

B. S. Industrial Engineering, Universidad Tecnológica de Bolívar, Colombia; M. E., Industrial Engineering, University of Puerto Rico (RUM); Ph. D. in Philosophy, Finance, University of Puerto Rico (RRP); Department of Engineering Technologies.

Millán Hernández, Ángel D.

Librarian III (Assistant Professor)

G.A., Physical Therapy, University of Puerto Rico at Humacao; B.S., General, University of Puerto Rico (RRP); M.S., Science and Information Technology, University of Puerto Rico (RRP); Learning Resources Center. B.S., Information Science and Technology, University of Puerto Rico (RRP); M.S., Information Science and Technology, University of Puerto Rico (RRP); Learning Resource Center.

Miranda Jiménez, Lisa A.

Psychologist II (Assistant Professor)

M.A., Industrial Organizational Psychology, Caribbean Center for Graduate Studies, San Juan, PR; Ph.D., Clinical Psychology, Pontifical Catholic University of Puerto Rico; Department of Counseling and Psychological Services.

Nieves Avilés, Heriberto

Assistant Professor

B.A., Sciences in Biology, Interamerican University of Puerto Rico (SJ); B.A., in Painting, University of Puerto Rico (RRP); M.F.A., Fine Arts in Painting, National Autonomous University of Mexico; Ph.D. in Arts and Design, National Autonomous University of Mexico; Department of Humanities.

Nieves Velázquez, Luis F.

Assistant Professor

B.A. Marketing, University of Puerto Rico (RRP), M.B.A., Finance, Interamerican University (SJ), Ph.D. in Business and Management Development with specialization in Interregional and International Business, Interamerican University of Puerto Rico (SJ); Department of Business Administration.

Ortiz Arteaga, Carmen A.

Assistant Professor

B.A., Graphic Arts, University of Puerto Rico at Carolina; M.S., Graphic Arts Systems, Rochester Institute of Technology; Ph.D., Instructional Design for Online Learning, Capella University;

Department of Design.

Otero Rivera, Ralph

Associate Professor

B.S., Criminology, University of Central Texas; M.S., Criminal Justice, Interamerican University of Puerto Rico (S.J.); Ph. D., Criminal Justice, Interamerican University of Puerto Rico (S.J.); Ph.D. in Philosophy of Behavioral Sciences and Society - Sociology and Ethics, Complutense University of Madrid (Spain); Certificate Graduate Studies CS Forensics, Ana G. Mendez University; Department of Criminal Justice.

Otero Semprit, Raúl

Professor

B.A., Elementary and Secondary Education in Spanish, University of Puerto Rico (RRP); M.A., Hispanic Studies, University of Puerto Rico (RRP); Ph.D., Puerto Rican and Caribbean Literature, Centro de Estudios Avanzados de Puerto Rico y el Caribe; Spanish Department.

Otero Vélez, George

Assistant Professor

B.A., Science and Mathematics, University of Puerto Rico-Mayagüez (RUM); M.B.A. in Accounting, Inter-American University of Puerto Rico (SJ); M.B.A. in Finance, Inter-American University of Puerto Rico (SJ); Ph.D. in Business and Management Development with specialization in Interregional and International Business (in progress), Inter-American University of Puerto Rico (SJ); Department of Business Administration.

Pantojas Rivera, Wanda I.

Associate Professor

G.A., Culinary Arts, The Culinary Institute of America; G.A., Nutrition and Dietetics, University of Puerto Rico at Bayamon; B.A., Secondary Education, Home Economics, University of Puerto Rico (RRP); M.A., Secondary Education, Home Economics, University of Puerto Rico (RRP); Ph.D., History of Puerto Rico and the Caribbean, Center for Advanced Studies of Puerto Rico and the Caribbean; School of Hotel and Restaurant Management.

Parrilla Díaz, Anya

Associate Professor

M.S., Biology, University of Puerto Rico (RCM); Ph.D. in Bioethics, Renewable Resources, Universidad Complutense de Madrid, Spain; Department of Natural Sciences (Biology).

Penchi Porrata, Zulma

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B.A., Secondary Education in Spanish, Inter-American University of Puerto Rico (SG); M.A., Hispanic Studies, University of Puerto Rico (RUM); M.A., Peninsular and Hispanic American Literature, New York University; Ph.D., Puerto Rican and Caribbean Literature, Centro de Estudios Avanzados de Puerto Rico y el Caribe; Spanish Department.

Peñalbert Ramos, José A.

Professor

B.S., Physics, University of Puerto Rico (RRP); M.S., Physics, University of Puerto Rico (RRP); Ph.D. in Chemistry-Physics, University of Puerto Rico (RRP); Department of Natural Sciences (Physics).

Pérez Cruz, Eileene

Councillor III (Assistant Professor)

M.A., Education, Guidance and Counseling, Pontifical Catholic University of Puerto Rico; Ph.D., Education in Guidance and Counseling, University of Puerto Rico (RRP); Department of Counseling and Psychological Services.

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Associate Professor

B.S., Hotel and Restaurant Management, University of Puerto Rico at Carolina; MAEd, Management and Supervision, University of Phoenix; Major in Hotel and Restaurant Management, Florida International University; Ph.D. in Leadership in Educational Organizations, University of Puerto Rico (RRP), School of Hotel and Restaurant Management.

Pérez Méndez, Eunice

Professor

B.A., Secondary Education in Spanish, University of Puerto Rico (RRP); M.A., Spanish, State University of New York; Ph: Language and Literature, University of the Basque Country, Bilbao, Spain; Spanish Department.

Pérez Rivera, Yaritza D.

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B.A., Social Sciences in Criminal Justice with concentration in Forensic Psychology, University of Puerto Rico at Carolina; M.A., Counseling Psychology, Interamerican University of Puerto Rico (SJ); Doctor of Philosophy in Psychology with specialization in Counseling Psychology, Interamerican University of Puerto Rico (SJ); Graduate Certification in Forensic Psychology, Carlos Albizu University (SJ); Department of Criminal Justice.

Pérez Vélez, Osvaldo

Assistant Professor

B.A., Art, University of Puerto Rico (RRP); M.A., Theatre, New York University; Ph.D., Humanities-History, University of Puerto Rico (RRP); Department of Humanities.

Porbén González, Maricela

Associate Professor

B.A., Psychology, University of Puerto Rico (RRP); M.A., Community Social Psychology, University of Puerto Rico (RRP); Postgraduate Certification in Holistic Sex Therapy, Carlos Albizu University; Ph.D. in General Psychology, Carlos Albizu University; Postdoctoral Certification in HIV/AIDS Research (NIH). Department of Criminal Justice.

Portela Valentín, Stanley
Librarian III (Professor)

B.A., Translation, Interdisciplinary Studies, University of Puerto Rico (RRP); M.A., Translation, University of Puerto Rico (RRP); M.L.S., Information Science Major, Graduate School of Library and Information Science, University of Puerto Rico (RRP); Learning Resource Center.

Ramírez Ruíz, Jesmarie
Instructor

B.A., Hotel and Restaurant Management, University of Puerto Rico at Carolina; M.S., Hospitality Management, Florida International University; Ph.D. in Tourism (in progress), University of the Balearic Islands; School of Hotel and Restaurant Management.

Ramírez Suárez, Luis M.
Professor

B.A., Philosophy, University of Puerto Rico (RUM); M.A., Philosophy, University of Puerto Rico (RRP); Ph.D. in Philosophy, Gregorian University, Italy; Department of Humanities.

Ramos Scharrón, Jonathan F.
Professor

B.S., Business Administration, University of Puerto Rico (RUM); M.S., Hotel, Restaurant and Tourism Management, University of Massachusetts; Certified Hospitality Educator (CHE), American Hotel & Lodging Association; School of Hotel and Restaurant Administration.

Resto Rodríguez, Maristella
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B.S., Biology, University of Puerto Rico (RRP); M.S., Biology, University of Puerto Rico (RRP); Ph.D. in Microbiology, University of Puerto Rico (RRP); Department of Natural Sciences (Biology).

Rivas Ortiz, Juan A.
Instructor

B.A., Graphic Arts, University of Puerto Rico at Carolina; M.A., Graphic Arts - Digital Design, Atlantic University College, Guaynabo; Department of Design.

Rivera Alicea, Paul A.
Professor

B.S., Tourism Business Administration, Florida International University; M.S., Hotel and Food and Beverage Management, Florida International University; Ph.D. in Tourism Geography, University of the Balearic Islands, Spain; School of Hotel and Restaurant Management.

Rivera Aponte Carlos E.
Instructor

B. A., Education Arts, University of Puerto Rico (RRP); M.A., Music Education - Choral, Florida State University College of Music; Department of Humanities.

Rivera Caballero, José R.

Assistant Professor

B.A., University of Vincennes, Saint-Denis, France; M.A., Translation, Applied Foreign Languages, Sorbonne University, France; Ph.D., History of Puerto Rico and the Caribbean, Center for Advanced Studies of Puerto Rico and the Caribbean; Department of Humanities.

Rivera Rivera, Maribel

Assistant Professor

B.A., Secondary Education, Mathematics, University of Puerto Rico (RRP); M.S., Mathematics, University of Puerto Rico (RRP); Ph.D. in Curriculum and Teaching in Mathematics, University of Puerto Rico (RRP); Department of Natural Sciences (Mathematics).

Rivera Torres, Marilyn

Assistant Professor

B.A., Tourism, Sacred Heart University; M.A., Tourism with emphasis in Ecotourism Planning and Administration, Latin American University of Science and Technology; Postgraduate Degree in Cultural Tourism, Universidad Tres de Febrero; Postgraduate Degree in Tourism Business Management and Administration, European Postgraduate Center, Universidad Rey Juan Carlos Segundo; Department of Humanities.

Robles Parrilla, Delia

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B.A., Secondary Education in Spanish, University of Puerto Rico (RRP); M.A., Education-Curriculum and Teaching of Spanish, University of Puerto Rico (RRP); Ph.D. in Education-Curriculum and Teaching of Spanish (RRP); Post-Doctorate in Philosophy and Letters, Puerto Rican and Caribbean Literature, Centro de Estudios Avanzados de Puerto Rico y el Caribe; Department of Spanish.

Rodríguez Delgado, Wanda

Instructor

B.A., English Education, University of Puerto Rico (RRP); M.A., English as a Second Language Education, University of Puerto Rico (RRP); Ph.D. in Curriculum and Teaching English as a Second Language, University of Puerto Rico (RRP); Department of English.

Rodríguez-Ocasio, Giselle M.

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M.A., Master of Arts with concentration in clinical psychology, University of Puerto Rico (RRP); Ph.D., Doctor of Philosophy with concentration in psychology, University of Puerto Rico (RRP); Department of Counseling and Psychological Services.

Rodríguez Pérez, Alan R.

Professor

B.S., Hotel, Restaurant and Travel Management, University of Massachusetts; M.B.A., Marketing, Interamerican University of Puerto Rico (SJ); Grand Diplome Superieur, Ecole de Gastronomie Francaise Ritz Escoffier, France; Ph.D., Business Management, CEMA University, Argentina;

School of Hotel and Restaurant Management.

Rodríguez Rodríguez, Luis R.

Assistant Professor

B.A., Hotel and Restaurant Management, University of Puerto Rico at Carolina; M.S., Hospitality Management, Florida International University; Ph.D. in Tourism, University of Nebrija, Spain; School of Hotel and Restaurant Management.

Romero Chong, Juan D.

Assistant Professor

B.S., Physical Sciences, Catholic University of Peru; M.S., Mathematics, University of Puerto Rico (RUM); M.S., Mathematics, University of Puerto Rico (RRP); Ph.D., Physics-Chemistry, University of Puerto Rico (RRP); Department of Natural Sciences (Mathematics, Physics, Chemistry).

Romero Pérez, Herminio

Professor

B.A., Business Administration, Statistics-Accounting, University of Puerto Rico (RRP); Ph.D. in Business Administration in Finance, University of Puerto Rico (RRP); Department of Business Administration.

Rosario Albert, Enrique J.

Assistant Professor

B.A., Communications, University of Puerto Rico (RRP); M.A., Media Studies, Northern Illinois University; Ph.D. in Communication, University of Navarra, Spain; Department of Design.

Rosario Villafañe, Iván

Instructor

B.A., Psychology, University of Puerto Rico (RRP); M.A., Psychology, University of Puerto Rico (RRP); Ph.D. in Academic Research Psychology (in progress), University of Puerto Rico (RRP); Department of Criminal Justice.

Santiago Santana, José M.

Associate Professor

B.S., Biology with Human Focus, University of Puerto Rico at Bayamón; Ph.D. in Physiology, University of Puerto Rico (RCM); Post-Doctorate at the Institute of Neurobiology, Medical Sciences Campus; Department of Natural Sciences (Biology).

Seda Carrero, Judy Ann

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B.A., Public Communication (Journalism), University of Puerto Rico (RRP); M.A., Hispanic Studies, University of Puerto Rico (RRP); Ph.D., Puerto Rican and Caribbean Literature, Centro de Estudios Avanzados de Puerto Rico y el Caribe; Spanish Department.

Torres Cintrón, Rosana
Librarian I

B.S., Business Education, Secretarial Sciences, University of Puerto Rico (RRP); M.I.S., Information Sciences, University of Puerto Rico (RRP); Ph.D. in Education (Ed.D.) with concentration in Educational Technology and Distance Education, Nova Southeastern University (NSU), Abraham S. Fischler School of Education, Learning Resource Center.

Torres Segarra, Teófilo
Assistant Professor

B.A., Drama, University of Puerto Rico (RRP); Acting and Speech, New York School for Film & TV; M.F.A., Theatre, Brooklyn College (CUNY); Department of Humanities.

Vélez Flores, Miguel A.
Associate Professor

B.A., Secondary Education in Biology, University of Puerto Rico (RRP); M.A., Information Systems, EDP College of Puerto Rico; Ph.D., Information and Communication Technologies, University of León, Spain; Department of Office Systems.

Viera Ruiz, Nayda
Instructor

B.S., Biology, University of Puerto Rico (RRP); M.S., Biology, University of Puerto Rico (RRP); Ph.D. in Biology (in progress) University of Puerto Rico (RRP); Department of Natural Sciences (Biology).

Vizcarrondo Acosta, Roberto
Professor

B.S., Mathematics, University of Puerto Rico (RUM); M.E., Curriculum and Teaching of Mathematics, University of Puerto Rico (RRP); Ph.D. in Instructional Technology and Distance Education; Nova Southeastern University; Department of Natural Sciences (Mathematics).

Walters Pacheco, Kattia Z.
Professor

B.A., Psychology, University of Puerto Rico (RRP); M.A., Community Social Psychology, University of Puerto Rico (RRP); Ph.D. in Psychology, University of Puerto Rico (RRP); Department of Criminal Justice.

Course Descriptions

Business Administration

ADEM 1005 Business Mathematics

Academic credits: Three (3)

Contact hours: 45

Description: Mathematical techniques used in finance, accounting, and management problems. Includes elementary algebra and its application to simple and compound interest problems. Annuities, bond valuation, depreciation, capitalization, and others.

ADMI 3100 - Development New company

Academic Credits: three (3)

Prerequisite(s): ADMI 3155

Contact hours: 45 hours per quarter-term

Description: Introduction to the theory and practice of setting up a small business. The Topics include but are not limited to starting and growing a new business, acquiring a franchise or buying an established business. This course can be taught in face-to-face, hybrid or online mode.

ADMI 3150 - Business Plan Development

Academic Credits: three (3)

Prerequisites: none

Contact hours: 45 hours per quarter-term

Description: Development of a business plan for a small or medium-sized business. Components of a business plan, its importance and its use as a management tool.

ADMI 3155 - Business Creativity and Innovation

Academic Credits: three (3)

Prerequisites: none

Contact hours: 45 hours per quarter-term

Description: Describe the process of creativity and compare ways to use it as a tool for business innovation. Evaluate creative and innovative ideas for products and services in terms of their opportunities and risks. Create and innovate products and services that can be developed in a company. This course can be taught in face-to-face, hybrid or online mode.

ADMI 4005 Introduction to Management Activity

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to theories, managerial functions, business vision and the general business overview, the processes of planning, management, organization and control are studied and analyzed within an interdisciplinary framework of study. The course emphasizes the systematic view of business with all aspects that enable it to function effectively and sustainably.

ADMI 4007 Strategic Management

Academic credits: Three (3)

Prerequisite: MERC 3115

Contact hours: 45

Description: Introduction to a comprehensive, conceptual, and decisional analysis framework to help the firm assess its current condition, analyze the environmental forces affecting it, including competition, and translate that information into objectives and strategies that will enable it to compete effectively in its industry. Emphasis on management's responsibility to formulate programs that will keep the firm competitive over the long term.

ADMI 4035 Small Business Administration

Academic credits: Three (3)

Prerequisite: CONT 3005 and MERC 3115

Contact hours: 45

Description: Application of principles and methods for the development and operation of small businesses with an entrepreneurial approach.

ADMI 4039 Business Research Methods

Academic credits: Three (3)

Contact hours: 45

Description: Research Methodology and Design, application of research techniques in solving business problems.

ADMI 4335- Field study creation of small, medium-sized companies

Academic Credits: three (3)

Prerequisites: ADMI 3100

Contact hours: 45 hours per quarter-term

Description: Study of organizational growth, downsizing, and diversification alternatives for effective business decision making in changing and competitive environments.

CONT 3005 Introduction to Fundamentals Accounting I

Academic credits: Four (4)

Contact hours: 60

Description: Study of the basic principles, concepts, and procedures of accounting. The accounting cycle of service and buying and selling businesses is covered. Emphasis is placed on valuation, classification, presentation, management, and control of the following assets: cash, current values, accounts receivable, inventories, and fixed expenses.

CONT 3006 Introduction to Accounting Fundamentals II

Academic credits: Four (4)

Prerequisite: CONT 3005

Contact hours: 60

Description: This course continues with the study of the basic principles, concepts, and procedures of partnership and corporate accounting. It covers the organization, management of

partnerships and corporations, and their liquidation. Emphasis is placed on legal characteristics and their effect on the accounting treatment of capital and profit distribution. Financing through the issuance of bonds and the corporation's investment in other corporations is studied; financial statements are compared and analyzed, and the area of manufacturing is touched upon. This course can be taught in face-to-face, hybrid or online mode.

CONT 4006 Managerial Accounting

Academic credits: Three (3)

Prerequisite: CONT 3006

Contact hours: 45

Description: The course emphasizes the need for management to know the uses of accounting, to know the techniques used in accounting, to understand and appreciate the value of this information in decision making. It relates the student to the basic functions of management in the areas of planning, organization, direction, supervision, and control of company activities. This course can be taught in face-to-face, hybrid or online mode.

CONT 4045 Advanced Accounting

Academic credits: Four (4)

Prerequisite: CONT 3008

Contact hours: 60

Description: Study of the theories upon which the following specialized accounting problems rest: partnerships, appropriations, installment sales, firms in financial distress, estates and trusts, domestic and foreign branches, consolidations and mergers price level, inventories. Discussion of the principles governing accounting in institutions and government, including budgets, general and special funds.

CONT 4075 Theory and Principles of Auditing

Academic credits: Four (4)

Contact hours: 60

Description: This course studies auditing practices and emphasizes the evaluation of accounting systems and the internal controls contained therein. It includes the study of auditor's reports; auditing rules, standards, and procedures; the application of statistical samples and computers to auditing procedures; and the managerial services provided by the CPA to his clients.

CONT 4096 Financial Statement Analysis

Academic credits: Three (3)

Prerequisite: CONT 3006

Contact hours: 45

Description: The financial statement analysis course covers the interpretation, analysis and evaluation of financial information to assist various business users (both internal and external) in making economic decisions. This course studies the different analytical approaches by which accounting information can be understood, interpreted and evaluated for use in decision making.

ECON 3021 Principle of Economics I

Academic credits: Three (3)

Contact hours: 45

Description: Introductory course in economics where its scientific nature and methodology are explained. Fundamental aspects of economic systems and economic problems are discussed. The principles of supply and demand are treated in detail and their influence in determining the price and level of production in each of the markets of products and productive factors is explained. This course can be taught in face-to-face, hybrid or online mode.

ECON 3022 Principle of Economics II

Academic credits: Three (3)

Prerequisite: ECON 3021

Contact hours: 45

Description: Continuation of the introductory course in business economics. It includes topics such as: national income and its measurement, analysis of macroeconomic variables and their influence on the determination of the level of employment, production, etc. It studies monetary and banking institutions, monetary policy, public finance and fiscal policy, important aspects of economic development and international economics.

ESTA 3041 Statistics for Business Administration I

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to statistics. Descriptive statistics, basic concepts of probability, random variables, discrete and continuous and their probability distributions. Probability distributions and their properties: binomial, hypergeometric, Poisson and normal. Sampling distributions. Use of statistical computer programs to implement the statistical techniques studied.

ESTA 3042 Statistics for Business Administration II

Academic credits: Three (3)

Prerequisite: ESTA 3041

Contact hours: 45

Description: Introduction to statistical inference. Estimation and hypothesis testing for one and two samples. Introduction to statistical quality control. One-factor analysis of variance and multiple comparison tests. Contingency table analysis. Simple and multiple linear regression. Time series applications. Use of statistical computer programs to implement the statistical techniques studied.

FINA 3005 Introduction to Insurance

Academic credits: Three (3)

Contact hours: 45

Description: Discussion of the problem of risk and its impact on the individual, the economy and society; the different techniques, other than insurance, that can be used in its treatment; the

management of insurable risks through the insurance technique; and the relationship between the problem of risk and public policy, analysis and solution of situations involving risk.

FINA 3106 Financial Management

Contact credits: Three (3)

Prerequisite: CONT 3005 and ADMI 4005

Contact hours: 45

Description: Introduction to financial management with emphasis on the efficient management of funds to maximize the value of the company. It discusses the different models used for the evaluation of investment projects. The different techniques of short- and long-term financial planning are explained. Aspects concerning the capital structure of the company and its importance in making financing and investment decisions are studied. In the discussion of these topics, the ethical principles that should characterize the profession will be considered. This course can be taught in face-to-face, hybrid or online mode.

FINA 3107 Markets and Financial Institutions

Academic credits: Three (3)

Prerequisites: CONT 3005, ECON 3021 and ECON 3022.

Contact hours: 45

Description: Study of financial markets and the functioning of financial institutions. The course discusses the function of financial intermediation and the regulatory structure of financial markets in Puerto Rico, the United States and abroad. Models and theories about the functioning and behavior of financial markets and the effect of risk on them are explained. Also, different strategies and mechanisms to manage financial and non-financial risks and their relationship with the value of financial instruments are studied. Current situations and their impact on the financial system are analyzed, considering ethical aspects. This course can be taught in face-to-face, hybrid or online mode.

FINA 4010 Finance for Entrepreneurs

Academic credits: Three (3)

Contact hours: 45

Description: Basic course for students who wish to develop a business. The basic financial aspects necessary for the development and establishment of a business are studied. Emphasis is placed on the study of the process of starting a business, business management and financial planning, economic concepts to be considered, short- and long-term financing mechanisms, and expansion processes.

FINA 4015 Banking Administration

Academic credits: Three (3)

Contact hours: 45

Description: Study of the financial rules of a particular bank, as contrasted with those of the banking system. Emphasis on bank policy, not routine procedures. Analysis of the sources of bank funds with special attention to the use of those funds. A brief historical account of the development of modern banking institutions.

FINA 4016 Real Estate

Academic credits: Three (3)

Contact hours: 45

Description: Basic course on principles and practices in the real estate business and the socio-economic forces that underlie it.

FINA 4020 International Finance

Academic credits: Three (3)

Contact hours: 45

Description: Study of international monetary relations with particular attention to international monetary theory and policy. Topics to be discussed include international money markets, international banking, balance of payments adjustment, and the international monetary system. This course can be taught in face-to-face, hybrid or online mode.

FINA 4025 Advanced Business Finance

Academic credits: Three (3)

Prerequisite: FINA 3006

Contact hours: 45

Description: Advanced study of the financial administration of a company. A review of the topics discussed in the introductory course in business finance in depth and in depth. Discussion of the following topics: the financial objective of a private company, the value of money over time, the relationship between value, risk and return for both individual investment instruments and portfolios, the company's sources of financing and theories of capital structure, dividend policy and efficiency of financial markets.

FINA 4030 Financial Valuation of Companies

Academic credits: Three (3)

Contact hours: 45

Description: Study of the concepts and techniques by which reliable estimates of a company's financial value can be determined.

FINA 4037 Investments

Academic credits: Three (3)

Contact hours: 45

Description: This course studies the relationships between risk and return, emphasizing the importance of portfolio theories, their relationships and functions in the world of investments. It studies the stock markets, the role of institutions and the different theories that seek to explain these markets. Investment alternatives are discussed and analyzed in detail, emphasizing their risks and the objectives to which they lend themselves. The relevant needs of individual and institutional investors are analyzed in determining investment objectives. In addition, portfolio management and investment programming for individuals and institutions are discussed through the stylization of modern techniques. This course can be taught in face-to-face, hybrid or online mode.

FINA 4045 (CAPSTONE) Contemporary Trends in Financial Management

Academic credits: Three (3)

Contact hours: 45

Description: This is a course where different aspects of financial management of a company are integrated for students who are delving into that field. The following topics are studied: the financial goals of a company; the financial futures market; the borrowing margin of a company; financial application of simulation techniques and decision branches; financial projections; capital budgeting; the theory of utility in the quantification of risk; and the capital asset pricing model. This course can be taught in face-to-face, hybrid or online mode.

FINA 4050 Financial Markets

Academic Credits: Three (3)

Prerequisites: FINA 3006 or FINA 3106

Contact hours: 45 hours per quarter-term

Description: It analyzes the structure of financial markets and the application of the latest monetary theories and economics of financial markets. It includes, among others, the following topics: role of financial theory and policy, the implications of market structure, the interrelationship between real and financial variables in economic activity, and other related topics.

FINA 4066 Risk Management

Academic credits: Three (3)

Contact hours: 45

Description: Discussion and analysis of the principles and practices used in risk management. The different types of risk and the models used for their estimation are explained, as well as the most common protection techniques. The different protection strategies and their integrated implementation will be analyzed. The relationship between compliance, corporate governance and risk management will be discussed. The involvement of boards of directors and managers in the risk-taking process will be discussed. It is particularly aimed at students interested in the areas of markets and institutions.

FINA 4067 Securities and Fixed Income Market

Academic credits: Three (3)

Contact hours: 45

Description: Study of the valuation and behavior of fixed income assets. Analysis of the main assets of this type including government securities of the United States, Puerto Rico and agencies, corporate debt instruments, municipal bond market, mortgage loans and participations, and obligations collateralized by mortgages or other assets. Discussion of the mathematical analysis of pricing, bond yields, and bond volatility. Includes analysis of factors affecting yield and the term structure of interest rates. Introduction to fixed income portfolio management in both active and passive modes. This course can be taught in face-to-face, hybrid or online mode.

FINA 4138 Derivatives Markets

Academic credits: Three (3)

Contact hours: 45

Description: Comprehensive study of the processes of creating, providing, exchanging, and managing options, futures, and other financial derivatives. Basic valuation concepts are reviewed, along with their application to both individual instruments and investment portfolios. Financial derivatives are analyzed as risk management instruments for both institutional and individual investors. This course can be taught in face-to-face, hybrid or online mode.

FINA 4149 Investment Portfolio Management

Academic credits: Three (3)

Prerequisite: FINA 4037

Contact hours: 45

Description: Discussion of the different theories and techniques used to combine different types of investments and create portfolios that meet specific goals and objectives based on risk parameters. It is aimed at finance students with an interest in the investment area. It will include an in-depth discussion of different topics relevant to the area of portfolio management, such as the selection of investment policies and strategies, financial asset selection, integrated risk management, efficient diversification, market efficiency and performance measurement of investment portfolios. Analysis techniques (tactical and strategic) of foreign assets will be discussed considering international risks such as country risk, political risk, currency exchange, liquidity risk, among others. This course can be taught in classroom, hybrid or online mode. This course can be taught in face-to-face, hybrid or online mode.

FINA 4270 Behavioral Finance

Academic credits: Three (3)

Contact hours: 45

Description: Study of behavioral finance as a complement to the traditional paradigm for understanding the behavior of financial asset prices, corporate finance, and practices in securities markets. It is aimed at finance students with an interest in the investment area. This course can be taught in face-to-face, hybrid or online mode.

GEOP 4315 Operations Management

Academic credits: Three (3)

Prerequisite: ADMI 4005 and ESTA 3041

Contact hours: 45

Description: Introduction to the operational functions of the company and their importance for the achievement of the strategic plans of the organization. Expression of the techniques and tools available for the efficient production of goods and services with emphasis on materials management.

LEGA 4005 Legal Aspects in Business

Academic Credits: Three (3)

Contact hours: 45 hours per quarter-term

Description: Introduction and analysis of the general principles of law, legislation, doctrines and jurisprudence that regulate companies and individuals. It deepens the understanding of the functions of companies before the laws and regulations that govern them to make decisions. Students study segments of real cases that show legal and ethical trends and their impact on companies and individuals.

MERC 3115 Principles of Marketing

Academic credits: Three (3)

Prerequisite: ADMI 4005

Contact hours: 45

Description: Introduction to the study of the marketing process as a management function. Emphasis on the analysis, planning, implementation, organization and control of marketing programs. This course can be taught in face-to-face, hybrid or online mode.

MERC 4006 The Art of Selling

Academic credits: Three (3)

Prerequisite: MERC 3115

Contact hours: 45

Description: This course is structured for the student to learn modern sales techniques emphasizing presentation, customer treatment, closing, and the role of selling in the economic process. In addition, we consider it essential to create in the students a positive attitude towards the sales profession.

MERC 4227 Marketing Research

Academic credits: Three (3)

Contact hours: 45

Description: Study of the tools and methods of public relations. Emphasis on the design of activities aimed at supporting marketing strategies.

REHU 4405 Human Resource Management

Academic credits: Three (3)

Prerequisite: ADMI 4005

Contact hours: 45

Description: Introduction to the various strategies, practices, procedures and legal aspects related to the effective management of human resources in organizations. Study of the theories, methods, and techniques related to the function of human resource management within domestic and global economic contexts.

REHU 4406 Labor-management relations

Academic credits: Three (3)

Prerequisite: REHU 4405

Contact hours: 45

Description: Analysis of the dynamics of relations between unions and employers in organizations, both in Puerto Rico and in the United States from their origins to the present.

Emphasis on the study of the structures of the parties involved in labor-management relations, as well as the strategies used by each of them in the fulfillment of their functions. Introduction to the basic processes related to collective bargaining, the administration of agreements and their relationship with the non-union sector.

REHU 4407 Compensation Systems

Academic credits: Three (3)

Prerequisite: REHU 4405

Contact hours: 45

Description: Introduction to the design, implementation and administration of an effective compensation system. Emphasis on organizational diagnosis in terms of internal and external influences as a prelude to the design and administration of a compensation system.

REHU 4409 Human Relations

Academic credits: Three (3)

Prerequisite: ADMI 4005

Contact hours: 45

Description: Objective study and presentation of the nature of human relations in industry. It covers the influence of individual personality, formal and informal organization, organizational communication, leadership and supervision, group dynamics and employee participation, and labor unions on the climate of interpersonal relations in the organization. Some of the most common human relations problems in organizations are analyzed through the discussion of cases and group work experiences.

REHU 4416 Business Ethics

Academic credits: Three (3)

Prerequisite: ADMI 4005

Contact hours: 45

Description: Study of ethics and its economic and business application. The need for ethical standards that promote trust, so that the managerial function can achieve the goals, in justice, equity and freedom. Analysis of the three main resources for ethical decision-making: legal, theological-philosophical, and economic.

REHU 4419 Labor Legislation and Jurisprudence

Academic credits: Three (3)

Prerequisite: ADMI 4005 and REHU 4405

Contact hours: 45

Description: Analysis of labor and social legislation (federal and local) and how it affects business decision making. Study and analysis of the jurisprudence that has been resolved by the supreme court and its effects on organizations. It emphasizes the importance of labor legislation, particularly protective labor legislation.

REHU 4426 Collective Bargaining

Academic credits: Three (3)

Prerequisite: REHU 4406

Contact hours: 45

Description: Historical background of industrial relations. Collective bargaining and its role in modern society. General principles and practices of collective bargaining in the public and private sector. Problems of collective bargaining. The content of the agreement, the stages and strategies of employer and union bargaining. Discussion and administration of the agreement: its interpretation, enforcement, and resolution of grievances and grievances; including arbitration.

Hotel and Restaurant Management

ADHO 2015 Hotel Staff Management

Academic credits: Three (3)

Contact hours: 45

Principles of the administration, organization and operation of the personnel department of a hotel. Study of the process of recruitment, evaluation and development of the personnel, based on the job analysis technique. Study of the administration of wages and salaries. Analysis of causes related to supervision, motivation and control of labor cost in a hotel operation.

ADHO 3006 Hotel Labor-Management Relations

Academic credits: Three (3)

Contact hours: 45

Description: Principles governing the relationship between hotel management and its employees: federal and state labor relations laws; analysis of collective bargaining, mediation, rights and duties of employers, unions and employees; wage and hour laws.

ADHO 3105 Hotel and Restaurant Management

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the broad hospitality industry and the administrative workings of the modern hotel and restaurant. The different departments of a hotel and the interdependence of their functions and processes are discussed. The concepts and principles of management theory and customer service that apply are defined. It also discusses other current topics related to the different segments of the hospitality industry in Puerto Rico and the world: casinos, clubs, cruise ships, convention centers and other important sectors. This course can be taught in face-to-face, hybrid or online mode.

ADHO 3106 Rooms Division Management

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 45

Description: In the course, areas such as the operation of the front desk, telecommunications, reservations, and housekeeping departments are studied. In addition, other topics are discussed,

such as: front desk functions, cashiers, uniformed service, housekeeping, laundry, linen, and employee uniforms. It also focuses on the consideration of analytical techniques for the operation of the rooms division of a hotel and for the management of the personnel stationed in that area.

ADHO 3107 Sales and Marketing in the Hospitality Industry

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 45

Description: Study of the general principles of marketing applied to the hospitality industry. An analysis of the aspects that characterize the hotel and restaurant market such as the nature of the service and products offered, consumer behavior, seasonality of demand, among others. A marketing plan for a hotel or restaurant will be prepared, using the techniques, models and best practices used in the hospitality industry. Topics such as segmentation, SWOT analysis, positioning, promotions, sales, advertising and public relations applied to hotel and restaurant operations will be discussed.

ADHO 3108 Fundamentals of Tourism

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the encompassing field of travel and tourism. Analysis of the economic, social, cultural, and environmental impact of tourism. Concepts and topics in tourism systems models, sociology, geography, and tourism marketing are covered. It discusses tourism demand and supply, planning and development of the local and international tourism industry, as well as their respective trends and forecasts.

ADHO 3132 Hotel Management Accounting

Academic credits: Three (3)

Contact hours: 45

Prerequisite: ADHO 3135

Description: This course dabbles in the interpretation and analysis of the financial statement of a hotel and restaurant operation, prepared according to the standards of the American Hotel & Lodging Association. In addition, it goes into the analysis of ratios and comparisons of assets, liabilities, and equity, following the Uniform System of Accounting for Hotels and Restaurants. Other topics discussed include cost, volume and profit analysis, preparation of operating budgets and financial projections of a hotel; study of the formulas used in the hotel industry to measure operating results, analysis of the operating capital situation, planning and management of cash flow in the hotel and restaurant. This course also trains the student in the financial decision making of a hotel general manager or operator of a restaurant operation.

ADHO 3135 Hotel Accounting

Academic credits: Three (3)

Prerequisite: CONT 3005

Contact hours: 45

Description: Study of the accounting system for hotels and restaurants as established by the American Hotel and Lodging Association. Recording and control of sales in the departments of rooms, food, beverages and other hotel facilities. Recording and controlling sales in the hotel departments. Daily audit process and other hotel departments. Application of cost accounting to the food and beverage department. Daily books and accounts of the major flow of transactions and preparation of financial statements of a hotel. Preparation of hotel statistics.

ADHO 3205 Introduction to Food and Beverage Operation Management

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the language and systems of food and beverage business operations. The study of their organization and menu planning, including principles of nutrition, sanitation, and occupational safety in food production. This course can be taught in face-to-face, hybrid or online mode.

ADHO 3206 Food and Beverage Operations Purchasing Administration

Academic credits: Three (3)

Prerequisite: ADHO 3205

Contact hours: 45

Description: This course propels toward the study of the systems used in the supply of food and beverages in a service company. It also works with viable solutions to solve the problems that may arise in this process. In addition, it deals with the specifications used in the purchasing process, quality factors, availability that affect prices, and the proper management of the resources needed to provide excellent service. This course can be taught in face-to-face, hybrid or online mode.

ADHO 3207 Nutrition and Safety

Academic credits: Three (3)

Prerequisite: ADHO 3205

Contact hours: 45

Description: This course design presents an overview of the importance of nutrition in maintaining human health. Its main theme revolves around the principles and concepts appropriate to provide good nutrition to the population to be served. Special emphasis is given to the promotion of the consumption of adequate food daily. In addition, it enables the student to implement the HACCP system in the preparation of food service and to apply the hygiene and safety practices established by the Federal and State Health Departments. This course can be taught in face-to-face, hybrid or online mode.

ADHO 3208 Food and Beverage Cost Control

Academic credits: Three (3)

Prerequisite: ADHO 3205

Contact hours: 45

Description: This course is based on the study and application of control systems, and analytical techniques used in commercial food and beverage operation as a mechanism to increase

revenues and profits through cost reduction. This course can be taught in face-to-face, hybrid or online mode.

ADHO 3211 Principles of Food Production

Academic credits: Three (3)

Prerequisite: ADHO 3205

Co-requisite: ADHO 3132

Contact hours: 30

Description: This course focuses on familiarizing the student with the basic skills and techniques of culinary arts. It studies the history, development, vocabulary, ingredients, and equipment necessary for the development of menus and recipes. The course provides for the application of knowledge of nutrition, food safety and hygiene, cost control, and the administration of food production areas. This course requires three hours of laboratory practice of the knowledge acquired in the classroom.

ADHO 3212 Principles of Food Production Laboratory

Academic credits: Zero (0)

Prerequisite: ADHO 3205

Co-requisite: ADHO 3211

Contact hours: 45

Description: This is the lab for the course ADHO 3211, Principles of Food Production. In this course students put into function the theory learned in class. This includes the preparation and conversion of recipes, analysis of food composition and the effect of heat application. During the laboratory, the rules of safety and hygiene in the kitchen are put into practice. The preparation, production, presentation and evaluation of various recipes with products such as: broths, soups, sauces, salads, vegetables and fruits, poultry, fish, seafood, meats, eggs, dairy products, breads and sweets, among others.

ADHO 3301 Hospitality Industry Practice I

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 12.5 hours of lecture per term and 200 hours of practicum.

Description: Hotel work experience. This includes one hour and fifteen minutes per week of lecture and two hundred (200) hours of supervised industry practice. The student will become familiar with each of the major areas of a hotel: food and beverage division (100 hours) and room division (100 hours). This course can be taught in face-to-face or hybrid mode.

ADHO 3302 Hospitality Industry Practice II

Academic credits: Three (3)

Prerequisite: ADHO 3301

Contact hours: 12.5 hours of lecture per term and 200 hours of practicum.

Description: Continuation of the student's work experience in a hotel. This includes one hour and fifteen minutes per week of lecture and 200 hours of supervised practice in the industry and

in activities of the UPR in Carolina. Through this course, the student will continue to become familiar with each of the operational areas of a hotel that he/she has not been able to learn during the Hotel Internship I. It is required to complete 120 hours in the departments of their concentration Hotel Management or Food and Beverage Management and 80 hours in one or more of the following hotel departments: sales and marketing, catering, group services, engineering, human resources, accounting, casino, among others, selected by the student with the professor's authorization.

ADHO 3415 International Marketing of Hotels and Restaurants

Academic credits: Three (3)

Contact hours: 45

Co-requisite: ADHO 3426

Description: This course prepares the student to conduct international marketing in the hotel, restaurant, and tourism field. It trains them in the effective management of critical thinking skills in the development of penetration strategies and international market research, analyzing data such as: market barriers, currency exchange, intercultural relations, political diversity and all those factors that influence international trade.

ADHO 3416 Safety in the Hospitality Industry

Academic credits: Three (3)

Contact hours: 45

Prerequisite: ADHO 3105

Description: This course punctuates around the principles, concepts, functions, policies and procedures of security and accident and crime prevention in the hospitality industry. It also analyzes the roles and responsibilities of security employees and other departments. It works on techniques for handling crisis situations and emergencies. In addition, it goes into legal aspects that are related to security in the hotel property.

ADHO 3417 Housekeeping Department Administration

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 45

Description: Detailed analysis of the functions and procedures used in the administration of a housekeeping department in a tourist accommodation operation. Emphasis is placed on the role of the department and its relationship to the overall operation of the lodge. Important issues for the department such as inventory control, personnel management, and conservation of resources are examined. This course can be taught in both classroom and technology-assisted modes of instruction.

ADHO 3418 Cruise Administration

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the fascinating and modern cruise industry. The class will have a special emphasis on defining the fundamental terms and concepts of the industry. The aspects

of cruise travel and the economic, social, cultural and environmental impact of this industry will be discussed. In addition, the student will be trained in the study of issues related to the management and operation of these vessels and their marketing and promotion. Issues related to the demand for this tourist product at local and international level will be analyzed, as well as the future tendencies of development of this industry. It includes an optional trip aboard a seven-day cruise in the Caribbean.

ADHO 3419 Casino and Gaming Operation

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 45

Description: This course design presents an overview of gambling. Its main theme revolves around the principles and concepts appropriate to the management and supervision of casinos.

ADHO 3425 Timeshare Property Management

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 45

Description: A course focusing on the study of the organization, development, and management of a timeshare property. Principles of organizational structure, property sales and marketing, mortgages, consumer behavior, front desk functions, maintenance, and general management of timeshare operations. Trends and the future of this unique component of the hospitality industry are discussed.

ADHO 3426 International Hotel and Restaurant Marketing Study Tour

Academic credits: Three (3)

Contact hours: 45

Description: This course trains the student to properly execute theoretical knowledge on international marketing in the field of hotels and restaurants. It consists of a study trip to countries of tourist interest, to analyze the tourist markets. A series of visits to world-renowned hotels, tourism and gastronomic institutions are coordinated.

ADHO 3435 Introduction to Hotel and Restaurant Data Processing Systems

Academic credits: Three (3)

Contact hours: 45

Description: This course focuses on the study of information systems, data processing, filing systems, and technology used in the hospitality industry. It also goes into the application of these systems in the functions of reception, reservations, communication within the hotel, customer billing and accounting. Furthermore, it studies the use of the various software available to facilitate hotel functions: their history, their development and their application. In addition, practice in the application of these programs to the hotel and restaurant management process is required. This course can be taught in face-to-face, hybrid or online mode.

ADHO 3445 Ecotourism

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the fastest growing tourism segment in the world. This course serves as a guide and provides the student with the basic and necessary elements for the successful development of sustainable ecotourism projects. It discusses the techniques of tourism management in protected areas and analyzes model cases of ecotourism projects of international relevance. The course includes an optional ecotourism study tour.

ADHO 3446 Coop Plan Hotel and Restaurant Management Walt Disney World College Program

Academic credits: Three (3)

Contact hours: 45

Description: International work experience at a prestigious company in the Walt Disney World Company's hospitality and tourism industry. The Disney World College Internship Program includes enrolling in a class of your interest from the WDWCP educational program and completing a program of internship hours supervised by a faculty member from the Hotel and Restaurant Management program. This course is an elective for all undergraduate students enrolled at UPR-Carolina.

ADHO 3455 Menu Planning

Academic credits: Three (3)

Prerequisite: ADHO 3205

Contact hours: 45

Description: Application of basic nutrition principles in menu planning and presentation. Fundamental to the creation of a food and beverage establishment, including the areas of business concept, facilities planning and organization, cost control, and marketing tools.

ADHO 3465 Beverage Service Management

Academic credits: Three (3)

Contact hours: 45

Prerequisite: ADHO 3205

Description: Theoretical course focused on the fundamentals of the management and operation of the different beverage operations. Factors that the operation manager must identify and apply to carry out a good selection and management of beverage inventories. Principles of cocktail art, etiquette, and beverage service. Factors of marketing, sales and beverage service promotions.

ADHO 4105 Administration and Maintenance of Physical Plant in Hotels

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the administrative and operational functioning of modern hotel maintenance, analyzing the managerial, technical and mechanical aspects of the physical plant of hotels and restaurants. In addition, it examines the issues of preventive maintenance, sustainability and their roles in the overall business strategy of a hospitality operation. Issues

related to the design and maintenance of electrical, water, air conditioning, telecommunications, and security systems in the hospitality industry will be discussed. This course can be taught in face-to-face, hybrid or online mode.

ADHO 4106 Group and Convention Planning and Marketing

Academic credits: Three (3)

Prerequisite: ADHO 3107

Contact hours: 45

Description: This course concentrates on the planning, operation of groups and conventions. It focuses on the methods of marketing and selling these types of businesses, as well as the distribution of administrative responsibilities involved in the operation of conventions and groups. This course can be taught in both classroom and technology-assisted modes of instruction.

ADHO 4107 Hotel Law

Academic credits: Three (3)

Contact hours: 45

Description: This course propels toward the analysis of the legal principles that relate to the hotel industry in the United States and Puerto Rico. Therefore, it delves into the precepts that have to do with the creation of the Puerto Rico Tourism Company such as: analysis of legislation related to the industry, gambling, food and beverage services; civil law projects applicable to the hotel industry. In addition, the new norms of rural tourism in Puerto Rico and international aspects are analyzed and discussed.

ADHO 4135 Hotel Finance

Academic credits: Three (3)

Prerequisite: ADHO 3132

Contact hours: 45

Description: This course introduces and emphasizes the principles, concepts and systems to be used in financial systems in the hotel and restaurant industry. The orientation of this course is aimed at the evaluation and analysis of financial information that allows students to develop knowledge, skills and management techniques, increasing the process of business decision making to enable capitalization in the hotel industry.

ADHO 4201 Advanced Food Production

Academic credits: Three (3)

Prerequisite: ADHO 3205, ADHO 3211, and ADHO 3212.

Co-requisite: ADHO 4202

Contact hours: 30

Description: The student will learn all techniques and procedures required in large quantity food production. This encompasses production planning, menu creation, recipe standardization, food preparation, promotion and service in a real function.

ADHO 4202 Advanced Food Production Laboratory

Academic credits: Zero (0)

Prerequisite: ADHO 3205, ADHO 3211, and ADHO 3212.

Co-requisite: ADHO 4201

Contact hours: 45

Description: The student will practice all procedures and techniques required in a large quantity food production. This includes planning a function, creating menus, standardizing recipes, food preparation, promotion, and providing quality services.

ADHO 4205 Management and Direction of Service Styles

Academic credits: Three (3)

Prerequisite: ADHO 3205

Contact hours: 45

Description: This course studies the fundamentals of effective management of different styles of food and beverage services, as well as the factors that the operation manager must recognize to carry out good management and direction of the different styles of services. On the other hand, it provides practical experiences so that the student can put into practice the knowledge acquired. This course can be taught in face-to-face, hybrid or online mode.

ADHO 4305 Hospitality Capstone Course

Academic credits: Three (3)

Prerequisite: ADHO 3301 and ADHO 3302

Contact hours: 12 hours of lecture per term and 200 hours of practice.

Description: The course is designed for students who are in their senior year of high school. It focuses on problem solving, critical thinking and effective communication. The course involves an internship in the hospitality industry in which the student will work directly with the company's management staff in administrative functions. The class will include 1 hour and fifteen minutes of lecture per week and 200 hours of supervised practice broken down as follows: 150 hours in your area of concentration (Hotel Management or Restaurant Management) at your practicum site and 50 hours of volunteer work in School activities and initiatives. Authorization from the practicum course professor and compliance with the policies and requirements of the selected practicum site and the School are required. This course can be taught in face-to-face or hybrid mode.

ADHO 4415 Resort & Vacation Club Management

Academic credits: Three (3)

Prerequisite: ADHO 3105

Contact hours: 45

Description: Course based on the study of new trends in the development, management and marketing of resorts in all categories and vacation clubs. It will analyze the operational particularities that differentiate and distinguish these lodging properties from the rest of the hotel industry. Recent trends of growth and conceptualization in this branch of the hospitality industry will be studied.

ADHO 4416 Revenue Management in the Hospitality Industry

Academic credits: Three (3)

Prerequisite: ADHO 3135

Contact hours: 45

Description: This course focuses on the study of the methodology and techniques used to maximize revenue and profit in the hospitality industry; through demand forecasting and price and inventory optimization.

ADHO 4417 Hotel Asset Management

Academic credits: Three (3)

Prerequisite: ADHO 3132

Contact hours: 45

Description: Study and management of the real estate and real property environment in the hotel management segment. Diverse topics such as hotel management contracts, franchising, and specific analytical methods for the effective use of fixed asset management will be discussed. The course will cover the history of hotel asset management, effective planning, the global economy, negotiable terms in hotel contracts, contract negotiations, the owner-management relationship, program evaluations, effective evaluation standards and corresponding financial analysis, analytical hotel investment decisions, technology and information and quantitative risk analysis methods.

ADHO 4418 Hotel Facility Feasibility Studies

Academic credits: Three (3)

Prerequisite: ADHO 3132

Contact hours: 45

Description: The course focuses on the conceptualization, structure, and considerations related to the development process of tourism facilities. Environmental impact analysis, physical facilities, legal aspects, economics, and financial implications will be discussed to support the viability of hotel projects. The class will have special emphasis on the international hotel industry and Puerto Rico, contributing with local and international case studies.

ADHO 4445 Hotel Business Development

Academic credits: Three (3)

Prerequisite: ADHO 3107 and ADHO 3132

Contact hours: 45

Description: In this course, the student will learn the planning and development of a business concept for a hotel, restaurant and/or tourism related business. Topics such as the development of a business plan, types of business structures, business incorporation, market analysis, marketing strategies and implementation of the marketing plan, personnel recruitment, and financial projections will be discussed. In addition, financing methods available through private banking and government financial aid will be discussed.

ADHO 4455 Restaurant Management

Academic credits: Three (3)

Contact hours: 45

Prerequisite: ADHO 3205

Description: This course provides the student with the practical skills and knowledge necessary to efficiently manage a food and beverage service operation, General restaurant management will be analyzed with emphasis on planning, organization, leadership, and control systems. Topics will include defining a service philosophy; how to increase profit margins; effective workforce performance; identifying market segments; and planning for business growth. Case studies, guest speakers and analysis of the latest related literature will be the main resources to study the concepts presented in this course.

ADHO 4465 Wine Seminars

Academic credits: Three (3)

Contact hours: 45

Prerequisite: ADHO 3205

Description: A practical course on the fundamentals of wine production, selection, handling and appreciation. It discusses topics such as main types of wines and factors involved in their quality, wine regions, factors that the manager of a food and beverage operation must recognize to make a good wine selection, principles of sensory evaluation, service etiquette, marketing, sales and presentation of wines in a food and beverage operation.

ADHO 4501 (Culinary Arts Certification) Food Identification

Academic credits: One (1)

Contact hours: 15

Description: The course provides an overview of the different ingredients found in a commercial food operation. It discusses the methodology and manner of purchasing, receiving and storing the different foods used in a food operation. It shows and discusses how to recognize and identify when ingredients are at their optimum quality, appearance, texture, smell and taste.

ADHO 4502 (Culinary Arts Certification) Culinary Skills Development I

Academic credits: Three (3)

Contact hours: 45

Description: This course will introduce students to the basic knowledge a culinary arts student should have. The course covers basic production areas of the commercial kitchen, integrating theoretical and technical knowledge of food preparation. The correct and professional way to operate in a commercial kitchen, manual and sanitary skills, equipment identification, cutting skills, preparation of broths, sauces and soups are discussed and practiced. Also, organization within the kitchen will be discussed and specialized terms of the culinary arts will be studied.

ADHO 4503 (Culinary Arts Certification) Culinary Skills Development II

Academic credits: Three (3)

Contact hours: 45

Description: This course is designed to provide an overview of the basic knowledge a culinary arts student should have. The course covers areas of production within the commercial kitchen, integrating technical and theoretical knowledge. In its laboratory, students experience how to prepare food. This includes classic dishes of international cuisine, such as vegetables by color and family, starches, grains and proteins.

ADHO 4504 (Culinary Arts Certification) Garde Manger

Academic credits: Three (4)

Contact hours: 60

Description: This course will specialize the student in practical and theoretical knowledge of hot and cold appetizer production. Students will experiment with the preparation of hot and cold foods for functions, plated appetizers, buffet trays, canapés, past, terrines, salads, sausages, as well as smoked and cured meats and fish. In addition, you will strengthen the tools necessary to perform effectively in a commercial or institutional kitchen.

ADHO 4505 (Culinary Arts Certification) Introduction to Hot Food

Academic credits: Four (4)

Contact hours: 60

Description: The course offers specialized knowledge in hot food confection. It provides a background on the methodology and techniques used in the preparation of hot dishes of different types of cuisine. Topics related to the proper way to operate a commercial kitchen are discussed.

INTD 3002 Interdisciplinary Seminar II in General Education for Specialization Students

Academic credits: One (1)

Prerequisite: INTD 3001

Contact hours: 15

Description: Research helps to solve problems, to expand knowledge and to the maintenance of social cohesion and sustainable growth. The seminar promotes, as part of the General Education Program, that students become familiar with the importance and usefulness of research for their area of specialization, be it physical, biological, philosophical or social in nature. It also awakens the student's interest and generates basic skills through activities directed to the development of general knowledge in research.

Natural Sciences

BIOL 3011 General Biology I

Academic credits: Four (4)

Co-requisite: BIOL 3013

Contact hours: 60

Description: Study of the fundamental principles of biology with emphasis on molecular aspects. It includes fundamentals of chemistry, the cell as a fundamental unit of life, and the aspects that comprise thermodynamics and cellular biochemical processes as integrated systems are analyzed. This course can be taught in face-to-face, hybrid or online mode.

BIOL 3012 General Biology II

Academic credits: Four (4)

Prerequisite: BIOL 3011-3013

Co-requisite: BIOL 3014

Contact hours: 60

Description: Studies the principles of Mendelian and molecular genetics, the mechanisms of genetic control, reproductive systems in animals, and development. This course integrates the topics of evolution, ecology, and behavior that complement the overview of organisms as members of the biosphere. This course can be taught in face-to-face, hybrid or online mode.

BIOL 3013 General Biology I Laboratory

Academic credits: Zero (0)

Co-requisite: BIOL 3011

Description: Complement to the BIOL 3011 course. This course may be offered in classroom or hybrid mode.

BIOL 3014 General Biology II Laboratory

Academic credits: Zero (0)

Prerequisite: BIOL 3011-3013

Co-requisite: BIOL 3012

Description: Complement to the BIOL 3012 course.

BIOL 3108 Undergraduate Research

Academic credits: Two (2)

Prerequisite: BIOL 3012

Contact hours: 30

Description: Supervised research in biological sciences in which the student is provided with training and experience in the application of scientific methods and research.

BIOL 3305 Genetics

Academic credits: Three (3)

Prerequisite: BIOL 3012-3014

Contact hours: 45

Description: Study of the fundamental principles of inheritance considering concepts of molecular biology; identification, mechanism of action and transmission of genetic material. Theories of physical organization of the gene, genetic behavior in individuals and populations, the concept of linkage, and the genetic control of metabolism and development are studied in detail.

BIOL 3306 Genetics Laboratory

Academic credits: Zero (0)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3305

Description: Complement to the BIOL 3305 course.

BIOL 3349 Genetics

Academic credits: Three (3)

Prerequisites: BIOL 3011, ESMA 3101

Contact hours: 45

Description: Classical genetics, chemical nature, physical organization, changes and function of genetic material and introduction to population genetics. This course can be taught in face-to-face, hybrid or online mode.

BIOL 3417 Plant Organismal Biology

Academic credits: Four (4)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3418

Contact hours: 60

Description: Study of the general concepts of taxonomy, anatomy, physiology, and ecology in plants.

BIOL 3418 Organismal Plant Biology Laboratory

Academic credits: Zero (0)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3417

Description: Study of cell structure and plant tissues; structure and function of root, stem, leaf and reproductive organs, such as: flower, fruit and seed; photosynthesis, growth and development. Classification and nomenclature of non-vascular and vascular plants will be studied.

BIOL 3425 Organismal Animal Biology

Academic credits: Four (4)

Prerequisite: BIOL 3012

Co-requisite: BIOL 3426

Contact hours: 60

Description: Biology of different groups of animals with emphasis on their morphology, physiology, diversity, reproduction, ecology, behavior, evolution and taxonomy.

BIOL 3426 Laboratory of Animal Organismal Biology

Academic credits: Zero (0)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3425

Description: A complement to BIOL 3425. Study of preserved and live specimens of different animal groups with emphasis on dissection and study of distinctive animal structures.

BIOL 3703 Fundamentals of Microbiology

Academic credits: Four (4)

Co-requisite: BIOL 3704

Contact hours: 60

Description: Study of the fundamental concepts of living organisms with emphasis on the structure and function of microorganisms.

BIOL 3704 Fundamentals of Microbiology Laboratory

Academic credits: Zero (0)

Co-requisite: BIOL 3703

Description: Study of microorganisms using laboratory techniques such as: use and handling of microscope and other equipment, transfers, isolation, purification, preservation, staining, biochemical tests and others.

BIOL 3705 General Microbiology

Academic credits: Four (4)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3707

Contact hours: 60

Description: Study of microorganisms and their activities with emphasis on bacteria. Includes evolution, classification and identification, reproduction, morphology, physiology, ecology, biochemistry, genetics, and control. It includes applied aspects such as microbiology of food, soil, water, and the basic principles of immunology.

BIOL 3707 Microbiology Laboratory

Academic credits: Zero (0)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3705

Description: Complement to the BIOL 3705 course.

BIOL 3791 Human Biology III

Academic credits: Four (4)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3793

Contact hours: 60

Description: The course studies the structure and function of the cell, the four basic tissues of the human skeletal, muscular and nervous systems, and the skin.

BIOL 3792 Human Biology IV

Academic credits: Four (4)

Prerequisite: BIOL 3791-3793

Co-requisite: BIOL 3794

Contact hours: 60

Description: Study of the structure and function of the endocrine, cardiovascular, immune, respiratory, digestive, urinary, and reproductive systems.

BIOL 3793 Human Biology Laboratory III

Academic credits: Zero (0)

Prerequisite: BIOL 3012-3014

Co-requisite: BIOL 3791

Description: Lab that complements the course BIOL 3791.

BIOL 3794 Laboratory of Human Biology IV

Academic credits: Zero (0)

Prerequisite: BIOL 3791-3793

Co-requisite: BIOL 3792

Description: Lab that complements the course BIOL 3792.

BIOL 3907 Molecular Biology

Academic credits: Three (3)

Prerequisite: BIOL 3012-3014

Contact hours: 45

Description: Study of the fundamental principles of molecular biology. The structure, function, and biosynthesis of fundamental biological macromolecules and their interactions in the cell are discussed. Fundamental biological processes are interpreted in terms of the physicochemical properties of these molecules. Special emphasis is placed on DNA and its central role in genetic processes.

BIOL 4055 Environmental Science

Academic credits: Three (3)

Contact hours: 45

Description: Environmental science course in which the student will become familiar with the fundamental concepts of an ecosystem. Students will be able to make a comparative study in the field between a terrestrial and an aquatic ecosystem. In addition, students will analyze the problems of environmental pollution, and the control measures established by man; simultaneously having the opportunity to offer their own solutions to environmental problems.

BIOL 4545 Biochemistry of the Cell

Academic credits: Three (3)

Prerequisite: BIOL 3011, BIOL 3012

Co-requisite: BIOL 3794

Contact hours: 45

Description: Study of biological macromolecules, enzymologist and cellular metabolic patterns and their regulation.

CIBI 3001 Fundamentals of Biology I

Academic credits: Three (3)

Contact hours: 45

Description: Study of the fundamental biological concepts of biology including: the structure of living matter, its chemical composition, cellular unity, cellular metabolism, and genetics with emphasis on man through lectures, discussions, and demonstrations. Course for students who

will not be pursuing the natural sciences. Not equivalent to BIOL 3011. This course can be taught in face-to-face, hybrid or online mode.

CIBI 3002 Fundamentals of Biology II

Academic credits: Three (3)

Prerequisite: CIBI 3001

Contact hours: 45

Description: Study of the fundamental concepts of biology including ecology, development, evolution, hormonal and nervous control, and other anatomical and physiological aspects of life with emphasis on man through lectures, discussions, and demonstrations. Course for students who will not pursue the natural sciences. Not equivalent to BIOL 3012. This course can be taught in face-to-face, hybrid or online mode.

CIFI 3001 Introduction to Physical Sciences I

Academic credits: Three (3)

Contact hours: 45

Description: This course presents the student with an overview of the historical and philosophical evolution of the physical sciences. The purpose is to introduce science, not as a static collection of facts and formulas, but as an organic body of continuously developing concepts. A brief discussion of the evolution of astronomy leads from the Aristotelian to the Newtonian universe. Theories of motion, universal gravitation, and conservation principles will be examined.

CIFI 3002 Introduction to Physical Science II

Academic credits: Three (3)

Prerequisite: CIFI 3001

Contact hours: 45

Description: From the point of view of the evolution of concepts, the theories of electricity and magnetism, the development of the atomic hypothesis of matter and those fundamental ideas of modern physics that make it the dominant cultural factor of our century are studied here.

CIFO 3001 Introduction to Forensic Science

Academic credits: Three (3)

Contact hours: 45

Description: Discusses the concepts, disciplines, and principles of forensic sciences and their application in criminal investigation. Topics include: the history of forensic science, an overview of commonly used scientific disciplines (e.g., forensic biology, pathology, odontology, anthropology, toxicology, chemistry, psychology, document examination, and crime scene), the use and implications of forensic databases, ethical issues, state and federal legislation, and the skills involved in scientific analysis.

CIFO 3002 Forensic Chemistry

Academic credits: Three (3)

Prerequisite: QUIM 3025

Contact hours: 45

Description: Study of the basic principles of forensic chemistry. Analysis of the procedures, techniques and applications of forensic chemistry and its relation to the investigation of crimes. Collection, examination, evaluation and handling of physical evidence obtained after a crime. Description of analytical chemical methods, techniques and instrumentation applied to forensic chemistry. Evaluation of criminal cases from a chemical perspective. Systematic analysis of evidence collected at a crime scene will be studied. It will include the legal aspects in both Puerto Rico and the United States and the chemical analysis of that evidence using instrumentation that has been discussed in the analytical chemistry course.

CIFO 3003 Topics in Criminal Procedure and Rules of Evidence Applicable to Forensic Science

Academic credits: Three (3)

Prerequisite: CIFO 3001, JUST 3005

Contact hours: 45

Description: This course will study basic topics about the criminal process that is followed in court against a person charged or accused of crime, from the hearing to determine cause for arrest or citation, to the pronouncement of sentence. It will examine the investigative processes that are used to make the evidence obtained admissible in criminal court proceedings and will relate the system of principles and rules governing the admissibility of evidence in a criminal proceeding to the analysis of evidentiary proof.

CIFO 4015 Forensic Serology and DNA Technology

Academic credits: Two (2)

Prerequisite: BIOL 4545 or CHEM 4050, CIFO 3005.

Co-requisite: CIFO 4016

Contact hours: 30

Description: Introduction to the fundamentals of forensic serology, as well as the theory, methodologies, preservation, identification and analysis of evidence using different blood and body fluid samples, as well as DNA analysis and characterization.

CIFO 4016 Forensic Serology and DNA Technology Laboratory

Academic credits: One (1)

Prerequisite: BIOL 4545 or CHEM 4050, CIFO 3005.

Co-requisite: CIFO 4015

Description: Practice of the search, collection, identification, characterization, and individualization of biological evidence collected at a crime scene. The different techniques of serological and forensic DNA analysis and their respective interpretations will be practiced in the application of the concepts learned.

CIFO 4035 Forensic Toxicology

Academic credits: Two (2)

Prerequisite: CHEM 3025, BIOL 4545

Co-requisite: CIFO 4036

Contact hours: 30

Description: Introduction to the fundamentals of forensic toxicology, as well as strategies, methodologies and techniques most appropriate for the analysis of samples of medico-legal interest in cases of death caused by a substance with toxic potential.

CIFO 4036 Forensic Toxicology Laboratory

Academic credits: One (1)

Prerequisite: CHEM 3025, BIOL 4545

Co-requisite: CIFO 4035

Description: Practice of the basic concepts of forensic toxicology, where experiments related to the concepts discussed in class will be performed. The activities to be performed include receipt of samples, instrumental analysis, evaluation of results, preparation of certificates of analysis, handling and storage of data according to the regulations of accrediting agencies.

CIFO 4045 Analysis of Controlled Substances

Academic credits: Three (3)

Prerequisite: QUIM 4015

Contact hours: 45

Co-requisite: CIFO 4046

Description: Challenges, methods and analysis in forensic science are discussed from an instrumental analysis perspective. Emphasis is placed on the analysis of drugs and substances associated with arson, document analysis, paint residue samples, and firearms residue, using the major techniques and instruments of chemical analysis, including gas chromatography-mass spectrometry (gc/ms), thin layer chromatography (tlc), ultraviolet-visible spectrophotometry (uv-vis), fourier transform infrared spectrophotometry (ft-ir), and high-performance liquid chromatography (hplc). Alcohol detection is performed by breath test.

CIFO 4046 Controlled Substances Analysis Laboratory

Academic credits: One (1)

Prerequisite: QUIM 4015

Co-requisite: CIFO 4045

Description: Practice of the basic concepts of the analysis of controlled substances, where the chemical analysis routinely performed on controlled substances in a forensic laboratory will be presented, discussed and executed. Reports of results of chemical analysis performed on controlled substances will be written.

CIFO 4055 Firearms Ballistics

Academic credits: Two (2)

Prerequisite: FISI3011, FISI 3012

Co-requisite: CIFO 4056

Contact hours: 30

Description: Theory of the physics of internal, external and terminal ballistics as applied to the identification of firearms, bullets and casings, the formation and deposition of gunshot residue, trajectory of shots and distance between weapon and target, and bullet wounds. An account of

the history of firearms, safety rules when handling firearms, calibers and nomenclature of firearms.

CIFO 4056 Firearms Ballistics Laboratory

Academic credits: One (1)

Prerequisite: FISI3011, FISI 3012

Co-requisite: CIFO 4055

Description: Practice and application of the terms and concepts learned in class, which are used in the analysis of the different tests that are performed in a forensic laboratory to firearms, their components and derivatives.

CIFO 4501 Forensic Investigation I

Academic credits: Three (3)

Prerequisite: CIFO 3003

Contact hours: 45

Description: This course studies the fundamental principles and procedures used to solve crimes. It analyzes the crime scene and studies the identification, collection, preservation, transportation, and analysis of physical evidence, as established by the rules of evidence. Specific crimes are analyzed, with emphasis on those involving death.

CIFO 4502 Forensic Investigation II

Academic credits: Three (3)

Prerequisite: CIFO 4501

Contact hours: 45

Description: This course is a continuation of CIFO 4501. It studies the application of advanced criminal investigative techniques in the investigation of non-fatal crimes. Students will be able to investigate and evaluate the nature and extent of the modus operandi of organized crime. They will study, among others: white collar crime, drugs, money laundering, fraud, economic crime, cybercrime and government corruption; as well as the ethical element associated with these.

CIFO 4990 Capstone Seminar

Academic credits: Three (3)

Prerequisite: JUST 4308, CIFO 3005, CIFO 4502, QUIM 4015.

Contact hours: 45

Description: Discussion of emerging trends in forensic science and criminal justice and the application of that knowledge to the practice and ethics of the forensic science profession. Access to technological resources relevant to forensic science and criminal justice will be practiced promoting student learning. Opportunities to practice writing various reports conducted in the profession will be provided. The students will take this seminar in their final quarter-term of study.

ESGE 3007 Problems of Human Ecology

Academic credits: Three (3)

Contact hours: 45

Description: An interdisciplinary analysis and study of interrelated factors causing major ecological problems.

ESMA 3101 Applied Statistics I

Academic credits: Three (3)

Co-requisite: MATE 1001, FIS1 1002

Contact hours: 45

Description: Basic concepts of the methods of applied statistics. Descriptive statistics; probability; random variables; probability distributions. Statistical analysis using computers.

FISI 1001 Technical Physics I

Academic credits: Three (3)

Co-requisite: MATE 1001, FIS1 1002

Contact hours: 45

Description: An introductory course in Physics that focuses on the technical applications of the fundamental concepts of kinematics, dynamics, analytical statics, energy, hydraulics, and thermodynamics.

FISI 1002 Technical Physics Laboratory I

Academic credits: One (1)

Co-requisite: FIS1 1001

Description: A three-hour laboratory per week divided as follows: one hour of theoretical discussion and two hours of experimentation including experiments in mechanics and heat.

FISI 1003 Technical Physics II

Academic credits: Three (3)

Prerequisite: FIS1 1001

Co-requisite: FIS1 1004

Contact hours: 45

Description: The technical applications of electromagnetism, optics and modern physics are examined here.

FISI 1004 Technical Physics Laboratory II

Academic credits: One (1)

Prerequisite: FIS1 1002

Co-requisite: FIS1 1003

Description: A three-hour laboratory session per week, divided as follows: one hour of discussion and two hours of experimentation including experiments in electromagnetics and optics.

FISI 3011 University Physics I

Academic credits: Three (3)

Co-requisite: MATE 3031

Contact hours: 45

Description: Introductory course on physics as a fundamental science. It offers a unified view of physics, emphasizing conservation principles, the concepts of fields and waves, and the atomic viewpoint of matter. This first semester covers kinematics, dynamics of a particle, energy, and oscillatory motion. Dynamics of a particle system and the gravitational field.

FISI 3012 University Physics II

Academic credits: Three (3)

Prerequisite: FISI 3011

Contact hours: 45

Description: This course is devoted to the study of electrostatics, electromagnetism, electromagnetic waves and light, and some fundamental principles of modern physics and the structure of matter.

FISI 3013 University Physics Laboratory I

Academic credits: One (1)

Co-requisite: FISI 3011

Description: Laboratory course aimed at developing experimental skills. Experiments will be conducted in the following areas: measurements, vectors, statics, rectilinear and rotational kinematics, dynamics, conservation of momentum and energy, and thermal properties of matter.

FISI 3014 University Physics II Laboratory

Academic credits: One (1)

Prerequisite(s): PHYS 3011, PHYS 3013

Co-requisite: FISI 3012

Description: Laboratory course aimed at developing experimental skills. Experiments will be conducted in the following areas: vibratory motion, waves, static electricity, direct current, alternating current, Kirchhoff's laws, geometrical optics and physical optics.

MATE 0080 Preparatory Mathematics I

Academic credits: Three (3)

Prerequisite: Score of less than 600 on the mathematics achievement portion of the CEEB exam.

Contact hours: 45

Description: Notions of sets and subsets of numbers. Operations with rational numbers; divisibility rules, radicals of order 2; algebraic expressions; operations with polynomials, special products; equations and linear inequalities in one variable. Notions of geometry. Pythagorean Theorem.

MATE 0081 Preparatory Mathematics II

Academic credits: Three (3)

Prerequisite: Score of less than 650 on the mathematics achievement portion of the CEEB exam.

Contact hours: 45

Description: Notions of set and sets of numbers. Operations on rational numbers. Algebraic expressions: polynomials; rational expressions. First and second-degree equations in one variable. Literal equations. Application problems. Exponents and radicals.

MATE 1001 Technical Mathematics I

Academic credits: Four (4)

Prerequisite: MATE 0081 or CEEB Mathematics Achievement Test score of 650 or higher.

Contact hours: 60

Description: Includes the study of exponents and radicals, operations with polynomials, algebraic fractions, solving linear and quadratic equations, systems of equations, algebraic and trigonometric functions, and applications.

MATE 1002 Technical Mathematics II

Academic credits: Four (4)

Prerequisite: MATE 1001

Contact hours: 60

Description: Includes exponential and logarithmic functions, computations with logarithms; determinants, matrices and applications; complex numbers, polar coordinates, sequences, arithmetic and geometric progressions, lines, circles and the study of conics.

MATE 3001 Introductory Mathematics I

Academic credits: Three (3)

Contact hours: 45

Description: Review of elementary algebra, factoring, algebraic fractions, exponents and radicals, complex numbers, equations and inequalities. This course can be taught in face-to-face, hybrid or online mode.

MATE 3018 Precalculus and Analytical Geometry

Academic credits: Four (4)

Prerequisite: MATE 3001 or its equivalent

Contact hours: 75

Description: Basic concepts of logic and set theory. The body of real numbers, inequalities, absolute value, subsets of real numbers. Natural numbers. Proof by induction. Binomial theorem. Successions and series, limits of successions. Functions, algebra of functions, graphs. Analytic geometry the body of complex numbers, polynomials over complex numbers. The fundamental theorem of algebra. Trigonometric functions Inverse trigonometric functions. Exponential and logarithmic functions.

MATE 3026 Introduction to Computer Statistics

Academic credits: Three (3)

Prerequisite: MATE 3001

Contact hours: 45

Description: Introduction to the use of computers, basic concepts of scientific programming, introduction to descriptive statistics, permutations, combinations and the binomial theorem, Bayes' Theorem, random variables, normal distribution, hypothesis testing, chi-square distribution and regressions.

MATE 3031 Calculus I

Academic credits: Four (4)

Prerequisite: MATE 3172 or MATE 3018

Contact hours: 60

Description: Differential and integral calculus of a real variable, with applications.

MATE 3032 Calculus II

Academic credits: Four (4)

Prerequisite: MATE 3031

Contact hours: 60

Description: Includes: integration methods, polar coordinates, parametric equations, indeterminate forms, improper integrals, vectors, vector functions, surfaces, series, applications.

MATE 3041 Introduction to Mathematics I

Academic credits: Three (3)

Contact hours: 45

Description: Knowledge of algebra and geometry. Notions of set theory and logic. Axioms and elementary properties of real numbers. Linear equations. Inequalities. Graphs. Laws of exponents the binary system and other scales

MATE 3042 Introduction to Mathematics II

Academic credits: Three (3)

Prerequisite: MATE 3041

Contact hours: 45

Description: Functions and graphs. Elements of Euclidean geometry. Measurements of area and volume. Elements of probability and statistics. The normal distribution.

MATE 3171 Precalculus I

Academic credits: Three (3)

Contact hours: 45

Description: Real number systems, equations, inequalities, Cartesian plane, distance, midpoint, circle, lines, basic functions, transformations of functions, operations with functions, inverse function, complex numbers, polynomial functions, rational functions. Each unit can add 20% of content.

MATE 3172 Precalculus II

Academic credits: Three (3)

Prerequisite: MATE 3171

Contact hours: 45

Description: Exponential functions, logarithmic functions, trigonometric functions, systems of equations, matrices, determinants, sequences and series. Each unit can add 20% of content.

MECU 3031 Quantitative Methods for Business Administration I

Academic credits: Three (3)

Contact hours: 45

Description: Precalculus course for Business Administration students. Study of functions, linear, quadratic, rational, irrational, interval, exponential and logarithmic functions. Matrix algebra and solution of systems of equations by the reduction method. Emphasis on the application of these concepts in the solution of business administration problems such as: trend, depreciation, rate of change, optimization (income, cost), value stabilization, financial mathematics and preparation of graphical schemes.

MECU 3032 Quantitative Methods for Business Administration II

Academic credits: Three (3)

Prerequisite: MECU 3031

Contact hours: 45

Description: Introductory course in Differential Calculus for Business Administration students. Study of the concepts of limit and continuity. The derivative of a function and the rules of differentiation of functions of an independent variable. Emphasis on applications of continuous interest, marginal analysis, optimization of functions, and curve tracing. Introduction to integral calculus.

QUIM 3001 General Chemistry I

Academic credits: Four (4)

Co-requisite: QUIM 3003

Contact hours: 60

Description: Introduction to the fundamental concepts and laws of chemistry. Study of the periodic table, simple chemical reactions, stoichiometry, atomic structure, bonding and calorimetry. This course can be taught in face-to-face, hybrid or online mode.

QUIM 3002 General Chemistry II

Academic credits: Four (4)

Prerequisite: QUIM 3001

Co-requisite: QUIM 3004

Contact hours: 60

Description: Study of the properties of gas, solid, and liquid states of matter, dissolutions, colligative properties, chemical equilibrium, kinetics, thermodynamics, and electrochemistry.

QUIM 3003 General Chemistry I Laboratory

Academic credits: Zero (0)

Co-requisite: QUIM 3001

Description: This laboratory complements what has been studied in the General Chemistry I course. It includes laboratory experiences emphasizing safety techniques, chemical techniques in the laboratory and statistical analysis, physical and chemical properties, stoichiometry, types of reactions, preparation of solutions, gases, thermochemistry, periodic table, chemical bonds, and molecular geometry.

QUIM 3004 General Chemistry II Laboratory

Academic credits: Zero (0)

Prerequisite: QUIM 3001

Co-requisite: QUIM 3002

Description: This laboratory complements what has been studied in the General Chemistry II course. It includes laboratory experiences emphasizing safety techniques, laboratory chemical techniques and statistical analysis, intermolecular forces and states of matter, solutions, colligative properties, kinetics and reaction mechanism, chemical equilibrium and Le Chatelier's Principle, acids and bases, buffer systems, titration curves, thermodynamics and electrochemistry.

QUIM 3021 Fundamentals of General Chemistry

Academic credits: Four (4)

Contact hours: 60

Co-requisite: QUIM 3023

Description: Course on principles of general chemistry oriented toward students of health-related professions. Includes measurement system, matter and energy, atomic and molecular structure, radioactivity, stoichiometry, solutions, liquid state, solid state, gaseous state, chemical equilibrium and chemical kinetics.

QUIM 3022 Fundamentals of Organic Chemistry and Biochemistry

Academic credits: Four (4)

Prerequisite: QUIM 3021

Co-requisite: QUIM 3024

Contact hours: 60

Description: Basic course in organic chemistry and biochemistry oriented to students of health-related professions. Nomenclature, structure, properties and important reactions of the different families of hydrocarbons, alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines and amides. Principles of biochemistry with emphasis on carbohydrates, lipids and proteins.

QUIM 3023 Fundamentals of General Chemistry Laboratory

Academic credits: Zero (0)

Co-requisite: QUIM 3021

Description: General chemistry fundamentals lab to accompany the QUIM 3021 course.

QUIM 3024 Fundamentals of Organic Chemistry and Biochemistry Laboratory

Academic credits: Zero (0)

Prerequisite: QUIM 3021

Co-requisite: QUIM 3022

Description: Organic chemistry and biochemistry fundamentals lab to accompany QUIM 3022 course.

QUIM 3025 Analytical Chemistry

Academic credits: Four (4)

Prerequisite: QUIM 3002

Co-requisite: QUIM 3026

Contact hours: 60

Description: Survey of theory and methods for qualitative and quantitative analysis using gravimetric and volumetric methods, including potentiometric titrations. Brief introduction to spectrophotometric methods of analysis with emphasis on the ultraviolet-visible region. The lecture emphasizes the fundamental theory of chemical analysis, the relevant equilibria and the computation of results. Limitations and possible errors in the most common analytical determinations and the interpretation of the results obtained from them are also studied.

QUIM 3026 Analytical Chemistry Laboratory

Academic credits: Zero (0)

Prerequisite: QUIM 3002

Co-requisite: QUIM 3025

Description: Development of practical skills in quantitative analysis with emphasis on the determination of analytes in unknown samples through gravimetric, spectrophotometric, electrometric and chromatographic techniques. Special attention to the statistical treatment of data.

QUIM 3031 Organic Chemistry I

Academic credits: Four (4)

Prerequisite: QUIM 3002

Co-requisite: QUIM 3033

Contact hours: 60

Description: Study of carbon compounds by functional groups based on structure, nomenclature, stereochemistry, synthesis, reactions and mechanisms. In addition, a brief introduction to infrared spectroscopy, nuclear magnetic resonance and mass spectrometry is included.

QUIM 3032 Organic Chemistry II

Academic credits: Four (4)

Prerequisite: QUIM 3031

Co-requisite: QUIM 3034

Contact hours: 60

Description: Continuation of the study of carbon compounds by functional groups based on structure, nomenclature, stereochemistry, synthesis, reactions and mechanisms, including infrared spectroscopy, nuclear magnetic resonance and mass spectrometry techniques.

QUIM 3033 Organic Chemistry I Laboratory

Academic credits: Zero (0)

Prerequisite: QUIM 3002

Co-requisite: QUIM 3031

Description: This is a five-hour laboratory that complements the course of Organic Chemistry I. It includes, among others, practice in the methods of analysis, purification, identification and synthesis of organic compounds. It includes, among others, practice in the methods of analysis, purification, identification and synthesis of organic compounds.

QUIM 3034 Organic Chemistry Laboratory II

Academic credits: Zero (0)

Prerequisite: QUIM 3031

Co-requisite: QUIM 3032

Description: This is a five-hour laboratory that complements the Organic Chemistry II course. It includes, among others, the experimental study of different organic reactions and their mechanisms, qualitative analysis and identification of unknowns.

QUIM 4015 Instrumental Analysis

Academic credits: Four (4)

Prerequisite: QUIM 3025

Co-requisite: QUIM 4016

Contact hours: 60

Description: Chemical and instrumental methods of analysis both qualitative and quantitative. Fundamental principles related to the use of modern instrumentation and analytical methods.

QUIM 4016 Instrumental Analysis Laboratory

Academic credits: Zero (0)

Prerequisite: QUIM 3025

Co-requisite: QUIM 4015

Description: This is a laboratory that complements the instrumental analysis course. The laboratory work is organized in such a way that the student can operate all the available instruments almost independently. Chemical analysis will be performed by spectroscopic, electrochemical and chromatographic techniques.

Graphic Arts and Commercial Advertising Technology

AGRA 3005 Introduction to Communication

Academic credits: Three (3)

Contact hours: 45

Description: The course introduces the study of the development and evolution of the different forms of communication used by human beings throughout their history up to the current contemporary society. The student will establish the link between the transformation of society and the development of different resources, techniques and communication technologies that allow the continuous knowledge and exchange of human beings and their economic, cultural and social development. Likewise, the student will be able to identify the interpellation of communication processes and resources available to contemporary society. The course has a theoretical and practical orientation and uses the available audiovisual communication resources. This course can be taught in face-to-face, hybrid or online mode.

AGRA 3015 Introduction to Graphic Arts

Academic credits: Three (3)

Contact hours: 45

Description: Introductory course on the main printing processes. Experimentation with various processes, equipment and materials, to familiarize the student with various means of graphic communication.

AGRA 3018 Graphic Design

Academic credits: Three (3)

Contact hours: 45

Description: Theory, analysis and practice of design development and printed material. Development of the skill of preparing manual sketches. Each type of sketch and its function in the creative process is analyzed. Computer design preparation. Fundamental principles for the preparation of the design, emphasizing the technique of manual layout (mechanical separation of colors; considerations on typography and photographs and illustrations) and digitizing. Application of graphic design on computer using the corresponding programs. This course can be taught in face-to-face, hybrid or online mode.

AGRA 3039 Fundamentals of Typography

Academic credits: Three (3)

Prerequisite: AGRA 3005

Contact hours: 45

Description: Theory, analysis and practice of the various typographic forms. The conventional rules of typographic composition applied to manual, and computer graphic design are analyzed and practiced using the corresponding programs. This course can be taught in face-to-face, hybrid or online mode.

AGRA 3049 Digital Image Tracking and Handling

Academic credits: Three (3)

Prerequisite: AGRA 3005

Contact hours: 45

Description: The course focuses on the study of theories and techniques in the reproduction of line, half-tone, duo-tone, tri-tone, four, five or six color documents. The different peripherals and graphic equipment used to reproduce originals in black and white, process or Pantone colors will be discussed. Knowledge of the main programs used in the graphic media industry is developed. Emphasis will be placed on the ethical aspects of reproducing copyrighted documents.

AGRA 4059 Computations and Estimates

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of the economic principles involved in determining the cost of different printing methods. Study of the types, sizes, uses, weight and quality of paper. Determination of the cost of materials, production planning, cost per hour, profits and prices. Calculation of the

total cost of a job from design to final printing. This course can be taught in face-to-face, hybrid or online mode.

AGRA 4066 Creative Strategic Design

Academic credits: Three (3)

Prerequisite: AGRA 3018

Contact hours: 45

Description: The course will produce innovative creative design challenges within the contemporary graphic environment. It will offer diverse alternatives for personal and professional development to each student as a future creative designer. It is expected to overcome competitive design challenges in different sectors: industrial, business, advertising and personal. In each creative work challenge, students will develop assertive problem-solving skills and develop compelling visual strategies that will help them to excel with distinction, establishing the difference of a creative designer over an average designer. The course seeks that the student is positioned within the new trends in design and thereby gain learning from their own experiences in the creative process. They will place their digital creative concepts through an interactive multimedia digital portfolio.

AGRA 4067 Introduction to Lithographic Presses

Academic credits: Three (3)

Prerequisite: AGRA 3049

Contact hours: 45

Description: Introduction to the principles and methods of graphic reproduction on lithographic presses, the operation of the press and simple printing exercises, production of different publications. Use and handling of lithographic presses. Production of one- and two-color prints.

AGRA 4069 Elements of Production Management

Academic credits: Three (3)

Contact hours: 45

Description: Introductory course in the art and science of production management in printing. Emphasis is given to the theory and practice of organization in production, purchasing, production planning and control, the study of inventories, job control and measurement. This course can be taught in face-to-face, hybrid or online mode.

AGRA 4070 Commercial Packaging Design

Academic credits: Three (3)

Prerequisite: AGRA 3018

Contact hours: 45

Description: Through this course the student will develop and create designs for commercial packaging based on its sustainability with the environment. Students will learn the various formats of packaging to serve for: product protection, consumer protection, manufacturer protection, and environmental protection. The course is designed to prepare the student in the process of label design or adhesive label and all that comprises the various materials of elaboration and manufacture in the United States (FDA) and in the Island (EPA).

AGRA 4075 Screen Printing I

Academic credits: Three (3)

Contact hours: 45

Description: Theoretical and practical course on the methods of textile printing. All phases of the process are covered from the preparation of the original artwork to the finishing of the print. In addition, other areas such as frame preparation, color matching and printing on various materials are considered.

AGRA 4077 Advanced Lithographic Press

Academic credits: Three (3)

Prerequisite: AGRA 4067

Contact hours: 45

Description: This course comprises study, analysis, and practice in all the elements studied in the previous course Introduction to Lithographic Press. It includes general practical knowledge about the press and its development, main parts, gears, regulation and operation. Production of different publications. Use and handling of the lithographic press. Elaboration of full color prints.

AGRA 4079 Paper and Ink Handling

Academic credits: Three (3)

Contact hours: 45

Description: Theory and analysis of two of the most important and controversial materials in graphic media. A brief history of the history of paper and ink. The subject is deepened with the analysis and classification of different types of paper and inks, their components and unique characteristics. We then work with the behavior of both materials with each other and their appropriate use for various printing systems.

AGRA 4085 Screen Printing II

Academic credits: Three (3)

Prerequisite: AGRA 4075

Contact hours: 45

Description: Advanced course in screen printing in which photo-sensitive films and emulsions are covered in preparation for stenciling. This technique can be used to produce line and halftone work.

AGRA 4089 Finishing Operations

Academic credits: Three (3)

Contact hours: 45

Description: Processes used to finish the printed work. It includes cutting, folding, collating, stitching, deburring, gluing, perforation, stamping, packaging, and any other finishing that the job requires. This course includes the last step that is given to a printed work, whether it is: cutting, binding, folding, laminating, sewing, etc.

AGRA 4111 Research Methods in Graphic Arts I

Academic credits: Three (3)

Prerequisite: MERC 3115

Contact hours: 45

Description: Graphic Arts Research Methods I presents a reflective look at the construction of modern science and the use of the scientific method in advertising research. Theoretical, methodological, and practical discussion and use of causal, functional, structural, phenomenological, and dialectical research designs are emphasized. Three dimensions of the designs are particularly explored: 1) the epistemological assumptions of each design, 2) the collection or analysis techniques used in the designs, and 3) critiques of the designs. The course presents the research process as a theoretical-practical experience, as the student develops a research proposal that includes the following: identification of a research problem, research questions, objectives, literature review, theoretical framework, hypothesis, and methodological design. This course can be taught in face-to-face, hybrid or online mode.

AGRA 4112 Research Methods in Graphic Arts II

Academic credits: Three (3)

Prerequisite: AGRA 4111

Contact hours: 45

Description: The course in Research Methods in Graphic Arts II is based, from the first course, on graphic research designs. Assuming scientific research as a relationship of theoretical field and observations, the most used methods and techniques in the quantitative and qualitative method of research are studied. The course culminates with the implementation of the research proposal previously approved in the first part of this course. This course can be taught in face-to-face, hybrid or online mode.

AGRA 4115 Web Page Design and Creation

Academic credits: Three (3)

Prerequisite: AGRA 3018

Contact hours: 45

Description: Through this course the student will learn the technology of design and creation of web pages for the Internet. Students will develop, plan and create a web site through the exploration, technique and appropriate programming to import and export graphic images for the Internet. It also enables the student to optimize, animate images and combine them into slices and hot spots using appropriate design programming languages and html, xhtml and css. Moreover, understand the world wide web world by learning the objectives of web page development, its purpose, its audience and quick download elements that are essential to the success of the site. This course is intended for students interested in the interactive world of the Internet.

AGRA 4125 Digital Printing

Academic credits: Three (3)

Prerequisite: AGRA 4077

Contact hours: 45

Description: The theory, analysis and practice of the most innovative printing system in the graphic media industry is studied. The different digital presses on the market and their functions

are mentioned and described. The procedure of acquisition and manipulation of images and text to obtain good printing quality is discussed. The procedure, proper use and maintenance of the equipment is explained.

AGRA 4305 Supervised Practicum AGRA I

Academic credits: Three (3)

Contact hours: 45

Description: The course consists of an 80-hour component, in which the student will be placed in a printing company or agency. The student's work will be under the supervision of the designated professional in the company and the professor in charge of the course. The student will be able to observe the real and functional operations that take place in the practice center. In this way the student will be able to put into practice, in an integrated and structured way, the acquired knowledge, skills, dispositions and ethical attitudes developed through the learning process.

AGRA 4306 Supervised Practice AGRA II

Academic credits: Three (3)

Prerequisite: AGRA 4305

Contact hours: 45

Description: The course consists of an 80-hour supervised internship, in which the student will be placed in the pre-press, post-press and management area of a printing company. The student will be supervised by a professional designated by the printing company and the professor in charge of the course. The student will be able to observe the real and functional operations that take place in the press, post-press and management areas of the practice center. In this way, the student can put into practice, in an integrated and structured way, the acquired knowledge, skills, dispositions and ethical attitudes developed through the learning process.

COMU 3117 Design and Production with Multimedia

Academic credits: Three (3)

Prerequisite: AGRA 3018

Contact hours: 45

Description: The course Design and Production with Multimedia seeks to integrate advanced production techniques making use of multimedia programming. It aims to give the student the necessary tools to work with the design and production of multimedia projects.

COPU 4365 Media Legislation and Information Deontology

Academic credits: Three (3)

Prerequisite: AGRA 3005

Contact hours: 45

Description: Study of legal and ethical standards related to media and information law. It includes the discussion of controversies related to new information and communication technologies, through lectures, aimed at incoming students, so that their future professional decisions are covered on a legal and ethical basis.

ESIN 4077 Introduction to Scientific Research in Communications

Academic credits: Three (3)

Prerequisite: AGRA 3005

Contact hours: 45

Description: This course allows the student to apply insight into the basic elements of scientific research and the same in the development of data analysis. Special emphasis is given to the construction of questionnaires for surveys and the process of data interpretation. The analysis includes the various areas of communication (mass, interpersonal, organizational). The student is exposed to the two major research currents: quantitative and qualitative, although, being an introductory course, emphasis will be given to the quantitative current.

PUCO 3025 Principles of Advertising

Academic credits: Three (3)

Contact hours: 45

Description: The course introduces the student to the world of advertising, familiarizing him/her with the historical development and current impact of the advertising function within the marketing management of the firm and, further, within the consumer society. The relationship between advertising and the consumer is considered, and the various elements of an advertisement and its effect on the average consumer's buying behavior are studied. The student is familiarized with the different means of dissemination of the advertising message and with the necessary considerations that the publicist makes when developing an effective media strategy. The student is exposed to the concept of what constitutes an advertising campaign and the analysis of the elements that are necessary to design a successful campaign. Finally, the student is familiarized with the different institutions that contribute to the advertising process. This course can be taught in face-to-face, hybrid or online mode.

PUCO 3035 Fundamentals of Drawing

Academic credits: Three (3)

Contact hours: 45

Description: Study of the basic elements of drawing as an instrument of advertising expression. Experimentation with different materials and techniques to achieve a particular objective within advertising design. Use of drawing as an integral and versatile part of print advertising.

PUCO 3045 Introduction to Computer Design

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the use of the computer to generate design, illustrations, drawings and paintings that can be used both for self-expression and for the elaboration of graphics, advertising and audiovisual material.

PUCO 3046 Advertising Copywriting

Academic credits: Three (3)

Prerequisite: PUCO 3025

Contact hours: 45

Description: Study of the basic considerations of the creative process, from the development of the creative process, the development of the concept to the transfer of this to an advertising message. The student is exposed to the elementary rules of the structure of a creative program that begins with the definition of objectives and culminates with the presentation of a final text in its versions for television, film, radio and print media. The course also considers the influence of behavioral sciences on copywriting and analyzes in detail the elements of the advertising copy and the functions of the copywriter within the profession.

PUCO 4005 Introduction to the Study of the Cultural Industries

Academic credits: Three (3)

Prerequisite: AGRA 3005

Contact hours: 45

Description: The student will learn about the media with symbolic content and its cycle of production, distribution and consumption of its production, as well as the use of these media by advertising and public relations and the novel cybernetic expression of communication through the Internet, its globalizing effects on the economic order, as well as its transculturizing potentiality.

PUCO 4007 Small and Medium Business Theory and Management

Academic credits: Three (3)

Contact hours: 45

Description: The course introduces the student to the problems inherent in the administration of small and medium-sized businesses. It discusses in detail the theory and the administrative process considering its application in business. It also develops an entrepreneurial mentality in students and motivates them to venture into the business world.

PUCO 4055 Design of Computer Publications

Academic credits: Three (3)

Prerequisite: PUCO 3045

Contact hours: 45

Description: Introduction to the specialized studio of desktop publishing. Study of computer programs designed especially for the graphic artist to produce publications, from the initial layout stages to the final "paste-up" artwork ready for printing.

PUCO 4071 Advertising Radio Production

Academic credits: Three (3)

Prerequisite: PUCO 3025

Contact hours: 45

Description: Study of theory, appreciation and practice for audio and radio program production. Analysis of the structure of the advertising text and the writing of advertising scripts for the radio medium.

PUCO 4072 Advertising Television Production

Academic credits: Three (3)

Prerequisite: PUCO 4071

Contact hours: 45

Description: Study of theory, appreciation and practice for video and television program production. Analysis of the structure of the advertising text and the writing of advertising scripts for the television medium.

PUCO 4079 Advanced Techniques in Advertising Television Production

Academic credits: Three (3)

Contact hours: 45

Description: Advanced training course in the handling of specialized equipment and training in television advertising production. Theoretical analysis of television content and the diversity of advertising productions. In-depth training on the handling of advanced functions in television equipment. Writing and production of a television advertising program where there is a balance between television content and production values.

PUCO 4085 Techniques in Advertising Campaigns

Academic credits: Three (3)

Prerequisite: PUCO 3025

Contact hours: 45

Description: The course introduces the student to the planning, research and implementation of strategies in advertising and public relations. Emphasis is placed on the development of advertising and public relations campaigns and the efficiency of the results will be evaluated. Use of the audiovisual resources available in the production of a presentation for a client.

PUCO 4086 Advertising Photography I

Academic credits: Three (3)

Prerequisite: PUCO 3025

Contact hours: 45

Description: Theoretical and practical course on the basic procedures of emulsion and digital still photography. Emphasis is given to advertising photography and its application in different advertising vehicles. The course includes the history of photography, the structure of the camera, concepts of exposure and composition, lighting techniques, processing and digital printing. Emphasis is also placed on the contractual relationship between the advertising agency, the photographer and the client and the copyright of the photograph.

PUCO 4089 Advanced Techniques in Advertising Radio Production

Academic credits: Three (3)

Prerequisite: PUCO 4071

Contact hours: 45

Description: This advanced course provides the opportunity to develop skills in advanced radio advertising production techniques.

PUCO 4111 Research Methods PUCO I

Academic credits: Three (3)

Prerequisite: MERC 3115

Contact hours: 45

Description: The Commercial Advertising Research Methods I course presents a reflective look at the construction of modern science and the use of the scientific method in advertising research. Emphasis is placed on theoretical, methodological, and practical discussion, its use in causal, functional, structural, phenomenological, and dialectical research designs. Three dimensions of the designs are particularly explored: 1) the epistemological assumptions of each design, 2) the collection or analysis techniques used in the designs, and 3) the critiques of the designs. The course presents the research process as a theoretical-practical experience, as the student develops a research proposal that includes the following: identification of a research problem, research questions, objectives, literature review, theoretical framework, hypothesis, and methodological design.

PUCO 4112 Research Methods PUCO II

Academic credits: Three (3)

Prerequisite: PUCO 4111

Contact hours: 45

Description: The course of Research Methods in Commercial Advertising II is based, from the first course, on advertising research designs. Assuming scientific research as a relationship of theoretical field and observations, the most used methods and techniques in the quantitative and qualitative method of research are studied. The course culminates with the implementation of the research proposal previously approved in the first part of this course.

PUCO 4115 Illustrative Advertising Photography

Academic credits: Three (3)

Prerequisite: PUCO 4086

Contact hours: 45

Description: This illustrative advertising photography course studies the construction of photographic images whose elements have been carefully chosen and then manipulated. The latest digital computer programs are used to handle and process the image in order to create an impact on the reader of a publication.

PUCO 4116 Editorial and Corporate Photography

Academic credits: Three (3)

Prerequisite: PUCO 4086

Contact hours: 45

Description: This editorial and corporate photography course explores the basic theoretical and practical aspects for all photography that will be used in various publications. These can be books, magazines, annual reports or any printed document that needs photography to support the information.

PUCO 4305 Supervised Practice PUCO I

Academic credits: Three (3)

Prerequisite: PUCO 4065

Contact hours: 45

Description: The course consists of an 80-hour supervised industry internship in which the student will be placed in an advertising agency, public relations agency or collateral communications services office. The student's work will be under the supervision of the designated professional in that agency or office and the professor in charge of the course. The student will be able to observe the real and functional operations that take place in the areas of account management, media and creative. In this way, the student will be able to put into practice, in an integrated and structured way, the acquired knowledge, skills, dispositions and ethical attitudes developed through the learning process.

PUCO 4306 Supervised Practice PUCO II

Academic credits: Three (3)

Prerequisite: PUCO 4305

Contact hours: 45

Description: The course consists of a second 80-hour supervised industry internship in which the student will be placed in an advertising agency, public relations agency or collateral communications services office. The student's work will be under the supervision of the designated professional in that agency or office and the professor in charge of the course. The student will be able to observe the real and functional operations that take place in the areas of account management, media and creative. In this way, the student will be able to put into practice, in an integrated and structured way, the acquired knowledge, skills, dispositions and ethical attitudes developed through the learning process.

Interior Design

DESI 3005 Fundamentals and Theory of Design

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the principles and elements of design and their application in the planning of living spaces and the distribution of furniture. Study of color, its influence and effective use in interiors. This course can be taught in face-to-face, hybrid or online mode.

DINT 1001 Interior Design I

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the study of the basic principles of two-dimensional orthographic drawing in plan, elevation and section, plan reading, symbology, the use of the architectural scale, metric and drawing instruments. It includes activities that require the application of the concepts that govern the development of space, form, volume, rhythm, balance and proportion. In addition, students work on the solution of spatial planning design problems for residential projects.

DINT 1002 Interior Design II

Academic credits: Three (3)

Prerequisite: DINT 1001

Contact hours: 45

Description: Skills are developed for the presentation of ideas in three-dimensional form using axonometric drawing and perspective as a medium. Students produce solutions to interior design problems using the tools of graphic presentation with color, texture, and three-dimensional details. The use of human scales is incorporated as a method of visual proportion.

DINT 1005 Interior Decoration

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the principles and elements of design and their application in the planning of living spaces and the distribution of furniture. Study of color, its influence and effective use in interiors.

DINT 1006 Decoration Accessories I

Academic credits: Three (3)

Prerequisite: DINT 1005

Contact hours: 45

Description: Study of materials and finishes used in interior design projects, their properties, characteristics and applications. Introduction to material calculations, cost estimates and tables of finishes for floor, wall and ceiling coverings.

DINT1007 Decoration Styles I

Academic credits: Three (3)

Contact hours: 45

Description: Study of the characteristics of artistic styles and movements from prehistoric times to the Baroque, focusing on architecture, interior design, accessories and furnishings.

DINT 2001 Interior Design III

Academic credits: Three (3)

Pre-requisite: DINT 1001, DINT 1002

Contact hours: 45

Description: This course introduces the basic knowledge of electricity and the development of residential and commercial electrical lighting design plans. Concepts governing lighting design, types of lamps, luminaires, and interior lighting calculations are studied. Basic understanding of air conditioning, communications and fire protection systems.

DINT 2002 Interior Design IV

Academic credits: Three (3)

Pre-requisite: DINT 1001, DINT 1002, DINT 2001

Contact hours: 45

Description: Development of interior design projects where acquired knowledge is applied to the solution of interior space problems. Emphasis on visual presentation, production of construction documents, selection and specification of cladding materials, furniture and decorative accessories. Organization of completion tables with sample books and cost estimates for the project.

DINT 2005 Decoration Styles II

Academic credits: Three (3)

Prerequisite: DINT 1007

Contact hours: 45

Description: Study of the characteristics of artistic styles and movements from the Rococo era to the modernist movements, focusing on architecture, interior design, furniture and accessories.

DINT 2006 Decoration Complements II

Academic credits: Three (3)

Prerequisite: DINT 1006

Contact hours: 45

Description: Study of textiles, door and window coverings and includes decorative accessories used in a design. Their characteristics and applications in the interior environment will be studied. Development of cost estimates and calculation of materials.

DINT 2007 Exterior Design and Landscaping

Academic credits: Two (2)

Pre-requisite: DINT 1001, DINT 1005

Contact hours: 30

Description: Planning of exterior and interior, public and private spaces through the development of a landscaping concept and plans, introduction to the use of plants, their ecological importance and the planting of vegetation, according to their growth characteristics and the space to be located.

DINT 2008 Commercial Decoration

Academic credits: Two (2)

Prerequisite: DINT 1001, 1005, 1006, 2001

Contact hours: 30

Description: Study of the design of commercial establishments, their codes and regulations applicable to spatial planning, selection of furnishings and cladding materials.

DINT 2009 Decoration Practice

Academic credits: Three (3)

Contact hours: 90 practice hours and 24 seminar hours

Prerequisite: DINT 1001, 1002, 1005, 1006, 1007, 2001, 2005, 2006

Description: The student will be exposed to the work field by completing a supervised internship. Students will prepare for the job search by completing a resume and portfolio of work completed during their years of study.

DINT 2015 CAD Technical Design

Academic credits: 3

Pre-requisite: DINT 1001, DINT 1005

Contact hours: 45

Description: Use of computer aided design and drawing applications; the student develops skills in the use of Autodesk's AutoCAD program for mechanical drawing.

DINT 2016 Digital Representation Techniques for Interior Design

Academic credits: 3

Prerequisite: DINT 1001, DINT 1002

Contact hours: 45

Description: Through this course, the student develops computer skills to generate three-dimensional models and digital images. The proper use of these tools allows students to visualize their designs and explore various spatial configurations in order to communicate their ideas in a clear and concise graphic form. This course can be taught in face-to-face, hybrid or online mode.

DINT 3005 Technical Drawing

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the study of the basic principles of two-dimensional orthographic drawing in plan, elevation, section, as well as plan reading, symbology, the use of the architectural scale, metric and drawing instruments. Skills are developed for the presentation of ideas in three-dimensional form using axonometric drawing and perspective as a medium. Students will make three-dimensional drawings using graphic presentation tools with color and textures. The use of human scales as a method of visual proportion is incorporated.

DINT 3101 Design Complements I

Academic credits: Three (3)

Prerequisite: DESI 3005

Contact hours: 45

Description: Study of materials and finishes used in interior design projects, their properties, characteristics and applications. Introduction to material calculations, cost estimates and tables of finishes for floor, wall and ceiling coverings. This course can be taught in face-to-face, hybrid or online mode.

DINT 3102 Design Complements II

Academic credits: Three (3)

Prerequisite: DINT 3101

Contact hours: 45

Description: Study of textiles, doors and windows, their coverings and includes decorative accessories used in a design. It will study their characteristics and applications in the interior environment, development of cost estimates and material calculations.

DINT 3105 Fundamentals of Green Design

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to sustainable design, environmental protection and resource conservation for students to develop sensitivity and a general knowledge of the factors that influence design and the selection of materials in an environmentally responsible manner. This course can be taught in face-to-face, hybrid or online mode.

DINT 3111 Green Interior Design I

Academic credits: Three (3)

Prerequisite: DESI 3005, DINT 3005, DINT3105

Contact hours: 45

Description: Introduction to the application of the concepts that govern the development of interior spaces; form, volume, rhythm, balance and proportion. In addition, students will work on the solution of design and spatial planning problems for sustainable residential projects. This course can be taught in face-to-face, hybrid or online mode.

DINT 3112 Green Interior Design II

Academic credits: Three (3)

Prerequisite: DINT 3111

Contact hours: 45

Description: Application of the concepts and principles of sustainable design to the development of commercial projects, such as displays and retail stores. This course can be taught in face-to-face, hybrid or online mode.

DINT 3115 Certification for Buildings, Codes & Regulations

Academic credits: Three (3)

Prerequisite: DESI 3005, DINT3005

Contact hours: 45

Description: Study of laws, codes, regulations, and certifications that promote the safety, health, and welfare of the public in indoor spaces. Emphasis on accessibility parameters, conditions of use and occupancy for indoor spaces. Conservation and efficient resource management through the green building certification system is discussed.

DINT 3125 Digital Technical Design

Academic credits: Three (3)

Prerequisite: DINT 3111

Contact hours: 45

Description: Use of computer aided drawing and design applications. The student develops skills in the use of a state-of-the-art computerized program for mechanical drawing.

DINT 3131 Design Styles I

Academic credits: Three (3)

Contact hours: 45

Description: Study of the characteristics of artistic styles and movements from prehistory to the Baroque, focusing on architecture, interior design, its accessories and furnishings. This course can be taught in face-to-face, hybrid or online mode.

DINT 3132 Design Styles II

Academic credits: Three (3)

Prerequisite: DINT 3131

Contact hours: 45

Description: Study of the characteristics of artistic styles and movements from the Rococo era to the modernist movements, focusing on architecture, interior design, furniture and accessories.

DINT 3135 Interior Design Technology

Academic credits: Three (3)

Pre-requisite: DINT 3111, DINT 3112

Contact hours: 45

Description: This course introduces the basic knowledge of electricity and lighting and the development of residential and commercial electrical and lighting design plans. Concepts governing lighting design, types of lamps, luminaires, and interior lighting calculations are studied. Basic understanding of acoustics, design of air conditioning systems, communications and fire protection.

DINT 4005 Furniture Design

Academic credits: Three (3)

Prerequisite: DINT 4113

Contact hours: 45

Description: Introduction to the study and development of design skills applicable to the creation of residential and commercial furniture.

DINT 4105 Landscape Design

Academic credits: Three (3)

Pre-requisite: DINT 3111, DINT 3112

Contact hours: 45

Description: Planning of exterior and interior spaces, public and private, through the development of a landscape concept and plans. Use of sustainable strategies for the development of projects. Introduction to the use of plants, their ecological importance and the planting of vegetation according to their growth characteristics and the space to be located.

DINT 4113 Green Interior Design III

Academic credits: Three (3)

Prerequisite: DINT 3112, DINT 3135

Contact hours: 45

Description: Development of interior design projects where green design knowledge will be applied to spatial planning problems of offices and institutions. This course can be taught in face-to-face, hybrid or online mode.

DINT 4114 Green Interior Design IV

Academic credits: Three (3)

Prerequisite: DINT 4113

Contact hours: 45

Description: Development of interior design projects where sustainable strategies will be applied to solve spatial planning problems in hotels and restaurants.

DINT 4115 Design Portfolio

Academic credits: Two (2)

Pre-requisite: DINT 4114, DINT 4005

Contact hours: 30

Description: Course designed to provide students with the methodology to prepare a professional portfolio of work completed during their years of study. Emphasis on composition and presentation skills and techniques. The student prepares for the job search by preparing a resume and letter of application.

DINT 4131 Research Methods in Interior Design I

Academic credits: Three (3)

Pre-requisite: DINT 3111, DINT 3112, DINT 4113, DINT 4114

Contact hours: 45

Description: The course presents a reflective look at the science of research methods. Emphasis is placed on methodological discussion, practice and its use in research designs. The research process is presented as a theoretical-practical experience, as the student develops a research proposal on a topic related to Design, which includes the following: identification of a problem, research questions, objectives, literature review, theoretical framework, hypothesis, and methodological design.

The Final Project Research synthesizes the knowledge acquired by the student during the studies of Interior Design. The student will develop research on interior design that addresses in an integrated manner all areas of professional knowledge with sufficient cohesion to allow their development as a future design professional.

DINT 4132 Research Methods in Interior Design II

Academic credits: Four (4)

Prerequisite: DINT 4131

Contact hours: 60

Description: The course presents a synthesis of the concepts learned and executed through the research project conducted in the previous course Interior Design Research Methods I. The research conducted in the previous course is developed as an interior design project.

This Final Project synthesizes the knowledge acquired by the student during the studies of Interior Design. The course presents the culmination of the research process as a practical experience, as students develop their interior design proposal in two-dimensional graphic and three-dimensional/plastic media.

This project addresses in an integrated manner all areas of professional knowledge with sufficient cohesion to enable their development as future design professionals.

DINT 4135 Interior Design Supervised Practice

Academic credits: Three (3)

Pre-requisite: DINT 3102, DINT 4114, DINT 3132, DINT 4115

Contact hours: 150 practice hours and 24 seminar hours

Description: The student will be exposed to the work field by completing a supervised internship. Designed to provide students with the opportunity to apply all the knowledge, skills and abilities learned throughout their courses. The seminar will discuss different aspects related to the professional practice of an Interior Designer. Students will share experiences and receive guidance on their performance and progress during the course.

Education

EDES 4006 Nature and Needs of Exceptional Learners

Academic credits: Three (3)

Contact hours: 45

Description: Provides an overview of the psychological and educational needs of exceptional learners. It provides the experiences and knowledge necessary for the design and implementation of appropriate curricular programs, techniques, and strategies for these students. Laboratory and field experiences, including observations of exceptional learners in regular and special classrooms, will be an integral part of the course. This course can be taught in face-to-face, hybrid or online mode.

EDFI 3016 Individual and Ensemble Sports

Academic credits: Three (3)

Contact hours: 45

Description: Theory and practice of fundamental skills in handball, basketball, volleyball, softball, and track and field. Emphasis on the sequence and methodology of teaching at the school level, within the concept of lifetime sports. Each student will pass a practical theory exam in two other sports not covered in class.

EDFI 3026 Games, Rhythms & Gymnastics

Academic credits: Three (3)

Contact hours: 45

Description: Theory and practice for teaching the concepts and skills of games, rhythms, and gymnastics appropriate to the elementary physical education curriculum. The unit on games includes those of simple organization, preparatory for new sports, and cooperative games. The rhythm unit includes body expression and dances.

EDFI 3195 Massage and Taping

Academic credits: Two (2)

Contact hours: 30

Description: A practical course that aims to familiarize the student with the elementary concepts of bandages and their physiological effects, as well as the need for and application of preventive and protective bandages. (Students should bring their own material).

EDFI 3425 Weightlifting

Academic credits: Two (2)

Description: In the theoretical part we will study the history, rules, terminology and fundamentals of the sport. Olympic lifts and free lifts. Individual skills of both lifts will be taught in the skill teaching periods. Special emphasis will be given to the use of this sport in the conditioning of the body in other sports through weight training.

EDFI 3385 Physical Efficiency

Academic credits: Two (2)

Description: Exercises for body conditioning. Development of qualities such as agility, flexibility, balance, coordination and strength. How to condition an athlete's body. Physical efficiency tests will be administered at the beginning and end of the course.

EDFI 3395 Physical Education for the Exceptional Child

Academic credits: Three (3)

Contact hours: 45

Description: Adaptation of physical education to the needs of the child who deviates from the norm in mental, physical, or social characteristics. Special emphasis on programs for the handicapped.

EDFI 3451 Tennis

Academic credits: Two (2)

Description: Study of the history, rules, facilities and playing equipment. Practice the fundamental skills of the sport, such as: forehand, backhand and service strokes.

EDFI 3452 Intermediate Tennis

Academic credits: Two (2)

Prerequisite: EDFI 3451

Description: Intermediate skills of the game of offense, defense, techniques and strategies, double and single plays.

EDFI 3465 Personal and Community Health

Academic credits: Three (3)

Contact hours: 45

Description: It studies the healthy way of life from the point of view of the individual and the community in which he/she lives giving special attention to the interrelationships involved. It includes topics such as: inheritance, exercise, rest, nutrition, environmental health, personal habits, public hygiene, communicable diseases, etc.

EDFI 3515 Recreational Crafts and Handicrafts Skills

Academic credits: Two (2)

Description: Fundamental techniques of using inexpensive materials to make personal and household items for recreation. Instruction in making projects with wooden shakers, shells and shells, artificial flowers and their arrangements. Simple methods to encourage activity and use for recreational purposes.

EDFI 3525 Recreational Manual Skills

Academic credits: Two (2)

Prerequisite: EDFI 3515

Description: Fundamental techniques of using inexpensive materials to make personal and household items for recreation. Instruction in making wood projects; palier mache; crumb and/or decoupage. Simple method to encourage creativity and to be used for recreational purposes.

EDFI 3545 Elementary Folk Dances

Academic credits: Two (2)

Description: Students are introduced to the history of dance, customs of other peoples, factors that influence the pattern of dances, how to improve technique when dancing folk dances. Students will practice basic skills, simple choreography, fundamental movements, dance steps, dance positions and dance formations. One unit of Puerto Rican folkloric dances will be taught.

EDFI 3555 History and Principles of Physical Education

Academic credits: Three (3)

Contact hours: 45

Description: Historical investigation of physical education from its origin to the present. Study and interpretation of the fundamental principles in physical education programs.

EDFI 3595 Basketball and Football

Academic credits: Two (2)

Description: Emphasis is given to the theory and practice of the sport based on the game, offense, defense and rules of the game.

EDFI 3665 Recreational Games

Academic credits: Two (2)

Description: The history, equipment specifications, facilities and rules to be followed in the different sports are studied. The fundamental skills and strategies of each of the chosen games will be practiced.

EDFI 3675 Life, Health and Wellness

Academic credits: Three (3)

Contact hours: 45

Description: Study of major individual and collective health problems. Emphasis on the relationship of lifestyles, external factors and their consequences on individual and societal well-

being. Basic aspects of safety, prevention and management of risks and / or accidents in daily life at home and in the community. This course can be taught in face-to-face, hybrid or online mode.

EDFI 3695 First Aid and Safety

Academic credits: Three (3)

Contact hours: 45

Description: Discussion of safety causes and procedures for prevention, injury management and medical emergencies in physical education. Includes discussions of drug, cigarette, and alcohol use and abuse. Emphasis on legal implications in providing first aid. Includes basic bandaging and coordination for CPR certification.

EDFI 3698 Psychomotricity

Academic credits: Three (3)

Contact hours: 45

Description: Fundamentals of neurological perceptual motor development in infancy and childhood with and without impairment. Emphasis on the phases and stages of motor and perceptual development, including factors that affect them. Includes principles of motor development and learning, perceptual motor intervention techniques, and deviations in motor and perceptual motor development.

EDFI 4165 Physical Education, Recreation and Sports Management

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the organization, supervision and administration involved in a physical education program.

EDFI 4166 Introduction to Therapeutic Recreation

Academic credits: Three (3)

Contact hours: 45

Description: This course is designed to familiarize students with the profession of recreation therapy including history, philosophies, programs, treatments, research, and populations served. It is intended to provide the student with a basic experience of the meaning of therapeutic recreation.

EDFU 3001 Human Growth and Development I

Academic credits: Three (3)

Contact hours: 45

Description: This course seeks to give prospective teachers an understanding of the nature and scope of psychology. As a background to better understand the educational process, it confronts the student with knowledge about the growth and development of children and adolescents. It examines the natural and environmental forces that contribute to the development of a healthy personality. This course can be taught in face-to-face, hybrid or online mode.

EDFU 3002 Human Growth and Development II

Academic credits: Three (3)

Prerequisite: EDFU 3001

Contact hours: 45

Description: In this course students are brought into contact with the psychological principles that explain the teaching-learning process and the individual conditions that affect it. Part of the time is devoted to the study of the evaluative process with special attention to the principles governing the construction of educational examinations and school promotion. This course can be taught in face-to-face, hybrid or online mode.

EDFU 3007 Social Foundations of Education

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of the fundamental principles of the Social Sciences and their relationship with the educational process. Discussion of the social problems that have conditioned or conditioned the development of education.

EDFU 3017 Assessment for Learning

Academic credits: Three (3)

Contact hours: 45

Description: It aims to create awareness in the student-teacher of the philosophy of evaluation as part of the educational process. It also aims to promote in the student a knowledge of quantitative and qualitative assessment techniques and their uses. Valid and reliable assessment techniques will be analyzed to identify, stimulate, predict and guide the student's behavioral characteristics. It will also include the organization, presentation and statistical analysis of the data revealed in the evaluation instruments, interpretation of the data to make intelligent decisions regarding teaching strategies.

EDFU 4007 Principles of Research

Academic credits: Three (3)

Contact hours: 45

Description: Familiarizes students with the techniques and methods of scientific research. It will develop incipient skills in the identification of problems and hypotheses and in the selection of methods of collecting, analyzing and interpreting data. This course can be taught in face-to-face, hybrid or online mode.

EDFU 4019 Philosophical Foundations of Education

Academic credits: Three (3)

Contact hours: 45

Description: Studies the relationship that exists between philosophy and the pedagogical endeavor. Introduction to the basic problems of philosophy, with special emphasis on its educational implications. This course can be taught in face-to-face, hybrid or online mode.

EDIN 3005 Basic Foundations of Occupational Education

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of the objectives that govern the function of different types of industrial vocational programs. This course can be taught in face-to-face, hybrid or online mode.

EDIN 3006 Special Methods in Trades and Tasks Analysis

Academic credits: Three (3)

Contact hours: 45

Description: Practice in the technique of analysis, determination of curriculum content; preparation of instruction sheets for teaching trades in industrial vocational education. This course can be taught in face-to-face, hybrid or online mode.

EDIN 3015 Technical Drawing

Academic credits: Three (3)

Contact hours: 75

Description: Fundamental principles of drafting with tools for mechanical drawing. The use of symbols, design and problem solving are included, as well as the application of geometric principles related to the preparation of simple diagrams to produce parts. The reading and interpretation of blueprints, designs, diagrams, and the application of the computer in drawing is applied.

EDIN 3020 Introduction to the Study of Technology

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the study of technology and its implications for human beings. This course is designed to develop in students the skills and attitudes necessary to understand the nature of technology. It includes understanding, analyzing, and discussing the changes brought about by technologies in human history. The concepts, functions, and modern practices of technological advances are studied, as well as the creation of instruments and machines for the improvement of human coexistence. Students must design technological instrumentation concepts while simulating possible tools for the future. This course can be taught in face-to-face, hybrid or online mode.

EDIN 3025 Introduction to Occupational Technology

Academic credits: Three (3)

Contact hours: 45

Description: Study of the evolution of technology and its relationship to science and industry. Analysis of the basic elements of technology such as: the machine, materials, raw material conversion processes, and raw material conversion energy sources and energy sources. The role of information in technology is emphasized including storage and processing of data and statistics and the components of communication. It includes storage and processing of data and statistics and the components of communication. The relationship between man and machine is studied

including machine design, construction, operation, maintenance, and how to prepare and use the human element effectively. This course can be taught in face-to-face, hybrid or online mode.

EDIN 3105 Occupational Internship

Academic credits: Six (6)

Pre-requisite: EDIN 3005, EDIN 3006

Contact hours: 225 (includes lecture and practicum hours per term)

Description: Study and immersion in workplace work practices related to designing, making, producing goods, and providing personal and non-personal services for occupational education teacher candidates. Includes experiences associated with the most recent trends in the student's occupational field for curriculum adaptation and updating.

EDIN 3106 Technological Innovations

Academic credits: Three (3)

Contact hours: 75

Description: This course introduces students to investigate the dizzying changes of technological innovation and how it affects systems, culture, economy, and society for better or worse. This course introduces students to the dizzying changes in technological innovation and how it affects systems, culture, economy, and society for better or worse. This course can be taught in face-to-face, hybrid or online mode.

EDIN 3107 Occupational Curriculum Development

Academic credits: Three (3)

Contact hours: 45

Description: Study of the fundamentals, principles, and basic issues relating to curriculum planning and development for technical occupations. Analysis of curriculum conceptions; philosophical, historical, psychological, sociological, and technological foundations; and curriculum models, domains, and principles. Discussion of the human dimension of curriculum planning and the role of the teacher, principal, coordinator, employer and student, the community and the curriculum specialist. It includes the evaluation of current educational programs in our occupational education system considering the requirements of various occupations and employment market trends. This course can be taught in face-to-face, hybrid or online mode.

EDIN 4006 Labor Relations

Academic credits: Three (3)

Contact hours: 45

Description: Development of the labor movement. Organized labor and its relations with industry and school. Labor-management relations. Knowledge of labor-management legislation and its applications in Puerto Rico.

EDIN 4019 Construction Technology

Academic credits: Three (3)

Contact hours: 75

Description: Study of the construction world that provides experience in learning and applying the basic knowledge and skills of the construction industry. Readings, lectures and discussions of the practices and skills required for construction. Construction concepts that are performed in laboratories to test the knowledge acquired. The world of construction is divided into three stages: 1) introduction, 2) production analysis and personnel management, 3) synthesis of construction practices and planning regulations.

EDIN 4020 Electrical Systems Technology

Academic credits: Three (3)

Contact hours: 75

Description: Study of scientific and technological concepts related to the production, control, and utilization of electrical energy. Includes the application of laws and principles of electricity, magnetism, electric current, circuits, and measurement. Requires laboratory experience.

EDIN 4025 Introduction to Electronics

Academic credits: Three (3)

Contact hours: 75

Description: Introduction to the study of electronics and its application to modern life. It deals with the laws and formulas for the principles of electromagnetism, inductive reactance, capacitive reactance and the analysis of alternating and direct current circuits with resistive, inductive capacitive elements in series, parallel and series parallel in resonance. The study of basic symbols used in electronics and the use of them in schematic diagrams. The reading and use of measuring instruments to determine and correct faults in electronic circuits. Laboratory work will emphasize experimentation and problem solving.

EDIN 4028 Manufacturing Technology

Academic credits: Three (3)

Contact hours: 75

Description: Trains industrial arts teachers in the basic concepts and methods of an organized manufacturing system. It includes simulation of the mass production of an article in an industrial arts laboratory. Aspects of management, personnel, raw materials, production planning, production processes, distribution, and product service, as developed in an industrial plant or factory, are studied. Other activities include role playing in simulated situations and laboratory experiences in the design, materials study, development, and production of consumer items.

EDIN 4029 Workshop Organization and Administration

Academic credits: Three (3)

Contact hours: 45

Description: Students are given the opportunity to discuss problems concerning the organization and management of workshops on space distribution, natural light, artificial light and ventilation; equipment, materials, inventories, requisitions, records and reports; safety rules and fundamental principles to avoid accidents, fires, with application to vocational industrial education.

EDIN 4030 Industrial Materials Technology

Academic credits: Three (3)

Contact hours: 75

Description: Study of the characteristics of natural and artificial materials (solid, liquid, and gaseous), used in the production of goods, for human use and consumption. This course emphasizes the analysis of the different types of materials used as basic ingredients and raw materials in manufacturing technology. It includes the evolutionary study of natural and synthetic materials and their development in different periods to produce handmade or manufactured objects. Students will conduct laboratories related to the various raw material processes used in the various industries to produce durable and non-durable products.

EDIN 4035 Industrial Safety & Occupational Health

Academic credits: Three (3)

Prerequisite: EDIN 3005, EDIN 4029

Contact hours: 45

Description: Discussion and analysis of the basic principles related to industrial safety and occupational health and their relationship to the teaching of industrial vocational education. This course can be taught in face-to-face, hybrid or online mode.

EDIN 4045 Art and Design Applied to the Industrial Arts

Academic credits: Three (3)

Prerequisite: EDIN 3015

Contact hours: 75

Description: Study, planning and application of processes of the visual arts in design and problem solving using traditional graphic language while exploring with new experiences in the field of digital around communication, plastic production and creation of images for functional purposes in a heuristic context (to find, solve, discover) to create and recreate objects through the application of the diversity of techniques of the artistic field and analysis of materials through technological systems for life.

EDIN 4046 General Metal Working

Academic credits: Four (4)

Contact hours: 97.5

Description: Analysis of the various aspects of the metallurgical industry. An introduction to the various methods by which ore is processed, such as sheet metal, foundry and welding processes (oxyacetylene, arc, mig and tic). Design and manufacture of various metal products.

EDIN 4049 Graphic Communication Technology

Academic credits: Three (3)

Prerequisite: EDIN 3020

Contact hours: 45

Description: Theory and practice of the principles of graphic communication, history, development and evolution of methods and techniques used for the production of graphic information. Includes technology of photographic composition, screen printing, lithography,

engraving, bookbinding, and finishing products related to the reproduction, storage, and distribution of printed materials.

EDIN 4059 Force Technology

Academic credits: Three (3)

Contact hours: 45

Description: Introduction to the study of force technology. Analysis of the production of force as the main element that moves modern industrial technology. Methods used by man to convert different types of energy into useful force. Emphasis on the current energy crisis and the need to seek alternatives. This course can be taught in face-to-face, hybrid or online mode.

EDIN 4065 Curriculum and Methodology for Teaching Vocational Education to Exceptional Adolescents

Academic credits: Three (3)

Contact hours: 45

Description: Study of appropriate curricular modifications and teaching strategies to serve the exceptional adolescent.

EDIN 4085 Curriculum and Methodology for Teaching Industrial Arts to Exceptional Adolescents

Academic credits: Three (3)

Prerequisite: EDES 4006

Contact hours: 45

Description: Study of appropriate curricular modifications and teaching strategies to serve the exceptional adolescent in the industrial arts program.

EDIN 4105 Transportation Systems Technology

Academic credits: Three (3)

Contact hours: 75

Description: Study of the systems used for horizontal and vertical transportation of humans, animals and objects on land, water, air and space surfaces. It includes the analysis of the different means of transportation that have been used from prehistoric times to futuristic projects that are designed with the purpose of shortening distances and moving objects with extraordinary weights that require special machines for their mobilization. It contains laboratory experiences, research and solutions of practical application problems. This course can be taught in face-to-face, hybrid or online mode.

EDIN 4106 Design and Evaluation of Training Programs

Academic credits: Three (3)

Prerequisite: EDIN 3006

Contact hours: 45

Description: Study of the fundamentals of curriculum and the various models that apply to the design of occupational technical programs. The course is aimed at in-service teachers and future occupational education teachers, with the purpose of training them to design specialized curricula for technical training in vocational schools and technological institutes. Participants will

analyze the characteristics of occupational and technical curricula and once designed they will implement them in a real scenario.

EDPE 4195 Methodology and Teaching of Industrial Arts in the Secondary School

Academic credits: Three (3)

Contact hours: 45

Description: Theoretical and practical approach to the teaching-learning process. All aspects of teaching industrial arts in high school will be studied: planning; innovative education and curricular analysis; basic content in the area; preparation, adaptation and utilization of resources; methodology, techniques and teaching strategies; fundamentals of measurement and evaluation. Students will complete at least 15 hours of laboratory experience. These experiences will enable them to develop critical, dynamic and creative attitudes towards the educational problems prevailing in our Puerto Rican reality.

EDPE 4196 Teaching Practice - Industrial Arts (Secondary)

Academic credits: Six (6)

Contact hours: 300 (in the four-month period)

Description: The course requires students to lead the teaching-learning process in a public or private school, participate in school activities, and attend seminars at the university. In these experiences students are provided with theoretical, technical, practical and methodological tools to develop in them the knowledge, skills and attitudes that contribute to improving their teaching practice. In addition, current issues in the field that the student teaches are discussed and analyzed, as well as situations that arise in practice. A university professor, a cooperating teacher and the principal of the selected school supervise the student. The student attends four (4) hours per day at the assigned school or seminar at the university, as appropriate.

EDPE 4205 Methodology of Teaching Industrial Vocational Education in the Secondary School

Academic credits: Three (3)

Pre-requisite: EDIN 3005, EDIN 3006

Contact hours: 45

Description: Theoretical and practical approach to the teaching-learning process. All aspects related to teaching vocational industrial education in high school will be studied: planning; innovative education and curricular analysis; basic content in the area; preparation, adaptation and use of resources, methodology, techniques and teaching strategies; fundamentals of measurement and evaluation. Students will complete at least fifteen (15) hours of laboratory experience. These experiences will enable them to develop critical, dynamic and creative attitudes towards the prevailing educational problems in our Puerto Rican reality.

EDPE 4206 Teaching Practice - Industrial Vocational Education (Secondary)

Academic credits: Six (6)

Contact hours: 300 (in the four-month period)

Description: The course requires students to lead the teaching-learning process in a public or private school, participate in school activities, and attend seminars at the university. In these experiences students are provided with theoretical, technical and methodological tools to

develop in them the knowledge, skills and attitudes that contribute to improving their teaching practice. In addition, current issues in the field that the student teaches are discussed and analyzed, as well as situations that arise in practice. A university professor, a cooperating teacher and the principal of the selected school supervise the student. The student attends four (4) hours per day at the assigned school or seminar at the university, as appropriate.

TEED 4018 Introduction to Computers in Education

Academic credits: Three (3)

Prerequisite: EDFU 3001, EDFU 3002

Contact hours: 45

Description: Introduction to computer integration in education. Emphasis on the evolution, impact and educational implications, the theories that support its integration, analysis of studies and research, evaluation and selection of educational programs. Practice with some programs. Study of the basics of computer lesson design. This course can be taught in face-to-face, hybrid or online mode.

Multidisciplinary Studies Concentration in Tourism Culture

TURI 3005 History, Present and Future of Tourism

Academic credits: Three (3)

Contact hours: 45

Description: Historical analysis of tourism from ancient times to the present day, mainly since the Second World War. The main tourist destinations in Europe and America and their most important attractions in this field will be studied.

TURI 3006 Tourist Geography of Puerto Rico

Academic credits: Three (3)

Prerequisite: HIST 3241

Contact hours: 45

Description: A study of the geography of Puerto Rico from a tourism perspective, in which the physical geographic and cultural elements that affect tourism development on the Island will be emphasized. The possibilities of ecotourism are developed and compared with the offerings of other countries in this area.

TURI 3007 Monuments and Historical Places of the Tourist Areas of Puerto Rico and the Caribbean
Academic credits: Three (3)

Prerequisite: TURI 3005, TURI 3006, TURI 3105, HIST 3241

Contact hours: 45

Description: Study of Puerto Rican and Caribbean area cultural manifestation through its predominant monuments and sites in the area. Emphasis is placed on the historical element and its reflection in the production of cultural heritage. Importance is given to the architectural, sculptural, and archaeological elements as evidence of the spiritual culture of the peoples studied.

TURI 3105 Introduction to Ecotourism in Puerto Rico

Academic credits: Four (4)

Prerequisite: TURI 3005 and TURI 3006

Contact hours: 60

Description: This course responds to the new concerns that have arisen in this field in recent years, given the degradation of the environment and the return to nature. It studies the advances in the world of ecotourism, mainly in Europe, the United States, and the Caribbean. It analyzes the public policy of Puerto Rico and the solutions that have been implemented in this field.

TURI 3107 Tourist Guide Development

Academic credits: Three (3)

Pre-requisite: TURI 3005, TURI 3006, TURI 3105

Contact hours: 45

Description: Discussion and study of the functions of the tour guide. The various types of guides and the roles they play are examined. The purpose is to highlight the responsibilities involved in such an important job in the field of tourism, all circumscribed by the principles of ethics and the need to revitalize the services offered to visitors. The course promotes the development of skills in tour planning and group management.

TURI 3109 Tourist and Cultural Geography of the Caribbean

Academic credits: Three (3)

Contact hours: 45

Description: Study of the general tourist geography of the Caribbean region; as well as the essential cultural elements of the countries in the area emphasizing their folklore, landscaping, social and economic importance.

TURI 3200 Internship and Seminar

Academic credits: Zero (0)

Prerequisite: TURI 3005, TURI 3006, TURI 3007, TURI 3105, and 3107.

Contact hours: One hour and fifteen minutes per week. It involves completing 200 hours of practice in the tourism sector and 15 hours of seminar.

Description: Course designed to provide high school students with the opportunity to put into practice, in accordance with the demands of modern tourism, all the knowledge, skills, abilities and positive attitudes learned throughout their courses. Different aspects related to internships, experiences and guidance regarding the individual performance and progress of each intern will be discussed. Both the internship and the seminar are intended to provide students with an educational experience that will provide and facilitate their entry into the occupational world of the tourism industry.

TURI 3215 Introduction to Museum Management

Academic credits: Three (3)

Contact hours: 45

Description: Introductory course on the function of museums and the importance of these institutions in their role as custodians and promoters of our cultural heritage. Emphasis will be

placed on the study of the historical background of museums; the national and international entities dedicated to the conservation, preservation and promotion of cultural heritage; the tourist use of musicological institutions and other essential concepts for knowledge in the museum field. The importance of the creation of the Institute of Puerto Rican Culture, its function of promoting the aesthetic elements of Puerto Rican culture through its monothematic museums and its influence on the proliferation of museums in Puerto Rico will be studied from a sociocultural perspective.

TURI 3301 Intensive Sign Language Applied to Tourism I

Academic credits: Three (3)

Contact hours: 45

Description: Incorporation of sign language into the tourism industry. Through the learning of basic sign language, you will be able to establish effective communication with deaf or partially deaf people and achieve total communication with consumers. The course promotes the incorporation of visual gestural techniques and manual codes for the presentation of an optimal service within the field of tourism. At the same time, the student will have a cultural understanding of this community equivalent to a foreign tourist.

TURI 3302 Intensive Sign Language Applied to Tourism II

Academic credits: Three (3)

Prerequisite: TURI 3301

Contact hours: 45

Description: In this course you will gain conversational fluency with deaf people. They will be able to interpret simple information when working in collaboration with other tour guides. Students will be able to project information by matching the different semantic levels of the audience. Know variations and regionalisms of the language within the United States and Puerto Rico.

TURI 3905 Tourist Study Tour

Academic credits: Three (3)

Contact hours: 45

Description: The course aims to conduct a cultural study of international tourist destinations. By applying the concepts of tourism geography, students will recognize the importance of socio-cultural elements and their influence on the development of tourism destinations. This course is a space that fosters critical thinking, understanding and respect for ethnic diversity after experiencing, firsthand, an intercultural relationship, politics and the heritage (historical, folkloric and natural) of each nation.

Humanities

ARTE 3115 Art Appreciation

Academic credits: Two (2)

Contact hours: 30

Description: Development of a comprehensive attitude towards the general principles of art. Color as a source of aesthetic pleasure. Art in the home and community. Presentation of

collections of works of art from major museums. Guided tours of museums, exhibitions and workshops.

ARTE 3116 History of Art - Compendium

Academic credits: Three (3)

Contact hours: 45

Description: The process of art history seen within its total historical context, moving towards an understanding of contemporary art. A broad chronological order is followed to facilitate the study of such an ambitious compendium. This course can be taught in face-to-face, hybrid or online mode.

ARTE 3157 Compendium of Visual Arts

Academic credits: Three (3)

Contact hours: 45

Description: Study on the methods and techniques within the Visual Arts: painting, sculpture, engraving and drawing as a basis for the integration of proposals in public art.

ARTE 3165 Trajectory of the Visual Arts in Puerto Rico, the Caribbean and Latin America

Academic credits: Three (3)

Contact hours: 45

Description: Study, analysis and understanding of the development of the Plastic Arts in the Caribbean and Latin American context from its pre-Columbian origins to the present from a tourism perspective.

ARTE 3276 Art Appreciation

Academic credits: Three (3)

Contact hours: 45

Description: Comparative study of the arts in the Modern Era with reference to the historical styles of major importance; analysis, evaluation and interpretation of great works of art in architecture, painting, sculpture, minor arts and graphic arts. Study of the artistic development in the culture of Puerto Rico and the valuable contributions of our artists to all facets of our contemporary life. This course can be taught in face-to-face, hybrid or online mode.

ARTE 4335 Contemporary Art

Academic credits: Three (3)

Contact hours: 45

Description: Study of European art from the Romantic period to the present, viewed through its historical development.

ANTR 4135 Political Anthropology

Academic credits: Three (3)

Prerequisite: CISO 3121 and CISO 3122

Contact hours: 45

Description: Comparative analysis of the phenomenon of power and the cultural and social forms that reproduce it. The political reality is observed in its historical and geographical extension. Political institutions, their uniformities, differences and interdependence with other forms of social organization are studied.

DINT 2011 Art History I

Academic credits: Three (3)

Contact hours: 45

Description: A study of the evolution of the arts from the earliest visual records in prehistory, as well as the artistic expressions of antiquity and classical times through the Middle Ages, for students to develop sensitivity and a broad understanding of artistic phenomena.

DINT 2012 Art History II

Academic credits: Three (3)

Prerequisite: DINT 2011

Contact hours: 45

Description: Study of artistic manifestations from the Renaissance to the present time. Students will be able to distinguish diverse plastic proposals through the history of art with a view to applying them in their profession.

DINT 3121 History of Art I

Academic credits: Three (3)

Contact hours: 45

Description: Study of the evolution of the arts from the earliest visual records in prehistory, as well as the artistic expressions of antiquity and classical times through the Middle Ages, for students to develop sensitivity and a broad understanding of artistic phenomena. This course can be taught in face-to-face, hybrid or online mode.

DINT 3122 History of Art II

Academic credits: Three (3)

Prerequisite: DINT 3121

Contact hours: 45

Description: Study of artistic manifestations from the Renaissance to the present time. Students will be able to distinguish diverse plastic proposals through the history of art with a view to applying them in their profession.

FILO 3001 Introduction to Philosophy I

Academic credits: Three (3)

Contact hours: 45

Description: Study and analysis of the most important problems of philosophy throughout historical development. Problems of epistemology, metaphysics, ethics and philosophical anthropology are highlighted. Attention is concentrated on the classical Greek period and the beginnings of medieval philosophical thought.

FILO 3005 Introduction to Ethics

Academic credits: Three (3)

Contact hours: 45

Description: Systematic examination of the fundamental theories of Western ethics and critical study of problems, such as: the object of ethics; the problem of moral knowledge; relationship between metaphysics, science, and morality; and the role of reason in moral conduct.

FILO 4006 Fundamentals of Logic

Academic credits: Three (3)

Contact hours: 45

Description: The principles and methods of reasoning in classical and modern logic are studied. The term, categorical propositions and the categorical syllogism. Sentential calculus or corrective logic and quantifying calculus or operational logic.

FRAN 3201 Functional French I

Academic credits: Three (3)

Contact hours: 45

Description: The course comprises two parts. The first part will emphasize comprehension and oral expression in everyday situations. The student will acquire vocabulary and functional expressions that will facilitate conversation. The second part will emphasize reading and writing without abandoning oral expression, on the contrary, developing it further. These parts will correspond to the first and second four-month periods. This course can be taught in face-to-face, hybrid or online mode.

FRAN 3202 Functional French II

Academic credits: Three (3)

Prerequisite: FRAN 3201

Contact hours: 45

Description: The course comprises two parts. The first part will emphasize comprehension and oral expression in everyday situations. The student will acquire vocabulary and functional expressions that will facilitate conversation. The second part will emphasize reading and writing without abandoning oral expression, on the contrary, developing it further. These parts will correspond to the first and second four-month periods.

GEOG 3007 Geography of the Caribbean

Academic credits: Three (3)

Contact hours: 45

Description: Study of the physical, cultural, economic, political and social geography of the Caribbean region, as well as the individual study of each of the countries that make up this area. Special importance will be given to those historical aspects and contemporary variables that have shaped the geographical evolution of the region, in addition to an exhaustive analysis of the cultural diversity and the economic-political complexity of the area.

HIST 3115 History of the United States (Compendium)

Academic credits: Three (3)

Contact hours: 45

Description: A study of the history of the United States of America from the time of its Independence to the present time.

HIST 3241 History of Puerto Rico I

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of the historical evolution of Puerto Rico from its beginnings to the present, without neglecting the pre-Columbian antecedents. It covers political, economic, social and cultural history. This course can be taught in face-to-face, hybrid or online mode.

HIST 3242 History of Puerto Rico II

Academic credits: Three (3)

Prerequisite: HIST 3241

Contact hours: 45

Description: Analysis of the historical evolution of Puerto Rico from its beginnings to the present, without neglecting the pre-Columbian antecedents. It covers topics of political, economic, social and cultural history. Study of the history of P.R. from 1898 to the present. This course can be taught in face-to-face, hybrid or online mode.

HIST 3245 Compendium of the History of Puerto Rico

Academic credits: Three (3)

Contact hours: 45

Description: It aims to provide the student with an overview of our history up to and including the 20th century. The course covers pre-Columbian cultures and analysis of the Spanish period in the areas of politics, population, military aspects and economy, from its beginnings to the present. This course can be taught in face-to-face, hybrid or online mode.

HIST 3505 Contemporary Caribbean History

Academic credits: Three (3)

Contact hours: 45

Description: Panoramic view of Caribbean history from the World War II period to the present.

HIST 4085 Contemporary Latin American History

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of the historical roots of Latin America's contemporary problems with special emphasis on economic, underdevelopment and political problems. It also studies the position of American countries within the international political system and the American consciousness. The course is based on the analysis of contemporary texts dealing with the problems mentioned above.

HUMA 3005 Study Trip

Academic credits: Three (3)

Contact hours: 45

Description: The study trip is the practical and direct experience through which the culture, geography, social organization and idiosyncrasies of the countries visited are appreciated, to then integrate that personal assessment into theoretical studies, as an undeniably useful formative aspect that complements all kinds of intellectual information. If the student chooses only to take the trip without the subsequent theory course of HUMA 3006, two partial exams will be administered on previously indicated topics and a monograph related to the trip will be required. If the student passes these requirements, he/she will receive the three credits.

HUMA 3010 Study Trip to Europe

Academic credits: Six (6)

Contact hours: 90

Description: The study trip is the practical and direct experience through which one appreciates the culture, geography, social organization and idiosyncrasies of the countries visited to then integrate that personal assessment into theoretical studies, as a formative aspect of invaluable usefulness that complements all kinds of intellectual information. The student receives a theoretical component prior to the trip (lectures, videos, foreign language courses, distribution of didactic material, etc.), and a practical component which is the trip itself; excursions to museums and monuments; the short tests given throughout the trip, the lectures given on the bus and the final evaluations.

HUMA 3055 Professional Ethics

Academic credits: Three (3)

Contact hours: 45

Description: Critical study of fundamental aspects of Western ethics as a philosophical discipline, its relevance and applicability to the contemporary world and its adaptation to the world of industry particularly the hotel industry.

HUMA 3101 Western Culture I

Academic credits: Three (3)

Contact hours: 45

Description: Critical reflection on the most important fundamental aspects of Western culture from the perspective of the various humanistic disciplines such as art, history, literature, philosophy and religious ideas, through the analysis of works and texts. The most significant originals with particular emphasis on ancient Greece and its relation to the present time. This course can be taught in face-to-face, hybrid or online mode.

HUMA 3102 Western Culture II

Academic credits: Three (3)

Contact hours: 45

Description: Critical reflection on the most important fundamental aspects of Western culture from the perspective of the various humanistic disciplines such as art, history, literature,

philosophy and religious ideas through the analysis of the most significant original works and texts with particular emphasis on ancient Rome, the origins of Christianity and the passage from the Hellenistic period to the Middle Ages and its relationship with the present time. This course can be taught in face-to-face, hybrid or online mode.

HUMA 3105 Socio-Juridical Foundations of Western Culture

Academic credits: Three (3)

Contact hours: 45

Description: Critical reflection from a humanistic perspective on the most important foundational aspects of Western culture. Emphasis will be given to the ethical, legal and political forms that characterize it. The most significant original works and texts corresponding to the cultures and historical periods that shaped the social and legal development of our civilization will be analyzed.

HUMA 3111 Compendium Western Culture I and II

Academic credits: Three (3)

Contact hours: 45

Description: Study of the most representative aspects of the culture of the West throughout the Greek, Roman and Medieval periods through the critical analysis of great literary, philosophical, artistic and religious works. This course can be taught in face-to-face, hybrid or online mode.

HUMA 3112 Compendium Western Culture III and IV

Academic credits: Three (3)

Prerequisite: HUMA 3111

Contact hours: 45

Description: Study of the most important aspects of Western culture from the Renaissance to the present day with special interest in the modern era. The course will study through critical analysis great literary, philosophical, artistic and religious works. This course can be taught in face-to-face, hybrid or online mode.

HUMA 3201 Western Culture III

Academic credits: Three (3)

Prerequisite: HUMA 3102

Contact hours: 45

Description: Critical reflection on the Western cultural process from the Middle Ages to the Renaissance emphasizing the areas of literature, philosophy, art, history and religious ideas through the analysis of the most representative works and texts of those periods and their relationship with the contemporary world.

HUMA 3202 Western Culture IV

Academic credits: Three (3)

Prerequisite: HUMA 3201

Contact hours: 45

Description: Critical reflection on the Western cultural process from the 18th century to the present day, emphasizing the areas of literature, philosophy, art, history and religious ideas through the analysis of the most representative works and texts of those periods.

ITAL 3001 Intensive Italian I

Academic credits: Three (3)

Contact hours: 45

Description: Courses aimed at beginner students of Italian focused on the development of communicative competence through the practice of the four functional skills of the Italian language (listening, speaking, reading, writing) and contact with Italian culture.

ITAL 3002 Intensive Italian II

Academic credits: Three (3)

Prerequisite: ITAL 3001

Contact hours: 45

Description: Short course equivalent to the first and second year of Italian. A daily period of 15 minutes of oral practice. Daily collation of assignments, grammar, intensive reading, composition, careful study of Italian idioms, as well as other forms of Italian expression.

ITAL 3101 Basic Conversational Italian I

Academic credits: three (3)

Contact hours: 45

Description: An introductory course to the Italian language, aimed at people who wish to develop a basic command of both verbal and written communication. In addition to the study of grammatical rules and the acquisition of basic and functional vocabulary, the course will also address relevant aspects of Italian culture.

ITAL 3102 Basic Conversational Italian II

Academic credits: Three (3)

Prerequisite: ITAL 3101

Contact hours: 45

Description: Advanced Italian language course aimed at people who wish to continue to expand their knowledge and mastery of effective communication, both verbal and written, for personal and professional enrichment. The course reviews vocabulary, the principles of Italian grammar, idioms, and emphasizes pronunciation. In addition, a panoramic view of Italian life and culture is presented.

MUSI 3135 Music Appreciation

Academic credits: three (3)

Contact hours: 45

Description: Music as a source of aesthetic pleasure, with particular emphasis on human, philosophical, and historical aspects. Study of the musical forms of blanks, sonata, concerto, and symphony and the major trends in music.

MUSI 3141 Band I

Academic credits: Two (2)

Contact hours: 30

Description: Prerequisite, elementary knowledge of a band instrument and music, plus prior permission of the band director.

MUSI 3142 Band II

Academic credits: Two (2)

Prerequisite: MUSI 3141

Contact hours: 30

Description: Continuation of Band I, MUSI 3141.

MUSI 3143 Band III

Academic credits: Two (2)

Prerequisite: MUSI 3142

Contact hours: 30

Description: Prerequisite: continuation of Band I and/or Band II or by teacher's arrangement. Improvement in instrument technique, theory, concert, and University and Community activities.

MUSI 3155 Puerto Rico, Latin America and the Caribbean Music Trajectory

Academic credits: Three (3)

Contact hours: 45

Description: Study, analysis and understanding of the historical trajectory of musical expression in the context of Puerto Rico, Latin America and the Caribbean from its pre-Columbian origins to the dawn of the currents present in the 20th century.

MUSI 3221 Choral Workshop I

Academic credits: three (3)

Contact hours: 45

Description: This course initiates the student in the study of the fundamentals of music; this includes vocal technique, music theory and rhythmic solfege in the key of G and F respectively. Students will be prepared to represent the Institution through their performance if they become a member of the UPR choir in Carolina.

MUSI 3222 Choral Workshop II

Academic credits: three (3)

Contact hours: 45

Description: This course offers continuation to the student of the fundamentals of music; this includes vocal technique, music theory, and rhythmic and melodic solfege in the key of G and F respectively. The student will have had the proper musical experience that will enable him/her to represent the Institution through his/her vocal performance as a member of the UPR choir in Carolina.

MUSI 3223 Choral Workshop III

Academic credits: three (3)

Contact hours: 45

Description: This course offers continuation to the student in the study of the fundamentals of music, this includes vocal technique, music theory and rhythmic and melodic solfege in the key of G and F respectively. The student will have had the proper musical experience that will enable him/her to represent the Institution through his/her vocal performance as a member of the UPR choir in Carolina.

MUSI 3241 Choir I

Academic credits: Two (2)

Prerequisite: Audition

Contact hours: 30 (by agreement)

Description: This course trains the student in general knowledge in Vocal-Choral Techniques, Theory and Solfeggio. It is a class organized as a mixed voice choir "A Cappella" or with accompaniment. Study and performance of religious, secular and folk choral works. Includes two (2) hours of lecture and three (3) hours of practice.

MUSI 3242 Choir II

Academic credits: Two (2)

Prerequisite: MUSI 3241 or Audition

Contact hours: 30 (by agreement)

Description: Continuation of MUSI 3241, Chorus I. Includes two (2) hours of lecture and three (3) hours of practicum.

MUSI 3243 Choir III

Academic credits: Two (2)

Prerequisite: MUSI 3242 or Audition

Contact hours: 30 (by agreement)

Description: Continuation of MUSI 3242, Choir II. Includes two (2) hours of lecture and three (3) hours of practicum.

MUSI 3401 Music Performance Band I

Academic credits: three (3)

Contact hours: 45

Description: This course will refine and expand psychomotor development and cognitive knowledge of playing a musical instrument as a member of a college band. In addition, it will introduce the student to the fundamentals of music theory that are necessary for their corresponding application and performance within the college band. It includes music theory, rhythmic solfège and melodic solfège in treble clef in the second line and bass clef in the fourth line.

MUSI 3402 Band Music Performance II

Academic credits: three (3)

Contact hours: 45

Description: This course will give continuity to the psychomotor development and cognitive knowledge of playing a musical instrument as a member of a college band. will continue to provide the student with knowledge of the fundamentals of music theory that are necessary for corresponding application and performance within the college band. includes music theory, rhythmic solfege and melodic solfege in treble clef in second line and bass clef in fourth line of the second level of proficiency.

MUSI 3403 Band Music Performance III

Academic credits: three (3)

Contact hours: 45

Description: This course will give continuity to the psychomotor development and cognitive knowledge of playing a musical instrument as a member of a college band. It will continue to provide the student with the knowledge of the fundamentals of music theory that are necessary for its corresponding application and execution within the college band. It includes music theory, rhythmic solfege, and melodic solfege in treble clef second line and bass clef fourth line of the third level of proficiency.

TEAT 3025 Dramatic Art Appreciation

Academic credits: three (3)

Contact hours: 45

Description: Analysis of the different elements that contribute to the realization of a theatrical production. Brief history of theatre. Reading and performance of plays. Optional workshop.

TEAT 3031- DICTION I

Academic credits: three (3)

Contact hours: 45

Description: Introduction and study of diction and development of the basic skills of breathing, projection, posture and pronunciation through staged exercises.

TEAT 3032 DICTION I

Academic credits: three (3)

Contact hours: 45

Description: Continuation of TEAT 3031, Diction I. Includes 1 hour of lecture and 2 hours of practice.

TEAT 3011 Acting I

Academic credits: three (3)

Contact hours: 45

Description: Fundamentals of acting techniques and development of basic skills through games, improvisations and scenes.

TEAT 3012 Acting II

Academic credits: three (3)

Contact hours: 45

Description: Study and acting techniques necessary for the development of the characterization.

TEAT 4081 Mobile Theater

Academic credits: three (3)

Contact hours: 45

Description: Study and practice of staging, performing and presenting theatrical works for an audience in and out of a theatrical structure or building.

Criminal Justice

CISO 3006 Socioeconomic Problems in Puerto Rico

Academic credits: Three (3)

Contact hours: 45

Description: Study of the problems of Puerto Rico's social, economic, and political institutions. Recent research as well as other available sources of information will be used to acquaint the student with the problems of Puerto Rican life today. There will be lectures, discussions of readings, study of research, and approaches to new problems.

CISO 3121 Introduction to Social Sciences I

Academic credits: Three (3)

Contact hours: 45

Description: This course begins the study of the fundamental problems of contemporary society. It consists of readings, discussions and lectures around three objectives: the analysis of the process of socialization or incorporation of the individual to his culture; the exploration of the social historical background and the beginnings of modern western culture situated Puerto Rico within such process of its development; definition of the main political, economic and cultural problems in the contemporary world. This course can be taught in face-to-face, hybrid or online mode.

CISO 3122 Introduction to Social Sciences II

Academic credits: Three (3)

Prerequisite: CISO 3121

Contact hours: 45

Description: This course begins the study of the fundamental problems of contemporary society. It consists of readings, discussions and lectures around three objectives: the analysis of the process of socialization or incorporation of the individual to his or her culture; the exploration of the social historical background and the beginnings of modern western culture situating Puerto Rico within political, economic and cultural problems in the contemporary world. This course can be taught in face-to-face, hybrid or online mode.

CISO 3155 Fundamentals of Statistical Reasoning

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 45

Description: Reasoning, computation, and limitations of elementary strategies applied to experience and research in psychology and the social sciences. Without neglecting theory, practical aspects are emphasized and include graphing, DEZ, T and CH12 tests, correlations, and experimental design. This course can be taught in face-to-face, hybrid or online mode.

CISO 3225 Social Morale

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 45

Description: This course examines the principles that guide moral reasoning and argumentation. It analyzes the main theoretical currents of ethical justification and studies the main contemporary moral problems. This course can be taught in face-to-face, hybrid or online mode.

CISO 3227 Seminar on Drug Use and Abuse

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 45

Description: The seminar aims to offer the student the opportunity to study the phenomenon of drug addiction from an integral perspective. The psychosocial aspects and the historical context in which the problem of drug addiction arises in Puerto Rico are discussed. A critical analysis is made of the different modalities of treatment and rehabilitation existing in the country. Emphasis is placed on the analysis of the government's public policy to combat the drug problem, the means of prevention used by the public and private sectors, and the proposed alternatives to the medicalization and legalization of drugs. This course can be taught in face-to-face, hybrid or online mode.

CISO 4278 Introduction to the Study of Public Administration in Puerto Rico

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 45

Description: Brief summary of the philosophical and scientific foundations of the knowledge of public administration, analysis of the techniques and general principles of universal applicability, as well as of the systems and modern theory of organization, historical synthesis of the government of Puerto Rico, critical analysis of the constitutional development of Puerto Rico; study of the organization, structure and functioning of the government of Puerto Rico in the light of the constitution of the Commonwealth of Puerto Rico, of the laws in force and of the federal laws of the United States. Special interest is given to the analysis of governmental action in criminal justice.

INTD 3001 Interdisciplinary Seminar General Education I

Academic credits: One (1)

Contact hours: 15

Description: The seminar works with essential academic competencies of the General Education program. It enters the study of the principles of critical and logical analysis, ethical behavior, and aesthetic appreciation. In addition, it examines human diversity and interdependence and the effects of globalization on human diversity and interdependence. The seminar seeks to motivate the active participation of incoming students in the academic community through academic and cultural activities where they develop social skills and common bonds with their fellow students, their professors and the university community.

JUST 3005 Introduction to the Criminal Justice System

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 45

Description: This course will analyze the traditional components of criminal justice: the police, the courts and correctional agencies and all those agencies that in one way or another intervene with the Criminal Justice System. It will examine the legal and philosophical basis of the Puerto Rico Criminal Justice System, as well as its structure, functions, problems, and procedures. This course can be taught in face-to-face, hybrid or online mode.

JUST 3015 Introduction to Police Science

Academic credits: Three (3)

Prerequisite: JUST 3005

Contact hours: 45

Description: The course studies the evolution, structure and functioning of modern police organizations. The role of the police in a democratic society and the relationship between the police and society. Through the course students will learn about the origin of the concept, evolution and role of the police in society. Through a series of lectures, written assignments and the preparation of a portfolio, students will learn, analyze and reflect on the functions of the police, their training and socialization; the elements and characteristics of the police personality; and the importance of community relations. This course can be taught in face-to-face, hybrid or online mode.

JUST 3016 Civil Rights

Academic credits: Three (3)

Prerequisite: CISO 3121

Contact hours: 45

Description: Study of the Bill of Rights of the Constitution of the United States of America and the Constitution of the Commonwealth of Puerto Rico. The relevant jurisprudence of the Federal Supreme Court and the Supreme Court of Puerto Rico regarding the rights of the accused is analyzed. This course can be taught in face-to-face, hybrid or online mode.

JUST 3017 Introduction to the System of Corrections

Academic credits: Three (3)

Prerequisite: JUST 3005

Contact hours: 45

Description: The course studies the development of the different programs and approaches used in Puerto Rico for the rehabilitation of the offender. It analyzes the legal basis and the structure of the agencies in charge of these programs, as well as the influence of jurisprudence in the current correctional administration. This course can be taught in face-to-face, hybrid or online mode.

JUST 3205 Fundamentals of Law Criminal Justice System

Academic credits: Three (3)

Prerequisite: JUST 3005

Contact hours: 45

Description: This course studies the fundamentals of law concerning the Criminal Justice System. Emphasis is placed on Criminal Law, Criminal Procedure and Evidence Law in Puerto Rico. It also studies the source of positive law, the Constitution and jurisprudential decisions.

JUST 3206 Structure and Functioning of the Courts

Academic credits: Three (3)

Prerequisite: JUST 3005

Contact hours: 45

Description: Introduction to the structure and functioning of the local and federal courts in Puerto Rico, including a brief description of the people, officials, institutions and the criminal process.

JUST 3255 Victimology

Academic credits: Three (3)

Prerequisite: JUST 3005, PSIC 4016

Contact hours: 45

Description: This course introduces students to the analysis of victims of crime in a social and legal context, in addition to taking into consideration the factors that lead to vulnerability so that a person can be victimized. A broad understanding of the role of victimology as part of the social sciences and the rights that apply within the criminal justice system will be developed. Victims of crime will be evaluated from a micro and macro social perspective of the problem: physical, emotional, family, social, economic, among others. The effects and impact on the development of the state's public policy will be discussed, as well as the governmental, legal, non-governmental, support services and prevention efforts that exist for victims of crime. This course can be taught in face-to-face, hybrid or online mode.

JUST 3305 Penology

Academic credits: Three (3)

Prerequisite: JUST 3005

Contact hours: 45

Description: Study of the discipline that studies penalties, punishments and security measures. Definition of penology and other basic concepts. Study of the social reaction to the criminal phenomenon. Analysis of the importance of the penal system throughout history. Study of deviance and forms of social reaction. It covers the presentation, analysis and discussion of the theories of punishment, means of control, prevention of antisocial behavior as well as the ways in which the legal reaction has evolved throughout history.

JUST 4005 Ethics and Law

Academic credits: Three (3)

Contact hours: 45

Description: The course analyzes the concepts of ethics, law, naturalism, and legal positivism. Ethical units are studied and the problems of civil rights, civil disobedience, and the ethical meaning of criminal justice are analyzed.

JUST 4006 Puerto Rico and United States Government

Academic credits: Three (3)

Contact hours: 45

Description: This course studies the historical, ideological, political, and structural framework of the criminal justice systems of the U.S. and Puerto Rican democracies.

JUST 4007 Federal Agencies and Impact on Criminal Justice System

Academic credits: Three (3)

Contact hours: 45

Description: This course studies the jurisdiction and function of federal agencies that are related to state agencies. The role of the federal court when exercising the duties of related federal agencies is studied.

JUST 4008 Women and the Criminal Justice System

Academic credits: Three (3)

Prerequisite: JUST 3005

Contact hours: 45

Description: This course examines the different roles women play within the criminal justice system as offenders, victims, and professionals in the criminal justice field.

JUST 4208 Psicofarmacología de las Drogas

Academic credits: Three (3)

Prerequisite: CISO 3227

Contact hours: 45

Description: Study of the effects and consequences of legal and illegal chemical substances on the physiology, behavior and cognitive processes of the human body. Topics discussed include history of drug use in different socio-cultural environments; structure and organization of the human nervous system; neurophysiology in the normal state and under the effects of various chemical substances; metabolic aspects of drugs, such as: absorption pathways, internal

processing, mechanisms of action and elimination pathways, as well as changes in the user's behavior. This course can be taught in face-to-face, hybrid or online mode.

JUST 4505 Seminar on Globalization and Criminality

Academic credits: Three (3)

Contact hours: 45

Description: This seminar is aimed at offering the student the opportunity to learn about and analyze the phenomenon of criminality within the context of the global economy. It considers the examination of migration, the order of international finance and mass media as an object of study in the development of criminality in the global landscape.

JUST 4507 Seminar: Psychological, Medical and Legal Aspects of Sexual Assault

Academic credits: Three (3)

Contact hours: 45

Description: This seminar discusses the effect of sexual assault on the victim, family members, and the community. Current literature and trends on the topic are analyzed. Critical analysis and creative student participation are encouraged.

JUST 4905 Criminal Justice Practice

Academic credits: Three (3)

Law and Society Prerequisite: JUST 3255, SOCI 3005, LESO 3207, LESO 3208, LESO 4002, PSIC 4061, PSIC 4062

Criminal Justice Prerequisite: Forensic Psychology: JUST 3255, PSIC 3015, PSIC 3016, PSIC 3205, PSIC 3206, PSIC 4061, PSIC 4062

Contact hours: 200 hours per quarter-term

Description: This course consists of practical experience in public or private agencies or institutions and community-based programs that provide direct or indirect services to the community in Criminal Justice and related services. The student will become familiar with the work and functions of these agencies, institutions or programs. Practical experience of the theories learned in other courses is emphasized in this course. This course can be taught in face-to-face, hybrid or online mode.

JUVE 4005 Juvenile Justice

Academic credits: Three (3)

Prerequisite: LESO 3206

Contact hours: 45

Description: The course enters the review and analysis of the legal bases on which the Juvenile Justice System in Puerto Rico is sustained, punctuating around the history, socio-cultural, educational, psychological and legal variables that permeate it; in addition, prevention and treatment services to combat juvenile delinquency in the country are identified. This course can be taught in face-to-face, hybrid or online mode.

LESO 3205 Criminal Law

Academic credits: Three (3)

Prerequisite: LESO 3016

Contact hours: 45

Description: The course presents aspects such as the development of criminal law, elements of crime, types of crime and defenses, case analysis, and legal terminology. This course can be taught in face-to-face, hybrid or online mode.

LESO 3207 Criminal Procedure

Academic credits: Three (3)

Contact hours: 45

Description: Studies the organizational structure and operation of the Puerto Rico Criminal Justice System from the procedural point of view, emphasizing the aspects of complaints, interrogation of suspects, arrests, searches, searches, raids, procedures for the identification of suspects. It includes the criminal presentation to be followed before the courts beginning with the hearing to determine the cause for arrest until the pronouncement of the sentence and the possible judicial procedures after the sentence. Essential case law from both the local Supreme Court and the U.S. Supreme Court is discussed. This course can be taught in face-to-face, hybrid or online mode.

LESO 3208 Evidence

Academic credits: Three (3)

Contact hours: 45

Description: Studies the rules that determine the admissibility of evidence in our judicial proceedings. In addition, it studies those procedural rules related to the procedures for the parade of evidence and with the determination of whether there is sufficient evidence to establish a fact. This course can be taught in face-to-face, hybrid or online mode.

LESO 4001 Criminal Investigation I

Academic credits: Three (3)

Prerequisite: LESO 3205, LESO 3207, LESO 3208

Contact hours: 45

Description: This course studies the fundamental principles and procedures used to solve crimes. Students will analyze the crime scene and study the identification, collection, preservation, transportation, and analysis of physical evidence as established by the rules of evidence. Specific crimes will be analyzed with emphasis on those involving death. This course can be taught in face-to-face, hybrid or online mode.

LESO 4002 Criminal Investigation II

Academic credits: Three (3)

Prerequisite: LESO 4001

Contact hours: 45

Description: This course, a continuation of LESO 4001, studies the application of advanced criminal investigative techniques to the elucidation of crimes not involving fatalities. Students

will be able to investigate and evaluate the nature and extent of the modus operandi of organized crime. White collar crime, drugs, money laundering, fraud, economic crime, cybercrime and government corruption, among others, will be studied. This course can be taught in face-to-face, hybrid or online mode.

LESO 4005 Criminal Investigation

Academic credits: Three (3)

Prerequisite: LESO 4001 Contact Hours: 45

Description: The course covers the study of the basic principles and techniques of criminal investigation. It also presents the historical evolution of investigation in Puerto Rico and internationally. On the other hand, it studies the crime scene and the collection of evidence and analyzes the investigation of specific crimes.

LESO 4006 Police Administration and Supervision

Academic credits: Three (3)

Prerequisite: LESO 4001

Contact hours: 45

Description: This course will study the principles of organization and administration of the Puerto Rican police institution. Emphasis will be placed on organizational theory, techniques in administrative procedures, administration programs and police supervision.

LESO 4505 Seminar on Selected Topics in the Area of Law and Society

Academic credits: Three (3)

Contact hours: 45

Description: The seminar is aimed at offering the student the opportunity to deepen knowledge about principles and theories of police administration through the analysis of situations particular to and pertinent to policing. It critically analyzes situations related to the police function in the light of theory, principles, laws and norms that support the practices and principles of police administration. It analyzes practices in police administration that require. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3003 Introduction to General Psychology

Academic credits: Four (4)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 60

Description: The course is an exposure to general psychology as it deals with the constitution of the human subject because of the evolution of the species through social and cultural organization. It will cover, among others, the following disciplinary controversies at the introductory level, the relationship of psychology to science as a socio-historical production, the demarcation of its disciplinary space in the Social Sciences, perception, cognitive development, learning, memory, language, and the social demands made on psychology. The course will consist of four lectures, two lectures and two discussions of contrasting readings. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3005 General Psychology

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122

Contact hours: 45

Description: A general introduction to the scientific principles of human behavior. Examines basic principles and theories considering their importance for the betterment of the individual and society.

PSIC 3006 Social Psychology

Academic credits: Three (3)

Contact hours: 45

Description: A psychological approach to social life from the point of view of the individual; the psychology of institutions and social conflicts; critical analysis of the relationship between culture and personality, language, suggestion, imitation, fashions, manias and rumors, stereotypes, attitudes, propaganda, public opinion and leadership. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3015 Theories of Personality

Academic credits: Three (3)

Prerequisite: CISO 3121, CISO 3122, PSIC 3003

Contact hours: 45

Description: The way in which the notion of personality has been constructed and configured from certain dominant understandings within the field of psychology will be studied. The epistemological assumptions underlying personality theories will be critically examined. It will examine whether some theoretical propositions such as psychoanalysis, social learning and humanistic theory develop an explicit personality theory. It will compare how the category of personality was constructed as coherent and related to biological determinants and how in contemporary theories it is proposed as socially and historically produced, flexible and fluid. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3016 Psychopathology

Academic credits: Three (3)

Prerequisite: PSIC 3003, PSIC 3015

Contact hours: 45

Description: Attempts a psychological analysis of the dynamics, diagnosis and prognosis of abnormal individual and group behavior. Specifically analyzes neuroses and major psychoses, personality disorders such as sociopathic, drug and alcohol addiction, sexual deviations, and so on. Acute and chronic brain disorders. It exposes an overview of the various psychotherapies in the treatment of abnormal behavior. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3025 Human Development I

Academic credits: Three (3)

Prerequisite: PSIC 3003

Contact hours: 45

Description: Study of human development from conception to death. Emphasis will be given to interpersonal, cognitive, and motivational influences and processes. Theories of learning, cognitive development, and psychodynamic development will be used as reference bases. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3026 Human Development II

Academic credits: Three (3)

Prerequisite: PSIC 3025

Contact hours: 45

Description: The course covers adult and late stages of human development. Emphasis is placed on aging processes and their social implications.

PSIC 3205 Introduction to Forensic Psychology

Academic credits: Three (3)

Prerequisite: PSIC 3003, PSIC 3015, PSIC 3016, PSIC 3206

Contact hours: 45

Description: This course will provide an overview of the field covered by forensic psychology. It will highlight the main tasks performed by the forensic psychologist in the Criminal Justice System. This course can be taught in face-to-face, hybrid or online mode.

PSIC 3206 Psychology and Law

Academic credits: Three (3)

Prerequisite: PSIC 3003, PSIC 3015, PSIC 3016

Contact hours: 45

Description: This course enters the critical study of the relationship between the legal system and the theory, practice, and research of psychology. It describes the link between the justice system and the behavioral sciences. It includes the topics of mental patients' rights, standards of legal responsibility, expert testimony in the behavioral sciences, prediction of dangerousness, the mental insanity defense, child custody disputes, and ethical issues within the field of psychology and law. This course can be taught in face-to-face, hybrid or online mode.

PSIC 4001 Research Methods in Psychology I

Academic credits: Three (3)

Prerequisite: CISO 3155

Contact hours: 45

Description: Discussion and function of the notion of paradigm in scientific research and its significance in the development of psychological knowledge. Critical analysis of the structure and process of research in psychology. Taxonomy of accumulated psychological knowledge as a starting point for the development of research projects. This course can be taught in face-to-face, hybrid or online mode.

PSIC 4002 Research Methods in Psychology II

Academic credits: Three (3)

Prerequisite: PSIC 4001

Contact hours: 45

Description: A well-founded presentation, starting from the first course of psychological research designs. Assuming scientific research as a relationship between theoretical field and observations, the methods and techniques most used in each design are studied: functional, structural, phenomenological and dialectical, with special emphasis on experimental and quasi-experimental designs. This course can be taught in face-to-face, hybrid or online mode.

PSIC 4006 Experimental Psychology

Academic credits: Four (4)

Contact hours: 60

Description: A course in experimental psychology that includes discussion of research fundamentals, history, methods, designs, experimental control techniques, and analysis techniques commonly used in psychology. Individual paired repeated measures, factorial, functional, few-subjects, and other designs are discussed.

PSIC 4061 Interviews and Interrogations

Academic credits: Three (3)

Prerequisite: PSIC 3003, LESO 3205

Contact hours: 45

Description: Study of interviewing and interrogation techniques as primary sources of information in criminal investigation. The principles of both techniques will be applied and emphasized, taking as reference the rules of evidence, criminal procedure and jurisprudence. This course can be taught in face-to-face, hybrid or online mode.

PSIC 4062 Crisis Intervention

Academic credits: Three (3)

Prerequisite: PSIC 3003

Contact hours: 45

Description: Theoretical and practical course that deals with the topic of crisis intervention. It includes theoretical considerations, multicultural perspectives, management of special populations, and intervention strategies. It discusses different systems for rescue services, particularly related to the criminal justice system and mental health services. It also includes considerations of recent changes and recommendations for evidence-based crisis intervention practice and research. This course can be taught in face-to-face, hybrid or online mode.

PSIC 4155 Behavior Analysis

Academic credits: Three (3)

Contact hours: 45

Description: Principles, practical applications of behavior analysis model, with emphasis on the management of adaptive problems. Attention is given to the concept of adaptation from the cognitive behavioral perspective. It also includes discussion and application of techniques of self-

control, assertiveness, stress management, and other adjustment problems. This course can be taught in face-to-face, hybrid or online mode.

PSIC 4160 Crisis Intervention and Interviewing

Academic credits: Three (3)

Prerequisite: PSIC 3003, LESO 3205

Contact hours: 45

Description: Theoretical and practical course in two parts. The first part deals with the principles and applications of the interview as an instrument to collect essential information for evaluation and decision making in the respective units of the Criminal Justice System. The second part of the course deals with crisis intervention. It includes theoretical and strategic considerations of intervention.

PSIC 4205 Social Psychology of the Organization

Academic credits: Three (3)

Prerequisite: JUST 3005, PSIC 3003

Contact hours: 45

Description: The course presents a psychological approach to social life from the point of view of the organization, the individual, institutions, conflict resolution, the decision-making process, communication styles, and hierarchical models. Moreover, it introduces the study of the organization and the various psychosocial factors that contribute to its functioning. Also, emphasis is given to the mission and objectives of the Criminal Justice System and to the review of the development of the social organization and the forces that coexist in the organization that produce modifications in the behavior of its members.

PSIC 4206 Correctional Psychology

Academic credits: Three (3)

Prerequisite: PSIC 3016

Contact hours: 45

Description: The course enters the exposition of the most common psychological disorders in the criminal population as well as treatment models for the same. Emphasis is given to the violent offender with antisocial personality, alcoholic, drug addict, sexual, female offender, and juvenile. The functions of the correctional psychologist and the supervision of professionals in the field are discussed.

PSIC 4507 Selected Topics in Forensic Psychology Seminar: Film and Psychopathology

Academic credits: Three (3)

Prerequisite: PSIC 3016, PSIC 3205

Contact hours: 45

Description: This seminar gives the student the opportunity to delve into various topics relevant to the field of forensic psychology. It is expected to critically analyze particular and current situations where law and psychology interact. The student is provided with the knowledge to understand the differences between legal discipline and psychology and also the way in which both converge in their interest in human behavior. It is expected in this course to critically analyze

the functioning of the Criminal Justice System in the light of psychological research and contemporary psychological theories.

SICI 4010 Application of Computer Statistical Analysis

Academic credits: Three (3)

Prerequisite: CISO 3155, SICI 4008

Contact hours: 45

Description: Use of the computer for statistical analysis of research in the field of Social Sciences. The course requires a computer lab and a statistics program.

SOCI 3005 Criminology

Academic credits: Three (3)

Prerequisite: SOCI 3245

Contact hours: 45

Description: Scientific analysis of the causes and forms of crime, the different systems of treatment and reform. This course can be taught in face-to-face, hybrid or online mode.

SOCI 3025 Sociology of Violence

Academic credits: Three (3)

Prerequisite: SOCI 3245

Contact hours: 45

Description: Concept of reform, social change, obedience and revolution, victim and victimizer interaction. Concept of violence in societies such as Anglo-American and Spanish-American. Nature of violence in its externalizations and juridical continuity. Characteristics of violence in Puerto Rico: cause and effect, future process of violence.

SOCI 3045 Sociology of Religion

Academic credits: Three (3)

Contact hours: 45

Description: Reflections on the concept of "religious experience". Its expression in ideas in relation to the circumstances surrounding historical and modern life, manifestations of enlightened rationalism in the attitude towards magic, tradition and disposition. Innovation, analysis of prophecy and asceticism. Religion in modern society.

SOCI 3245 Principles of Sociology

Academic credits: Three (3)

Prerequisite: CISO 3122

Contact hours: 45

Description: This course attempts to discover the basic structure of human society, to identify the main forces that hold groups together or weaken them, and to learn about the conditions that transform social life, as well as to analyze and interpret social data in a scientific way. In this course, students will develop their own position in relation to the nature and role of sociology in society in general and in the Puerto Rican context in particular. This course can be taught in face-to-face, hybrid or online mode.

SOCI 3265 Social Research Techniques

Academic credits: Three (3)

Prerequisite: SOCI 3245

Contact hours: 45

Description: The course consists of two phases: 1. The theoretical study of sociological and anthropological research designs, including theories, problems, hypotheses, definitions of variables, sampling techniques, and methods of analysis and interpretation. 2. An empirical investigation where the theoretical concepts and methods will be applied. This course can be taught in face-to-face, hybrid or online mode.

SOCI 3275 Sociology of Behavioral Variation

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of social deviations that break with established norms in the light of modern sociological theories and concepts, discussion of deviant behaviors and possible solutions to these social problems.

SOCI 3285 Group Dynamics

Academic credits: Three (3)

Prerequisite: CISO 3122

Contact hours: 45

Description: Analysis of the social interaction between personalities and the group they constitute. This course can be taught in face-to-face, hybrid or online mode.

SOCI 3315 Sociology of the Family

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of the fundamental structures of the institution of the family. Includes a comparative approach between the traditional family and the contemporary family. Topics such as courtship, marriage, divorce, etc. are discussed. This course can be taught in face-to-face, hybrid or online mode.

Office Systems

SICI 3011 Introduction to Computer Science I

Academic credits: Three (3)

Contact hours: 45

Description: General introduction to the concepts and terms related to computer programming logic. This course covers the following: algorithms, flowcharts, applications and techniques of special routines, represented through conceptual models.

SICI 3017 Introduction to Electronic Data Processing

Academic credits: Three (3)

Contact hours: 45

Description: This course is intended for students from other programs who wish to gain a foundation in electronic data concepts and procedures. Fundamentals of scientific and commercial programming will be presented. The student is required to prepare several simple programs, oriented to their needs. This course can be taught in face-to-face, hybrid or online mode.

SICI 3028 Applied Programming

Academic credits: Three (3)

Contact hours: 45

Description: The course provides the theoretical knowledge and practical skills necessary to profitably use the three most employed types of application software: word processors, electronic worksheets, database management systems, and other types of programs.

SICI 3211 Introduction to Information Systems

Academic credits: Three (3)

Contact hours: 45

Description: Fundamentals of computerized information systems, description of major components: data, communications, computers and other related equipment, programming systems, personnel. Procedures; functional units of a computer system; elements of the life cycle of systems executing various elementary programs; brief presentations and practice in the tools most useful to business personnel, such as word processing. Electronic worksheets, graphics generation, and file management: relationship between computerized systems, business, and society. This course can be taught in face-to-face, hybrid or online mode.

SICI 4008 Principles of Business Electronic Data Processing

Academic credits: Four (4)

Contact hours: 60

Description: The course is intended for students from other programs who are interested in gaining a foundation in the concepts and procedures of processing data by electronic means. Fundamentals of scientific and commercial programming will be presented. The student is required to prepare several simple programs oriented to their needs.

SICI 4010 Computer Application of Statistical Analysis

Academic credits: Three (3)

Prerequisite: CISO 3155, SICI 4008

Contact hours: 45

Description: Use of the computer for statistical analysis of research in the field of Social Sciences. The course requires a computer lab and statistical software. This course can be taught in face-to-face, hybrid or online mode.

SOFI 3004 Introduction to Document Processing & Design

Academic credits: Three (3)

Description: The course is structured to build a solid foundation in the development of basic computer keyboarding skills and techniques. Emphasis is placed on the development of speed

and accuracy and the techniques necessary to introduce the student to document layout using word processing software. The functions of vertical and horizontal centering, margin shifting, and simple tabbing are introduced and practiced. The teaching of collation techniques and marks as well as error correction is introduced. In addition, basic formatting and proofreading functions are demonstrated and applied for processing and designing the production of documents such as the traditional, simplified memorandum, and business letter. Students are also encouraged to develop creativity and teamwork as essential skills to survive and thrive in the world of automated work. The course must be passed with a "C".

SOFI 3007 Keyboard Operation Personal Use

Academic credits: Three (3)

Contact hours: 45

Description: Teaching alphanumeric touch keyboarding using the electronic typewriter or computer for personal use and basic skill development. Introduction to writing and producing documents, such as: letters, envelopes, vertical and horizontal centering, tabulations, and reports. Emphasizes good work habits, basic techniques, and error proofing.

SOFI 3008 Basic Computer Keyboarding and Introduction to Document Production

Academic credits: Three (3)

Contact hours: 45

Description: Teaching the basic skills and techniques necessary for touch operation of the electronic computer keyboard using word processing software. Application of the information processing cycle in document production. Development of basic skills (speed and accuracy), collation techniques and error correction. Development of work attitudes and habits.

SOFI 3017 Interpersonal Relations in the Office

Academic credits: Three (3)

Contact hours: 45

Description: Promotes self-awareness through the study of personality development, the formation of the concept of self, emotion management and effective communication. It includes the analysis of human behavior in terms of the individual, groups and companies.

SOFI 3067 Telecommunications in the Digital Office

Academic credits: Three (3)

Contact hours: 45

Description: The course Telecommunications in the Digital Office studies the theory and evolution of information thinking as a system, the information cycle, and the human aspect of using this technology. It includes the study of the subsystems of information processing and the latest information on technological advances in the digital office.

SOFI 3105 Document Production I

Academic credits: Two (2)

Contact hours: 30

Description: Continued development of basic skills and teaching of typing theory. Discussion of typing rules, language and typing word division for document creation, collation techniques during the document editing process, business letter formats with special notations, memos, tabulation exercises with column headings, horizontal and vertical lining, reports with notes, and use of document reproduction media. Emphasis on the development of good work habits. This course must be passed with a minimum of "C".

SOFI 3106 Document Production Laboratory I

Academic credits: Zero (0)

Description: This course is complementary to the Document Production I course. The student can develop to the maximum the basic skills of speed and accuracy. Through various exercises, students will apply thinking skills in the creation and editing of documents. Special emphasis is placed on the development of work attitudes and habits.

SOFI 3121 Business Document Processing and Design I

Academic credits: Three (3)

Description: The course is designed to apply and reinforce business document processing and design with a deliberate and intentional learning approach. The design of documents such as letters with special annotations; tables with main and column headings; business reports of one or more spreads are expanded. Collation techniques are emphasized during the review, proofreading, and editing process. Emphasis is placed on developing to perfection basic skills, good habits, positive and ethical attitudes toward work. It includes communication activities in developing the skills of composing, proofreading, and editing e-mails.

SOFI 3122

Commercial Document Processing and Design II

Academic credits: Three (3)

Description: Continues the application and reinforcement of business document processing and design with a deliberate and intentional learning approach. Focuses on the design of business form documents such as: requisitions and purchase orders, invoices, itineraries, press releases, reports, job applications, and personal data sheets. Instruction in writing legal documents is introduced. Basic skills are reinforced; processing and designing more complex business letters and modern memos. Application of collation techniques throughout the document editing process. Continued development of soft skills such as positive attitudes, good work habits, teamwork and others. The course must be passed with a minimum grade of "C".

SOFI 3210 Document Management

Academic credits: Three (3)

Contact hours: 45

Description: Teaching the rules for alphabetizing documents. Study of the organization and procedures for filing according to the following systems: alphabetical, numerical, geographical and by subject. Training in modern methods and techniques in the arrangement and control of documents: charge system, transfer and disposal of documents, microfilming and data processing.

SOFI 3215 Fast Writing in Spanish

Academic credits: Five (5)

Prerequisite: ESPA 3101

Contact hours: 75

Description: Teaching principles of rapid writing in Spanish. Includes reading, writing, and dictation in a rapid writing system used for transcribing by hand. Also includes review of language rules.

SOFI 3218 Document Production II

Academic credits: Two (2)

Prerequisite: SOFI 3105

Contact hours: 30

Description: Teaching and writing business forms such as: requisitions and purchase orders, invoices, statements, financial statements, financial statements, itineraries, press release, reports, job applications, and the personal data sheet. Reinforcement of basic skills, production of business letters and memos. Application of collation techniques during the editing process of the formats corresponding to the documents created. Teaching the writing of legal documents. Special emphasis on the development of work attitudes and habits.

SOFI 3219 Document Production Lab II

Academic credits: Zero (0)

Co-requisite: SOFI 3218

Description: This course is complementary to Document Production II. The student will continue the development of basic thinking skills through reinforcement exercises, creation and editing of administrative correspondence and statistical material. The development of desirable attitudes in performing assigned work is encouraged.

SOFI 3230 Document and Database Administration

Academic credits: 4 credits

Description: Teaching the rules of alphabetical filing. The organization and procedures for filing alphabetically, numerically, geographically, and by subject are studied. In addition, training is provided in the methods and techniques of document arrangement and control. It includes basic and intermediate aspects of a database program to apply the principles and standards of document management.

SOFI 3240 Information Processing Spreadsheets and Charts

Academic credits: Three (3)

Description: Teaching programs compatible with current office technology and administrative support staff functions. It includes the basics of office information processing software such as spreadsheets and graphics.

SOFI 3305 Information Processing

Academic credits: Two (2)

Contact hours: 30

Description: Teaching programs compatible with current office technology and administrative support staff functions. Includes the basics of information processing software such as spreadsheets, database, and graphics.

SOFI 3306 Information Processing Laboratory

Academic credits: Zero (0)

Co-requisite: SOFI 3305

Description: Course designed to reinforce the knowledge of the basic functions of information processing programs, such as: spreadsheets, databases and graphics. Students experiment with the functions of these programs in the creation of documents.

SOFI 3315 Fast Writing in English

Academic credits: Five (5)

Prerequisite: ENGL 3101

Contact hours: 75

Description: Teaching principles of rapid writing in English. Includes reading, writing, and dictation in a rapid writing system used for transcribing by hand. Also includes review of language rules.

SOFI 3327 Spanish Transcript

Academic credits: Four (4)

Prerequisite: SOFI 3215

Contact hours: 60

Description: Training in proper transcription techniques using electronic equipment. Integration and application of typing skills, fast typing systems, and language for proper transcription of documents. This course must be passed with no less than a "C".

SOFI 3328 English Transcript

Academic credits: Four (4)

Prerequisite: SOFI 3315

Contact hours: 60

Description: Training in the correct techniques for transcribing using electronic equipment. Integration and application of typing skills, fast typing systems, and application of language for transcribing documents. The course must be passed with no less than a "C".

SOFI 3355 Administrative Office Procedures

Academic credits: Three (3)

Prerequisite: SOFI 3105

Contact hours: 45

Description: Emphasis on the duties, responsibilities, as well as the professional image, characteristics and qualities of the administrative assistant. Discussion and application of modern office procedures. Teaching of the principles of decision making and effective time management for the better functioning of the office. This course can be taught in face-to-face, hybrid or online mode.

SOFI 3357 Elementary Accounting Procedures

Academic credits: Three (3)

Contact hours: 45

Description: Accounting designed especially for students in the Office Systems Program. Includes a general study of the basic elements of double entry bookkeeping, with appropriate application to special journals, subsidiary ledgers and other related ledgers and control of petty cash system. Preparation and analysis of payroll and financial statements.

SOFI 3415 Principles of Medical Terminology

Academic credits: Three (3)

Description: Emphasis on medical terminology to be applied in laboratory services, radiology, surgery and medical orders, among others. It discusses and applies the basic elements in the formation of medical terms such as: the root of the term, prefixes, suffixes and compound words. It also includes definitions and vocabulary related to body systems, so that the student can recognize, spell and correctly use terms of this specialized nomenclature. This course can be taught in face-to-face, hybrid or online mode.

SOFI 3416 Coding of Diagnoses and Procedures

Academic credits: Three (3)

Description: The tasks required of the medical biller and the importance of maintaining professional certification are discussed. The student is trained in basic coding standards and the use of the ICD-CM (International Classification of Disease) and CPT (Current Procedural Terminology) books so that the knowledge acquired is used in the performance of the functions as a medical biller.

SOFI 3417 Manual and Electronic Medical Billing with Audit Procedures

Academic credits: Three (3)

Description: Introduces the student to the billing processes according to the different medical plans. Manual and electronic methods will be used to collect data or information necessary to complete the medical billing function. Students will apply the rules governing insurance billing and basic auditing procedures to complete the medical billing cycle.

SOFI 3419 Administrative Procedures in the Medical Office

Academic credits: Three (3)

Description: This course introduces the student to the key aspects of working in the reception area of a medical office. In addition, students will learn how to manage administrative procedures, written communications, appointments, medical and financial records. Emphasis will be placed on maintaining the smooth running of a medical office so that processes are efficient. It includes the importance of service to both the client (patient) and other members of the health care team. This course can be taught in face-to-face, hybrid or online mode.

SOFI 3505 Ethics and Professional Development

Academic credits: Three (3)

Contact hours: 45

Description: Study and analysis of ethical practices in business and personal aspects confronting the individual in society. Ethical aspects and different approaches of analysis to solve different situations guided by ethical and moral values are discussed. Emphasis on critical thinking and decision-making skills.

SOFI 4005 Software Integration, Electronic Data Processing

Academic credits: Four (4)

Prerequisite: SOFI 3305

Contact hours: 60

Description: Electronic Information Processing. Teaching the advanced functions of word processing, spreadsheet and database programs. Integration of various word processing programs in document production.

SOFI 4030 Publication Design

Academic credits: Three (3)

Contact hours: 45

Description: Teaching the basics of computer publication design. Training in the design, creation and production of office publications. This course can be taught in face-to-face, hybrid or online mode.

SOFI 4036 Legal Office Procedure

Academic credits: Four (4)

Prerequisite: SOFI 3327

Contact hours: 60

Description: Emphasis on the responsibilities and duties of administrative personnel in the legal office. Teaching and application of terminology, functions and procedures in the production of legal documents. Development of the exercise of effective human relations, good judgment, positive attitudes, and professional education. Development and application of the principles of effective time management, decision making, analysis and interpretation of regulations.

SOFI 4037 Advanced Document Production

Academic credits: Three (3)

Prerequisite: SOFI 3218

Contact hours: 45

Description: Emphasis on mastery of modern office production techniques. Mastery of the technique of transcribing from hand-prepared drafts, development of the ability to follow oral and written instructions, production of specialized material, and mastery of the technique of collating.

SOFI 4038 Office Administration

Academic credits: Three (3)

Prerequisite: SOFI 3355

Contact hours: 45

Description: Discussion of the principles that apply in the planning, organization, direction and control of the typical activities of the different offices and in the solution of the problems that arise in them. Emphasis is given to aspects related to motivation, human resources and the management of information as raw material in the offices. Discussion of the effect of new technology on office administration and support staff. This course can be taught in face-to-face, hybrid or online mode.

SOFI 4305 Evaluation and Selection of Software and Office Equipment

Academic credits: Three (3)

Prerequisite: SOFI 3305

Contact hours: 45

Description: Study and analysis of various automated office equipment and programs from the user's point of view. Emphasis on comparison and evaluation techniques for proper selection of equipment and programs. This course can be taught in face-to-face, hybrid or online mode.

SOFI 4505 In-Service Training Techniques

Academic credits: Three (3)

Prerequisite: SOFI 3305

Contact hours: 45

Description: Techniques for office training of electronic equipment users. Development, management, coordination and evaluation of training programs.

SOFI 4985 Internship and Seminar

Academic credits: Five (5)

Prerequisite: SOFI 4005, SOFI 4038

Contact hours: 75

Description: Supervised work experience in offices in the communities selected as practice centers. The internship period is equivalent to 200 hours and 15 hours of seminar in which students will participate in activities that will complement their transition from university to the office.

Mechatronics Engineering Technology

MECA 3111 Introduction to Mechatronics Engineering Technology

Academic credits: 3

Prerequisites: None

Co-requisites: None

Contact hours: 45 per quarter

Description: Introduces the fundamental principles of engineering technology in a hands-on environment. The student will learn to identify tools, equipment, and components related to industrial practices in automated systems, as well as their responsibility on the job. They will use technical software to process and create technical documentation.

MECA 3112 Computer Aided Design

Academic credits: 3

Prerequisites: None

Co-requisites: None

Contact hours: 45 per quarter

Description: The course introduces the basic tools of computer aided design. The course is developed on a project basis from the conceptual part, modeling and fabrication of 3D parts.

MECA 3113 Basic Electricity and Electronics

Academic credits: 3

Prerequisites: None

Co-requisites: MECA 3114

Contact hours: 45 per quarter

Description: The course develops the study of DC and AC electrical circuits. This includes the concepts of: load, current, voltage, resistance, energy, power, capacitance, inductance, and transient behavior of RC and RL circuits. It also includes the study of Ohm's and Kirchoff's laws, series and parallel circuits and electrical sources.

MECA 3114 Basic Electrical and Electronics Laboratory

Academic credits: 1

Prerequisites: None

Co-requisites: MECA 3113

Contact hours: 45 per quarter

Description: Students practice basic handling of equipment such as: ammeters, voltmeters, digital multimeters. It develops measurement practices of the different electrical and electronic components, as well as tasks of identification and solution of failures in DC and AC electrical circuits.

MECA 3115 Electrical Blueprint and Diagram Reading

Academic credits: 3

Prerequisites: MECA 3211

Co-requisites: None

Contact hours: 45 per quarter

Description: The course introduces the student to the fundamentals of digital circuits used in signal processing and control. The focus is to expose students to sequential and combinational logic design, engineering standards and technical documentation, as well as teamwork and communication methods. It also studies basic, intermediate, and advanced numerical systems, codes, and digital gates.

MECA 3211 Industrial Electricity and Electric Motors

Academic credits:

Prerequisites: MECA 3113

Co-requisites: MECA 3212

Contact hours: 45 per quarter

Description: This course introduces the types of electric motors most used in industry. In addition, the course introduces the design and development of logic diagrams using relays for use in the installation, operation, and maintenance of electric motors.

MECA 3212 Industrial Electricity and Electric Motors Laboratory

Academic credits: 1

Prerequisites: None

Co-requisites: MECA 3211

Contact hours: 45 per quarter

Description: The student develops manual skills in the wiring of load and control circuits. In addition, students will develop skills in identifying and troubleshooting electrical motor control circuits using the digital multimeter and other instruments.

MECA 3213 Object Oriented Programming

Academic credits: 3

Prerequisites: MATE 3171

Co-requisites: None

Contact hours: 45 per quarter

Description: This course introduces fundamental concepts of object-oriented programming and design using high-level languages such as JAVA and Python. The course will discuss object-oriented concepts such as, "Classes", "Objects", "abstraction", 'Inheritance' and "Polymorphism".

MECA 3214 Statics and Dynamics

Academic credits: 3

Prerequisites: FISI 3011

Co-requisites: None

Contact hours: 45 per quarter

Description: The course studies the fundamental principles of statics and dynamics of mechanical systems. In addition, it studies forces and force systems, and equilibrium of bodies, kinematics and kinetics of particles, and kinematics and kinetics of rigid bodies. Emphasis is placed on the construction and analysis of physical and mathematical models of real mechanical systems.

MECA 3215 Digital Circuits

Academic credits: 3

Prerequisites: MECA 3211

Co-requisites: None

Contact hours: 45 per quarter

Description: The course introduces the student to the fundamentals of digital circuits used in signal processing and control. The focus is to expose students to sequential and combinational logic design, engineering standards and technical documentation, as well as teamwork and communication methods. It also studies numerical systems, codes, and basic, intermediate, and advanced digital gates.

MECA 3216 Databases

Academic credits: 3

Prerequisites: MECA 3219

Co-requisites: None

Contact hours: 45 per quarter

Description: The purpose of this course is to explain theoretical fundamentals of database. In this course we will discuss the phases of: Design, Operation and maintenance of databases. This course will focus on relational and object-oriented databases.

MECA 3217 Mechanical Systems

Academic credits: 3

Prerequisites: MECA 3214

Co-requisites: None

Contact hours: 45 per quarter

Description: The course studies the basic mechanical components that can be found in complex mechatronic systems such as gears, sprockets, mechanical drive using belts, belts, chains, bearings, bearings, seals, etc. Topics covered are the basic functions and physical properties of mechatronic components.

MECA 3218 Hydraulic and Pneumatic Technology

Academic credits: 3

Prerequisites: FISI 3011

Co-requisites: MECA 3219

Contact hours: 45 per quarter

Description: The course presents the basic principles and components for power transmission in hydraulic and pneumatic circuits. Fluid properties, hydraulic design, viscosity, hydraulic components, pumps, systems and circuits, maintenance and safety, pneumatics, control and design of air systems.

MECA 3219 Hydraulic and Pneumatic Technology Lab

Academic Credit: 1

Prerequisites: None

Co-requisites: MECA 3218

Contact Hours: 45 per quarter

Description: The laboratory presents hands-on experiences in the formation of hydraulic and pneumatic circuits for power transmission and their electrical control. Components such as: hydraulic motors, actuators, directional valves, among others, will be used.

MECA 3220 Fundamentals of Instrumentation and Controls

Academic credits: 3

Prerequisites: MATE 3031

Co-requisites: MECA 3221

Contact hours: 45 per quarter

Description: The purpose of the course is to explain the fundamentals and principles used in Instrumentation and Control Systems. Temperature, Pressure, Flow and Level parameters will be discussed in the course. The concept of “Piping Instrumentation Diagram (PI&D)” will be discussed in the course. The fundamental concepts of Control Valves, Control Loop and PID parameters will be discussed in the course.

MECA 3221 Laboratory Fundamentals of Instrumentation and Controls Lab

Academic credits: 1

Prerequisites: None

Co-requisites: MECA 3220

Contact Hours: 45 per quarter

Description: The laboratory provides hands-on experiences in the understanding and application of measuring instruments used in industry. The laboratory practices focus on the use of pressure, temperature, flow, displacement, and other instruments

MECA 3222 Introduction to Networking

Academic credits:

Prerequisites: MECA 3213

Co-requisites: None

Contact hours: 45 per quarter

Description: The purpose of the course is to explain the fundamentals of computer networks and Cyber Physical Systems (CPS). The concepts of Communication Protocols, Network Standards, OSI Model, Security, Network Topologies and Peripherals will be discussed in the course.

MECA 3311 Programmable Controllers I

Academic credits: 3

Prerequisites: MECA 3211

Co-requisites: None

Contact hours: 45 per quarter

Description: Course designed to introduce the student to programmable controllers (PLC & PAC) where hardware is covered, programming in ladder diagrams, introduction to communication networks. Programming using relay type instructions, as well as timers, counters, mathematical instructions, comparison, data movement, sequencers and an introduction to human machine interfaces (HMI).

MECA 3312 Industrial Robotics

Academic credits: 3

Prerequisites: MECA 3214

Co-requisites: None

Contact hours: 45 per quarter

Description: Course designed to introduce the student to Industrial Robotics where the components and structure, kinematic configuration, SCARA configuration, mechanical system drives, and robot programming are covered.

MECA 3313 Statistical Methods and Quality Control

Academic credits: 3

Prerequisites: MATE 3172

Co-requisites: None

Contact hours: 45 per quarter

Description: Introduction to Quality concepts and tools, statistical measurements and graphing, analysis using statistical software, metrology and calibration procedures and protocols, inspection and testing techniques. It analyzes preventive and corrective actions in the context of improving product, processes, service or correcting problems. This course helps prepare the student to qualify for the Quality Technician Certification by ASQ American Society for Quality.

MECA 3315 Occupational Safety and Health

Academic credits: 3

Prerequisites: None

Co-requisites: None

Contact Hours: 45 per quarter

Description: This course presents the principles of industrial health and safety. Emphasis is placed on industrial safety and OSHA regulations. Safe work environments, OSHA compliance, accident analysis and prevention, costs associated with accidents, among other topics are studied.

MECA 3411 Programmable Controllers II

Academic credits: 3

Prerequisites: MECA 3311

Co-requisites: None

Contact hours: 45 per quarter

Description: Course designed to introduce the student to block programming, Sequential Function Chart (SFC) programming languages, Structured Text Language (ST) and an introduction to Human Machine Interfaces (HMI).

MECA 3412 Motion Control

Academic credits: 3

Prerequisites: MECA 3215

Co-requisites: None

Contact hours: 45 per quarter

Description: Course designed to introduce the student to precise motion control systems. From design to application through configuration and programming.

MECA 3413 Technology Innovation Management

Academic credits: 3

Prerequisites: None

Co-requisites: None

Contact hours: 45 per quarter

Description: The course studies cases of innovative companies, elements of an innovation process, review of the main problem-solving methods, opportunity analysis, planning and forecasting techniques.

MECA 3414 Manufacturing Process Planning

Academic credits: 3

Prerequisites: MECA 3411

Co-requisites: MECA 3415

Contact hours: 45 per quarter

Description: The course presents the theory and applications of manufacturing processes (casting, forming, machining, additive manufacturing), CNC machines, types of materials, manufacturing design, product planning and control.

MECA 3415 Automated Manufacturing Systems

Academic credits: 1

Prerequisites: None

Co-requisites: MECA 3414

Contact Hours: 45 per quarter

Description: The laboratory emphasizes the programming and operation of automated manufacturing systems such as computer numerical control machines. The handling of measuring tools, and the application of part clamping techniques on CNC machines, as well as the selection of cutting tools are important part of this course.

MECA 3416 Machine Vision Systems

Academic credits: 3

Prerequisites: MECA 3311

Co-requisites: None

Contact hours: 45 per quarter

Description: This course is a broad introduction to computer vision. The course provides students with knowledge and practice in image geometry, image filtering, segmentation techniques, image representation and description, and depth measurements, texture analysis, dynamic vision and motion analysis, matching and recognition. The course will focus on solving problems based on this technology and industrial applications.

MECA 3417 Applied Economic Analysis

Academic credits: 3

Prerequisites: MATE 3172

Co-requisites: None

Contact hours: 45 per quarter

Description: This course teaches quantitative project evaluation tools with economic analysis in mind. Decision making strategies, risk, sensitivity analysis, and uncertainty analysis are studied. These tools are applied to problems through projects, emphasizing engineering technology, critical thinking, and communication skills.

MECA 3418 Mechatronic Systems Maintenance

Academic credits: 3

Prerequisites: MECA 3414

Co-requisites: None

Contact hours: 45 per quarter

Description: The course provides hands-on experience in troubleshooting techniques for repairing mechatronic systems. Skills developed include troubleshooting, repair, preventive maintenance, safe maintenance procedures, safe clamping practices for moving machines, and the proper use of lubricants.

MECA 3419 Capstone

Academic credits: 3

Prerequisites: MECA 3414

Co-requisites: None

Contact Hours: 45 per quarter

Description: The purpose of the course is to develop an understanding of independent research through the study of a particular topic of interest in Mechatronics Engineering Technology. The special project is an exercise in the professional application of specialized skills and experience developed in the field.

MECA 4211 Cyber Security

Academic credits: 3

Prerequisites:

Co-requisites:

Contact hours: 45 per quarter

Description: This course will explain the fundamentals of cyber security as applied to Cyber Physical Systems (CPS) and Internet of Things (IoTs). Fundamental concepts such as, Cyber Attacks, Vulnerability Assessment, Risk Management, Network Security and Remediation will be discussed in the course.

MECA 4212 Introduction to Artificial Intelligence

Academic credits: 3

Prerequisites:

Co-requisites:

Contact hours: 45 per quarter

Description: This course will explain the fundamentals of Artificial Intelligence. Topics and techniques for the analysis of intelligent systems will be discussed in the course. Expert Systems, Neural Networks, Fuzzy Logic and Machine Learning will be explained in the course.

MECA 4213 Industrial Project Management

Academic credits: 3

Prerequisites: MECA 3313, MECA 3417

Co-requisites: None

Contact hours: 45 per quarter

Description: This course provides engineering technology students with a comprehensive understanding of how to plan, optimize, and manage projects (or tasks) efficiently to bring products, services, or developments to fruition. This includes building the structure, processes, components, and linkages with a team to successfully deliver the project within schedule, budget, and quality requirements.

MECA 4214 Lean Manufacturing

Academic credits: 3

Prerequisites:

Co-requisites:

Contact hours: 45 per quarter

Description: This course presents fundamental knowledge of continuous process improvement methodologies used in competitive manufacturing environments. This introductory course exposes the student to the basic concepts of lean manufacturing theory and the various tools and techniques involved with a lean implementation. The course will be presented following the DMAIC (define, measure, analyze, improve, control) Lean-six sigma process methodology for solving problems related to process and system improvement.

Instrumentation and Control Systems Engineering Technology

AUTI 1005 Introduction to Automation

Academic credits: One (1)

Contact hours: 15

Description: Introduces the student to a general concept of industrial automation and its evolution. It defines what logic is in an electrical circuit. It reviews the units of measurement in electronic instrumentation and introduces the basic theory of measurement.

AUTI 1010 Control Circuit Design in CAD

Academic Credits: Three (3)

Contact hours: 45

Description: The course introduces the basic tools of 2D computer aided drafting. The course is developed on a project basis. Schematic and panel drawings of electrical control circuits will be made using the libraries provided by AutoCAD Electrical or other available software. The basic workflow and management of project drawings will be demonstrated.

AUTI 1012 Sensors and actuators

Academic credits: Three (3)

Prerequisite: MAIN 2025

Co-requisite: AUTI 1015

Contact hours: 45

Description: The different principles used in instruments to measure pressure, weight, temperature, flow, level, conductivity and pH are studied. In addition to the different methods used to manipulate processes and bring them to the correct value. These are relays, resistors, valves and electric motors. The different terms or parameters used by the manufacturers of the

equipment are explained. The advantages and disadvantages of the different instruments available are discussed to select the best one for a particular application.

AUTI 1013 PLC Wiring, Programming and Troubleshooting

Academic credits: Four (4)

Contact hours: 60

Description: This course is designed to train the student in wiring, programming, halting, and troubleshooting industrial electrical circuits using PLCs. The student will begin by wiring the I/O boards. This will make it easier for the student to master troubleshooting. This is followed by setting up the file, making the program, and running it. The student will practice these skills, using various ladder diagrams. In addition, you will work with the functions of documenting, parsing, forcing, and searching. After mastering these skills, the student will then proceed to troubleshoot and correct faults using the wiring diagram, digital multimeter and logic explained in class. All components illustrated in the diagrams will be provided, as well as the digital multimeter.

AUTI 1015 Sensors and Machine Vision Laboratory

Academic Credits: One (1)

Contact hours: 45

Description: This course will provide students with hands-on laboratory practice in the identification, preparation, selection, and use of the most common sensors found in industry, including high-tech sensors such as machine vision systems. In addition, hands-on experience will be provided with automation and automated artificial inspection technologies to recognize features or components, as well as to measure and detect defects.

AUTI 2005 PID Control P.W.D.

Academic credits: Three (3)

Prerequisite: AUTI 1012, AUTI 1013

Contact hours: 45

Description: This course is intended for the student to master the theoretical and practical skills to control a closed loop process using proportional, integral and derivative (PID) control modes. The content includes the 9PWM pulse width modulated control mode, as well as the process of wiring analog I/O boards and how to prepare and run closed-loop control programs. The course also aims to develop the skills to set the PID control parameters that best stabilize and control a given process.

AUTI 2006 PLC Programming and Communication

Academic credits: Three (3)

Prerequisite: AUTI 1013

Contact hours: 45

Description: It covers in a theoretical and practical way more advanced instructions used to program PLCs. In addition, it teaches the installation of communication networks between PLCs and establish communication with the different nodes of the network.

AUTI 2010 Applied Programming

Academic Credits: Three (3)

Contact hours: 45

Description: In the course you learn to code programmed using a computer programming language by solving mathematical problems, control problems, and using a programming language. It includes the conceptual approach to problems and the development of solutions through the implementation of algorithms and flowcharts.

AUTI 2015 Computerized Systems Validation

Academic credits: Three (3)

Prerequisite: AUTI 2005

Contact hours: 45

Description: The course introduces the concept of validating computerized systems in modern industry. The definitions, origin and Food and Drug Administration (FDA) standards, as well as those of IOS 9000 are studied. The methodology and qualifications of operation, installation and performance are extensively discussed. In addition, internal and external (supplier) audits are covered. Students will be required to validate some of the programs prepared for the Research and Practical Project course.

AUTI 2016 Analysis of an Industrial Automation Process

Academic credits: Two (2)

Prerequisite: AUTI 2005

Contact hours: 30

Description: The student will develop an analysis of an automation process used in the industry. They will establish the correctness of the process and submit changes or modifications that may improve it, if necessary. Emphasis will be placed on teaching methods of evaluation and preparing oral and written presentations.

AUTI 2017 Industrial Economics

Academic Credits: Three (3)

Contact hours: 45

Description: Application of elementary economic analysis when making technical project decisions. The comparison of alternatives is studied using techniques of annual costs, present value, rates of return, among others.

AUTI 2020 Industrial Substance Technology

Academic Credits: Three (3)

Contact hours: 45

Description: This course presents the student with an overview of the basic concepts of the chemical substances most used in modern industry. Among the topics of technical interest are the spectroscopic properties and the properties of chemical and molecular compounds in relation to the instrumentation used in the industry.

AUTI 2023 Fundamentals of Digital Circuits

Academic Credits: Three (3)

Prerequisite: MAIN 2007

Contact hours: 45

Description: This course introduces students to the fundamentals of digital circuits used in signal processing and control. The focus is to expose students to sequential and combinational logic design, engineering standards and technical documentation, as well as teamwork and communication methods.

MAIN 2007 Basic Electricity

Academic credits: Four (4)

Co-requisite: MAIN 2017

Contact hours: 60

Description: Emphasize providing the student with the basic knowledge and skills to make electrical repairs. It includes electrical theory, installations, wiring methods, ohm's law, measuring equipment, motors, electrical computations, controls and electrical drawings.

MAIN 2017 Basic Electricity Laboratory

Academic credits: One (1)

Contact hours: 45

Description: Study and laboratory practice on the operation of the different electrical components studied in the Basic Electricity course.

MAIN 2025 Industrial Electricity

Academic credits: Three (3)

Prerequisite: MAIN 2007, MAIN 2017

Co-requisite: MAIN 2037

Contact hours: 45

Description: Emphasizes the installation, maintenance, and industrial applications of electrical equipment. It includes the study of motor generators, electrical distribution and control methods for the proper operation and safety of this equipment.

MAIN 2029 Industry Work Experience Work Experience

Academic Credits: Three (3)

Prerequisite: AUTI 1012, AUTI 1013

Contact hours: 150 Practical/15 Lecture

Description: This is the organized and supervised experience that the student has in a real industrial work environment. This experience will allow the student to apply the knowledge acquired during their academic training, as well as their competencies. The internship centers will be selected based on technological activities related to the student's technical program and that will allow him/her to affirm and further develop his/her knowledge and skills. To complete this internship, the student will have to complete 150 contact hours at the internship center and 15 hours of theory.

MAIN 2037 Industrial Electricity Laboratory

Academic credits: One (1)

Co-requisite: MAIN 2025

Contact hours: 45

Description: Using electrical diagrams, students will wire load and control circuits commonly used in industry. After mastering the wiring, the student will be able to troubleshoot and repair faults using the electrical diagram and digital multimeter.

MAIN 2220 Robotics

Academic credits: Three (3)

Prerequisite: FISI 1001

Contact hours: 3 hours per week

Description: Industrial applications of robots. Basic configurations and operations. Study of the fundamental mechanisms, controls and sensors.

Mechanical Engineering Technology

COEN 1005 Energy Audit Techniques I

Academic Credits: Three (3)

Contact hours: 45

Description: This course will provide the student with an introduction to the analysis of energy consuming systems in buildings and facilities of various functions. The basic concepts of electricity and thermodynamics are presented to apply them to the realization of energy audits. The aim is to identify those aspects of the consuming systems that admit partial or permanent improvements in terms of energy consumption and to point out, with propriety, the type of superior technical assistance required to implement or evaluate its recommendation, to know the basic instruments for the measurement of energy flows with the corresponding precision. Specifically, the following topics must be covered: basic concepts of applicable electricity and thermodynamics, energy auditing, lighting and power (motors).

MAIN 1005 Engineering Materials

Academic credits: Three (3)

Contact hours: 45

Description: An introduction to the different materials used in industry; their application and properties. Tests to which the materials are subjected.

MAIN 1006 Manufacturing Processes

Academic credits: Three (3)

Contact hours: 45

Description: The fundamental processes of production, fabrication of steel and other metals: heat treatments, alloys, ferrous and non-ferrous metal castings, forgings, rolling, corrosion, welding, and general manufacturing methods.

MAIN 1010 Introduction to Engineering Technology

Academic Credits: Three (3)

Contact hours: 45

Description: The course presents basic knowledge of engineering technology in a laboratory environment. The student will learn to identify tools, equipment, and components related to industrial practices, as well as their responsibility on the job. Students will collect data and process it using spreadsheets, analyze it and present it in reports using different formats.

MAIN 2005 Blueprint Reading

Academic credits: Two (2)

Contact hours: 30

Description: By reading blueprints you can interpret and visualize drawings. It includes procedures for reading blueprints, titles, specifications, special areas, advanced and complex drawings, abbreviations and vocabulary.

MAIN 2007 Basic Electricity

Academic credits: Four (4)

Co-requisite: MAIN 2017

Contact hours: 60

Description: Emphasize providing the student with the basic knowledge and skills to make electrical repairs. Includes electrical theory, installations, wiring methods, OHM's law, measuring equipment, motors, electrical computations, controls and electrical plans.

MAIN 2009 Instrumentation and Controls

Academic credits: Three (3)

Prerequisite: MAIN 2007

Co-requisite: MAIN 2019

Contact hours: 45

Description: Includes principles used in instrumentation, understanding and application of measuring instruments, behavior of materials, energy, force, electrical circuits, industrial processes, pressures, temperatures, and gravity.

MAIN 2015 Refrigeration and Air Conditioner

Academic credits: Three (3)

Prerequisite: MAIN 2007, MAIN 2017

Co-requisite: MAIN 2018

Contact hours: 30

Description: Studies the fundamental principles of refrigeration and air conditioning. Includes heat exhausts, ventilation, controls, refrigeration, tools, cycles and classification, evaporation, condensers, and related equipment.

MAIN 2016 Boilers and Auxiliaries

Academic credits: Three (3)

Prerequisite: TEME 2008

Contact hours: 45

Description: This course gives special attention to power and energy sources such as boilers and hot air machines, cylinders and pistons, condensers, internal combustion engines, compressors and steam engines.

MAIN 2017 Basic Electricity Laboratory

Academic credits: One (1)

Co-requisite: MAIN 2007

Description: Study and laboratory practice on the operation of the different electrical components studied in the Basic Electricity course.

MAIN 2018 Refrigeration and Air Conditioning Laboratory

Academic credits: Zero (0)

Co-requisite: MAIN 2015

Contact hours: 45

Description: The lab is a complement to the MAIN 2015 course. The same principles are studied from the experimental point of view. The student will gain experience in the use of precision instruments and equipment, learn to analyze graphs, reports and research results.

MAIN 2019 Instrumentation and Controls Laboratory

Academic Credits: One (1)

Co-requisite: MAIN 2009

Contact hours: 45

Description: The lab is a complement to the MAIN 2009 course. It includes principles used in instrumentation, understanding and application of measuring instruments, behavior of materials, energy, force, electrical circuits, industrial processes, pressures, temperatures and gravity from the experimental point of view. The student will gain experience in the use of precision instruments and equipment. Also, they will learn to analyze graphs, reports, and research results.

MAIN 2020 Industrial Quality Control

Academic Credits: Two (2)

Co-requisite: MAIN 2021

Contact hours: 30

Description: Introduction to quality concepts, tools, techniques, statistics, metrology and procedures, calibration protocols, inspection and testing techniques. Preventive and corrective actions are discussed in the context of improving product, process, service or correcting problems.

MAIN 2021 Quality Control and Machine Vision Systems Laboratory

Academic Credits: One (1)

Co-requisite: MAIN 2020

Contact hours: 45

Description: This course will give students a hands-on introduction to industrial machine vision applications and provide practical experience with automated machine inspection and automation technologies. Example of current industrial applications using machine vision: electronics, metal, automotive, wood, plastics, paper, textiles, film, food manufacturing, biomedical. Common functions: feature or component recognition, assembly guidance, robotic arms or vehicles, welding, dispensing; inspection, measurement, defect detection.

MAIN 2025 Industrial Electricity

Academic Credits: Three (3)

Prerequisite: MAIN 2007

Co-requisite: MAIN 2037

Contact hours: 45

Description: Emphasizes the installation, maintenance, and industrial applications of electrical equipment. It includes the study of motors, generators, electrical distribution and control methods for the proper operation and safety of this equipment.

MAIN 2027 Machine Shop

Academic credits: Two (2)

Description: Application in the fundamentals in the operation of industrial machinery such as: Mechanical lathe, milling machine, drill press, press and sanders.

MAIN 2029 Work Experience in Industry

Academic credits: Three (3)

Prerequisite: MAIN 2025, MAIN 2015

Contact hours: 150 Practical / 15 Lecture

Description: This is the organized and supervised experience that the student has in a real industrial work environment. This experience will allow the student to apply the knowledge acquired during their academic training, as well as their competencies. The internship centers will be selected based on technological activities related to the student's technical program and that will allow him/her to affirm and further develop his/her knowledge and skills. To complete this internship, the student will have to complete 150 contact hours at the internship center and 15 hours of theory.

MAIN 2030 Welding Workshop

Academic credits: One (1)

Prerequisite: MAIN 2007, MAIN 2017

Contact hours: 30

Description: Technical knowledge in welding, fundamental arc, welding safety, welding machine, electrode classification, development of manual skills to perform welding of coated material,

training in the use of a/c and d/c machines and the use of DCEN and DCEP polarity. Aluminum and stainless-steel welding.

MAIN 2036 Programmable Controls

Academic credits: Three (3)

Prerequisite: MAIN 2025

Contact hours: 45

Description: All aspects of industrial automation are covered, from sensors used to initiate processes to complex analog control applications. The course contains all the necessary information and applications of programmable controllers.

MAIN 2037 Industrial Electricity Laboratory

Academic Credits: One (1)

Co-requisite: MAIN 2025

Contact hours: 45

Description: Using electrical diagrams, students will wire load and control circuits commonly used in industry. After mastering the wiring, the student will be given the opportunity to troubleshoot and repair faults using the electrical diagram and digital multimeter.

MAIN 2220 Robotics

Academic credits: Three (3)

Prerequisite: FISI 1001

Contact hours: 3 hours per week

Description: Industrial applications of robots. Basic configurations and operations. Study of the fundamental mechanisms, controls and sensors.

TECI 1005 Technical Drawing

Academic credits: Three (3)

Contact hours: 45

Description: Fundamental principles of engineering drawing as a means of technical and graphic expression. Applied geometry, lettering practice, orthographic projection of: points, lines, planes and objects. Reading drawings, analysis and problem solving by orthographic projection; auxiliary views, sections, procedures and rules of practice. Pictorial drawings: oblique isometrics, principles of perspective and freehand sketching; dimensions, notes and dimensioning in detail and set drawings.

TEME 2008 Hydraulics and Pneumatics

Academic credits: Three (3)

Prerequisite: MAIN 2007, MAIN 2017

Co-requisite: TEME 2026

Contact hours: 45

Description: Study of the fundamental theories of hydraulic and pneumatic systems. Emphasis is placed on the use of these media in the transmission of power in process and control systems.

TEME 2026 Hydraulics and Pneumatics Laboratory

Academic Credits: Three (3)

Co-requisite: TEME 2008

Contact hours: 45

Description: Study and laboratory practice on the operation of hydraulic and pneumatic components studied in the Hydraulics and Pneumatics course.

Automotive Technology

MAIN 1005 Engineering Materials

Academic credits: Three (3)

Contact hours: 45

Description: An introduction to the different materials used in industry; their application and properties. Tests to which the materials are subjected.

TEAU 1000 Mechanical Principles

Academic credits: Four (4)

Contact hours: 60

Description: Provides the knowledge necessary to understand the valve systems, connecting rods, pistons, crankshaft, cylinder blocks, gear trains and steering systems of the automobile. It exposes all these different mechanical systems of the automobile as articulated link mechanisms.

TEAU 2005 Brake and ABS System

Academic credits: Three (3)

Contact hours: 45

Prerequisite: TEAU 2021, TEAU 2022

Description: This course studies the theory of operation, diagnosis, and repair of drum, disc, and parking brake systems. Also included is the theory, diagnosis, and repair of anti-lock brake systems, ABS.

TEAU 2008 Manual, Automatic and Transaxle Transmissions

Academic credits: Three (3)

Contact hours: 45

Prerequisite: TEAU 2021, TEAU 2022

Description: This course studies the theory of operation and application of manual and automatic clutch systems in transmissions, transaxles, and differentials, with emphasis on diagnosis and repair. It also discusses the operation of hydraulic circuits and electronic controls of automatic transmissions and transaxles used today, as well as the use of special tools and repair techniques.

TEAU 2009 Automotive climate control system

Academic credits: Three (3)

Contact hours: 45

Prerequisite: TEAU 2021, TEAU 2022

Description: This course studies the theory of operation, diagnosis and repair of manual and electronic climate control systems. It includes the refrigeration cycle and EPA guidelines for refrigerant handling and recycling.

TEAU 2015 Suspension, Steering & Alignment System

Academic credits: Three (3)

Contact hours: 45

Prerequisite: TEAU 2021, TEAU 2022

Description: This course studies the theory of operation, diagnosis and repair of automotive suspension and steering systems, including electronic control systems. It includes procedures for repairing alignment components and servicing car tires.

TEAU 2021 Basic Electricity and Electronics

Academic credits: Five (4)

Prerequisite: MATE 3041

Contact hours: 60

Description: Nature of electricity, concept of current, voltage, resistance, capacitance, inductance, series circuit, parallel circuit, series parallel circuits. Theory of magnetism, sine waves, nature of alternating current, transformers. Includes electronic components of major application in the automotive industry. No previous knowledge of electronics is required. Explains the theory and operation of components such as: diodes, transistors and SCR.

TEAU 2022 Basic Electricity and Electronics Laboratory

Academic credits: One (1)

Prerequisite: MATE 3001

Description: This lab will test the fundamentals and operation of the various electrical and electronic components studied in its associated course, basic electricity and electronics.

TEAU 2025 Diesel Engines

Academic credits: Three (3)

Prerequisite: TEAU 2021

Contact hours: 45

Description: The study of the diesel engine and the operation and history, the different components. The engine cycles, tests on the injection pump or electronic injection, the turbo diesel system, cooling system and the most effective methods for the location of the connecting rods and a series of useful diagnostics that complement all the information.

TEAU 2026 Engine Performance I

Academic credits: Three (3)

Prerequisite: TEAU 1000

Contact hours: 45

Description: This course studies the theory of operation and diagnostics associated with the performance, drivability, and repair of fuel delivery and fuel injection systems; in addition, it

delves into the mechanical and electronic aspects of the emission control system. The use of current diagnostic equipment for engine subsystems is also discussed.

TEAU 2027 Engine Performance II

Academic credits: Four (4)

Pre-requisite: TEAU 2021, TEAU 2022, TEAU 2026

Contact hours: 60

Description: This course studies the theory of operation, application, diagnosis and repair of computerized emissions systems. It covers the concept of engine performance and ignition systems and alternative fuels and hybrid vehicles. It includes the use of engine performance diagnostic equipment and the on-board diagnostic system.

TEAU 2035 Hydraulic Drive System

Academic credits: Three (3)

Contact hours: 45

Description: The fundamental concepts of fluid mechanics and its properties are covered. The fluid as a continuous medium and as a power transmitter. It presents its application in the automobile in braking systems, power steering and automatic transmissions.

TEAU 2045 Automotive Management

Academic credits: Three (3)

Contact hours: 45

Description: This course covers the basic concepts of the administration and management of an automotive shop. Basic principles of accounting, time and inventory control. The operation of computers and their application in all the administrative processes that take place in an automotive shop are discussed. Computer programs, materials and equipment developed by Allen Group Inc. will be used. Emphasis will be given to business development.

TEAU 2055 Automotive Air Conditioning System

Academic credits: One (1)

Contact hours: 15

Description: The study of its engineering principles, its parts and components, its function and relationship to other automotive systems.

TEAU 2065 Motor Vehicle Warranty and Service Regulations

Academic credits: Three (3)

Contact hours: 45

Description: Study of the laws and regulations governing motor vehicle safety, warranty and consumer protection, the areas of particular concern when evaluating a new and used motor vehicle, what a warranty certificate must provide by law, and the legal vocabulary with which the various elements in the structure of motor vehicle transactions are known.

TEAU 2091 Automotive Technology Practicum I

Academic credits: Four (4)

Pre-requisite: TEAU 1000, TEAU 2005, TEAU 2021, TEAU 2022

Contact hours: 60

Description: Students will work in all branches of automotive mechanics, using the latest equipment and tools in a real work environment. They will have the opportunity to diagnose and repair vehicles with real problems.

TEAU 2092 Advanced Automotive Technology Practice

Academic credits: Three (3)

Pre-requisite: TEAU 1001, TEAU 2021, TEAU 2022, TEAU 2091, TEAU 2027

Contact hours: 225

Description: This course is designed for the student to gain practice in the application of knowledge in automotive technology. It requires a minimum of 210 hours of practical work in the industry, under the supervision of a duly licensed and registered automotive technician, and 15 contact hours with the professor of the program.

TEAU 3037 Automatic Transmissions

Academic credits: Two (2)

Prerequisite: TEAU 2021

Contact hours: 30

Description: Study of parts and components, engineering principles, function of automatic transmission and relationship to other parts of the automobile.

Spanish

COEM 3001 Business Communication

Academic Credits: Three (3)

Prerequisites: ESPA 3101- ESPA 3102

Contact hours: 45 hours

Description: Study and development of the fundamentals of effective communication, in a business context. It emphasizes the importance of developing communicative competence for the functioning of companies and professional performance. This course can be taught in face-to-face, hybrid or online mode.

COEM 3006 Business Communication

Academic Credits: Three (3)

Prerequisites: COEM 3001

Contact hours: 45 hours

Description: The seminar works on aspects of language, fundamental to the theory and practice of writing. The main objective is the study of communication using written language. Therefore, the basic models of communication are explored. The course offers students the opportunity to acquire the knowledge, skills, and aptitudes that will strengthen their written communicative competence to perform effectively in the professional environment. Emphasis is given to the

generation, development, and organization of ideas as previous phases of writing; likewise, the minimum units for the writing of a professional text are studied as the sentence, according to its structure, the types of paragraphs, and the grammatical links that serve as logical connectors to link ideas. This course can be taught in face-to-face, hybrid or online mode.

EDPE 4255 Language Arts in the Curricular Areas at the Secondary Level

Academic credits: Three (3)

Contact hours: 45

Description: Study and application of language arts with emphasis on the processes of teaching reading, writing, and oral communication in secondary level curricular areas, excluding Spanish. This course can be taught in face-to-face, hybrid or online mode.

ESCO 3001 Psychology of Communication I

Academic credits: Three (3)

Prerequisite: ESPA 3102

Contact hours: 45

Description: Development of linguistic awareness that allows students to face the dialectics of business writing and various business documents with correctness and appropriateness. Therefore, this first part of the course concentrates on the study of the basic elements of the language as well as the functional study of grammatical areas. This course can be taught in face-to-face, hybrid or online mode.

ESCO 3002 Psychology of Communication II

Academic credits: Three (3)

Prerequisite: ESCO 3001

Contact hours: 45

Description: In this second part of the course, the classroom becomes a laboratory where students put into function the aspects studied in the first part: producing, analyzing, and critiquing different types of letters, reports, memos, circulars, and other written documents. This course can be taught in face-to-face, hybrid or online mode.

ESCO 3005 Oral and Written Business Communication I

Academic credits: Three (3)

Prerequisite: ESPA 3101

Contact hours: 45

Description: The course concentrates on the study of writing in written business communication as well as the methods and techniques of oral communication. Different types of business letters and other documents of a business nature are studied. This course can be taught in face-to-face, hybrid or online mode.

ESCO 3006 Oral and Written Business Communication II

Academic credits: Three (3)

Prerequisite: ESPA 3101

Contact hours: 45

Description: The course focuses on the study of report writing methodology and techniques and oral presentation of the report. Proposal writing and other types of business communication are also studied. This course can be taught in face-to-face, hybrid or online mode.

ESCO 3205 Oral Communication in Spanish with a Sense of Universal Expression

Academic credits: Three (3)

Contact hours: 45

Description: Development of the theory of communication as a process of cultural and social expression. The process of oral communication and its implications as an effective and massive means of expression in society. This course is for the Bachelor of Business Administration.

ESPA 0060 Pre-Basic Spanish

Academic credits: Zero (0)

Description: Designed for students who are not prepared to perform efficiently in the Basic Spanish course. Through grammatical exercises and composition work, it aims to improve the students' skills to the point of enabling them to compete on equal terms with the students of Basic Spanish. The content of this course will focus particularly on the study of phonology, spelling, morphology, and syntax; it also involves the practice of writing exercises and comprehension of literary models. A minimum College Board score of 500-550 will be used.

ESPA 3015 Grammar and Composition

Academic credits: Three (3)

Prerequisite: ESPA 3102

Contact hours: 45

Description: Compendium of SPANISH 103-104. The course is of a corrective and practical nature where the student is confronted with the correct uses of the vernacular through the analysis of grammatical and literary topics. This course can be taught in face-to-face, hybrid or online mode.

ESPA 3025 Oral and Written Communication Skills

Academic credits: Three (3)

Prerequisite: ESPA 3015

Contact hours: 45

Description: This course will constitute the continuation of ESPA 3015, Grammar and Composition. All theoretical aspects offered in course 3015 will be put into practice in the second part. They will put into practice the production strategies of the four (4) types of expository, descriptive, narrative and argumentative discourse, taking as a basis the principles of logic and psycholinguistics that apply to the field of communication. Given the diverse specialties in the field of Graphic Arts, particular experiences will be provided for each of them, as well as those that are common to them. Exercises will be done that respond to the nature of the professional experiences' students will have in the field. This course will be offered in the Bachelor of Arts with a concentration in Graphic Arts.

ESPA 3101 Basic Spanish I

Academic credits: Three (3)

Contact hours: 45

Description: Vision that includes the following aspects: Introduction to the study of the Spanish language, both in its historical and grammatical aspects. Vision of the literary creation in Spanish in the genres of the short story and the novel, considered in the light of some fundamental themes. This course can be taught in face-to-face, hybrid or online mode.

ESPA 3102 Basic Spanish II

Academic credits: Three (3)

Prerequisite: ESPA 3101

Contact hours: 45

Description: Continues the study of grammatical aspects and the vision of contemporary literary creation in Spanish in the genres of essay, theater and poetry, considered in the light of some fundamental themes. This course can be taught in face-to-face, hybrid or online mode.

ESPA 3201 Introduction to Literary Genres I

Academic credits: Three (3)

Prerequisite: ESPA 3101

Contact hours: 45

Description: Study of the elements and distinctive features of the literary genres short story, novel and drama, through the exhaustive analysis of the most representative works of Spain, Spanish America and the Caribbean.

ESPA 3202 Introduction to Literary Genres II

Academic credits: Three (3)

Prerequisite: ESPA 3201

Contact hours: 45

Description: Study of the elements and distinctive features of the literary genres essay and poetry, through the exhaustive analysis of the most representative works of Spain, Spanish America and the Caribbean.

ESPA 3211 Introduction to Spanish Literature I

Academic credits: Three (3)

Prerequisite: ESPA 3102

Contact hours: 45

Description: Study of the literary currents, authors and representative works of Spanish literature from the Middle Ages to the Renaissance. This course can be taught in face-to-face, hybrid or online mode.

ESPA 3212 Introduction to Spanish Literature II

Academic credits: Three (3)

Prerequisite: ESPA 3211

Contact hours: 45

Description: Study of literary currents, authors and representative works in the history of Spanish literature from the Baroque to the 21st century.

ESPA 3291 Spanish Grammar I

Academic credits: Three (3)

Prerequisite: ESPA 3102

Contact hours: 45

Description: Study of the morphosyntactic aspects of the Spanish language in descriptive form starting from the simple sentence to include coordination and subordination. Analysis of texts presenting the different linguistic levels and their values. This course can be taught in the classroom educational modality, assisted with technology.

ESPA 3292 Spanish Grammar II

Academic credits: Three (3)

Prerequisite: ESPA 3291

Contact hours: 45

Description: Study of the morphosyntactic aspects of the Spanish language in descriptive form starting from the simple sentence to include coordination and subordination. Analysis of texts presenting the different linguistic levels and their values. This course can be taught in the classroom educational modality, assisted with technology.

ESPA 3331 Critical Thinking and Argumentative Writing I

Academic credits: Three (3)

Contact hours: 45

Description: The course trains students to analyze and write a variety of argumentative documents. Through the functional study of various grammatical units, students will have the opportunity to refine basic skills that will enable them to interpret and structure argumentative texts with critical awareness, logic, accuracy, coherence, appropriateness, and linguistic correctness. This course can be taught in face-to-face, hybrid or online mode.

ESPA 3332 Critical Thinking and Argumentative Writing II

Academic credits: Three (3)

Prerequisite: ESPA 3331

Contact hours: 45

Description: In this second part, students will strengthen the functional grammatical aspects that will enable them to understand, formulate and write different types of argumentative discourses with linguistic appropriateness and correctness. Throughout the course, students will refine a series of basic linguistic skills that will help them overcome the limitations they have in the oral and written expression of different discourses. This course can be taught in face-to-face, hybrid or online mode.

ESPA 4221 Spanish American Literature I

Academic credits: Three (3)

Prerequisite: ESPA 3211, ESPA 3212

Contact hours: 45

Description: Panoramic view of Hispanic American literature from its origins to the end of modernism. Emphasis on the analysis of its major works and literary movements. This course can be taught in face-to-face, hybrid or online mode.

ESPA 4222 Spanish-American Literature II

Academic credits: Three (3)

Prerequisite: ESPA 4221

Contact hours: 45

Description: Panoramic view of Hispanic American literature from the early twentieth century to the Boom. Emphasis on the analysis of its major works and literary movements.

ESPA 4231 Puerto Rican Literature I

Academic credits: Three (3)

Prerequisite: ESPA 3102

Contact hours: 45

Description: Panoramic view of Puerto Rican literature from its origins to the avant-garde movements. Reading and analysis of the most representative works of each period.

ESPA 4232 Puerto Rican Literature I

Academic credits: Three (3)

Prerequisite: ESPA 3102

Contact hours: 45

Description: Panoramic view of Puerto Rican literature from the generation of the thirties to the present day. Study of the major works of the main authors. This course can be taught in the classroom educational modality, assisted with technology.

ESPA 4233 Contemporary Puerto Rican Literature

Academic credits: Three (3)

Prerequisite: ESPA 4231

Contact hours: 45

Description: Study and analysis of the most representative works of Puerto Rican literature from the 1950s to the present. This course can be taught in face-to-face, hybrid or online mode.

LITE 3011 Analysis and Interpretation of Literary Texts: Modern and Contemporary Literature

Academic credits: Three (3)

Prerequisite: HUMA 3101, HUMA 3102

Contact hours: 45

Description: Overview of the best and most representative humanistic, baroque, and neoclassical world literature, highlighting genres and changes in the literary tradition.

English

INCO 3005 Business Communication I

Academic credits: Three (3)

Prerequisite: ENGL 3102, ENGL 3104, ENGL 3012

Contact hours: 45

Description: Course designed for Business Administration and Office Systems students. They are trained in the correct way of writing and communicating in business English. Special attention is given to achieving effective communication in the business field and the logical process involved in creating and writing a business letter. This course can be taught in face-to-face, hybrid or online mode.

INCO 3006 Business Communication II

Academic credits: Three (3)

Prerequisite: INCO 3005

Contact hours: 45

Description: Continuation of INCO 3005 with emphasis on writing and communicating correctly in business English. Special attention is given to achieving effective communication in the business field and the logical process involved in creating and writing a business letter. This course can be taught in face-to-face, hybrid or online mode.

INCO 3025 Conversational Secretarial English

Academic credits: One (1)

Prerequisite: ENGL 3102

Contact hours: 15

Description: This course develops the ability to communicate orally in situations relevant to an office routine.

INCO 4006 Report Writing

Academic credits: Three (3)

Prerequisite: INCO 3006

Contact hours: 45

Description: This course will give the student experience in analyzing and writing various types of reports used in commerce, including long, formal reports which require research to be done. Considerable practice will be given in writing problems and exercises that will help the student correct English usage. The student is trained in report writing techniques. A long, formal report is required to develop proficiency in the presentation and interpretation of the information in the report. This course is largely a laboratory. Aspects of report writing theory will be presented to students, including the different report functions, purpose, format, research methods, and basic communication principles that must be mastered to produce dynamic and effective reports. Due to the nature of this course, enrollment should be limited to 20 students. A formal, lengthy, analytical report will be required in lieu of a final exam. This course can be taught in face-to-face, hybrid or online mode.

INCO 4015 Conversational English

Academic credits: Three (3)

Prerequisite: ENGL 3104

Contact hours: 45

Description: This course is designed to help students increase their confidence, fluency and accuracy in spoken English. The emphasis will be on pronunciation, vocabulary, and assisting students to help themselves improve their spoken English. The student will progress from simple conversations to dialogues involving specialized words, their usage, and finally the organization, recitation of a speech and oral report.

INCO 4035 Commercial Translations

Academic credits: Two (2)

Prerequisite: INCO 3006

Contact hours: 30

Description: This course is designed to develop skills in the techniques used in Spanish to English and English to Spanish translations. Emphasis will be placed on vocabulary, idiomatic expressions and the structure of both languages as they apply to commerce.

INCO 4055 Advanced Conversational English

Academic credits: One (1)

Contact hours: 15

Description: This course is designed for students in the Office Systems program. Students are given training in speaking and listening skills. Emphasis is placed on the development of an extensive vocabulary including clichés and idiomatic expressions. Intonation and accentuation are also emphasized.

INGL 0080 Pre-Basic English

Academic credits: Three (3)

Prerequisite: A score of 450 or less on the College Board English test.

Contact hours: 45

Description: This is a preparatory course designed to enable the student to meet subsequent English requirements. It will develop listening, speaking, reading, and writing skills. In addition, it is intended to change students' attitudes toward learning English. This course can be taught in face-to-face, hybrid or online mode.

INGL 3011 Honors English I

Academic credits: Three (3)

Contact hours: 45

Description: Offered to students with a good command of the English language who wish to do advanced work in the language. Literary genres are studied, and extensive writing is done. Students who successfully complete this course do not need to take any other graduate English courses unless required by their faculty.

INGL 3012 Honors English II

Academic credits: Three (3)

Prerequisite: ENGL 3011

Contact hours: 45

Description: Offered to students with a good command of the English language who wish to do advanced work in the language. Literary genres are studied, and extensive writing is done. Students who successfully complete this course do not need to take any other English courses for graduation unless required by their faculty.

INGL 3021 Oral and Written English I

Academic credits: Three (3)

Prerequisite: ENGL 3102, ENGL 3104

Contact hours: 45

Description: Advanced level exam first semester of each year prepared for future elementary school teachers. The sounds of the language are learned: identification, production of sounds, accentuation, rhythm, intonation and the use of specific vocabulary. To correct individual difficulties, there will be laboratory practice.

INGL 3022 Oral and Written English II

Academic credits: Three (3)

Prerequisite: ENGL 3021

Contact hours: 45

Description: Continuation of INGL 3021. Includes the comparative study of the English phonetic system and the vernacular. Provides the opportunity to learn linguistic concepts and techniques that can be applied in teaching English in elementary or secondary school. Laboratory practice will be provided to correct individual difficulties.

INGL 3031 Conversational English First Level I

Academic credits: Three (3)

Contact hours: 45

Description: This course is for students of the bachelor's degree in Tourism Culture. It is directed towards the development of oral communication skills in tourism-related situations. Emphasis is given to terminology related to geography, history and cultural aspects. In addition, emphasis is placed on the correct pronunciation of the English language.

INGL 3032 Conversational English Level I II

Academic credits: Three (3)

Prerequisite: ENGL 3031

Contact hours: 45

Description: This course is a continuation for students of the bachelor's degree in Tourism Culture. It is directed toward the development of oral communication skills in situations related to tourism. Emphasis is given to terminology related to geography, history and cultural aspects. In addition, emphasis is placed on the correct pronunciation of the English language.

INGL 3035 American English Phonetics

Academic credits: Three (3)

Prerequisite: ENGL 3102, ENGL 3104

Contact hours: 45

Description: The correct techniques of pronunciation, rhythm and intonation are taught with oral practice and phonetic transcription, particularly in those aspects of American English that offer difficulty to those whose vernacular is Spanish. Laboratory attendance is required.

INGL 3101 Basic English I

Academic credits: Three (3)

Contact hours: 45

Prerequisite: A score of 481-580 on the College Board English test.

Description: Organized to develop the student's immediate needs in the mastery of grammatical structures, while strengthening their cultural and professional growth. Development of reading and writing skills. This course can be taught in face-to-face, hybrid or online mode.

INGL 3102 Basic English II

Academic credits: Three (3)

Prerequisite: ENGL 3101

Contact hours: 45

Description: Organized to develop the student's immediate needs in continuing to master the grammatical structures of the English language, while strengthening their cultural and professional growth. Development of reading and writing skills. This course can be taught in face-to-face, hybrid or online mode.

INGL 3103 Intermediate English I

Academic credits: Three (3)

Contact hours: 45

Description: Analysis of selected readings, such as: essays, fiction, poetry, or drama and practice in writing with attention to grammar and idiomatic expressions. This course can be taught in face-to-face, hybrid or online mode.

INGL 3104 Intermediate English II

Academic credits: Three (3)

Prerequisite: ENGL 3103

Contact hours: 45

Description: Analysis of selected readings, such as: essays, fiction, poetry, or drama and practice in writing with attention to grammar and idiomatic expressions. This course can be taught in face-to-face, hybrid or online mode.

INGL 3116 Compendium of Business Communication

Academic credits: Three (3)

Contact hours: 45

Description: Intensive study of report writing, letter writing, preparation of resumes for job applications, etc. Motivate students to express themselves orally to gain confidence in the use of English as a second language. This course can be taught in face-to-face, hybrid or online mode.

INGL 3201 Grammar and Reading Composition I

Academic credits: Three (3)

Prerequisite: ENGL 3102, ENGL 3104

Contact hours: 45

Description: Continued study of more advanced grammatical structures and composition based on close analysis of selected readings. This course can be taught in face-to-face, hybrid or online mode.

INGL 3202 Grammar and Reading Composition II

Academic credits: Three (3)

Prerequisite: ENGL 3201

Contact hours: 45

Description: Continuation of INGL 3201, with an introduction to outlining and research techniques. This course can be taught in face-to-face, hybrid or online mode.

INGL 3221 Introduction to Literature I

Academic credits: Three (3)

Prerequisite: ENGL 3102, ENGL 3104

Contact hours: 45

Description: Analysis and appreciation of the short story and essay through reading. Oral and written practice of developed themes, taking into consideration the above literary genres. This course can be taught in face-to-face, hybrid or online mode.

INGL 3222 Introduction to Literature II

Academic credits: Three (3)

Prerequisite: ENGL 3221

Contact hours: 45

Description: Continuation of INGL 3221. Reading for analysis and appreciation of poetry, drama, and novels. This course can be taught in face-to-face, hybrid or online mode.

INGL 3238 Introduction to Literary Creation

Academic credits: Three (3)

Prerequisite: ENGL 3222

Contact hours: 45

Description: This course is designed for students who have completed Introduction to Literature or have special permission of the instructor. It includes the development of writing techniques through writing prompts, analysis of works, and development of the student's perception and imagination.