INTER AMERICAN UNIVERSITY OF DE PUERTO RICO CENTRAL OFFICE VICE PRESIDENCY OF ACADEMIC AND STUDENT AFFAIRS

**OFFICE OF CURRICULUM AFFAIRS** 

# GUIDELINES FOR THE REVIEW OF SINGLE AND SHARED ACADEMIC PROGRAMS AT THE INTER AMERICAN UNIVERSITY OF DE PUERTO RICO

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#### INTRODUCTION

This document is intended to provide guidelines for academic and administrative staff who participate in the curricular review processes of single and shared academic programs (i.e., programs authorized at least in two campuses of the System). It is framed in the "Procedure for curricular articulation", as modified by the University Council on March 18, 2005, March 7, 2008 and May 24, 2011, and approved by the President of the University. In addition, it incorporates the "Guidelines for curriculum development at the Inter American University of Puerto Rico" promulgated by the Vice Presidency of Academic and Student Affairs, as amended, and approved by the President of the University 5, 2016.

The first part of this document presents the "Curriculum review process for single academic programs". Due to the nature of the process, this part is simpler, since the responsibility of reviewing the program rests within a single academic unit. The second part addresses the "Curriculum review process for shared academic programs". This part is more complex because it requires the articulation of the revision work in Institutional Committees, composed by a minimum of two academic units.

The third part applies, both to the review of single and shared programs. This includes: (1) the content of the proposal, (2) the new order of the resolutions that will be considered by the Academic Senate and the University Council, effective February 2016, (3) the important aspects in the preparation of the proposal and the resolutions, (4) the syllabus, and (5) the modification of syllabus. In addition, the section related to the Program Goals, the Program Objectives and the Competency Profile of Graduates was extended to link them to the internationalization of the curriculum and the use of the Tk20 tool for the academic assessment of student learning.

The fourth part highlights the teaching of values as thematic axis or thread in the curriculum of the University. On the other hand, the fifth part, which was included in the 2016 edition, highlights the internationalization of the curriculum at the University. The section also refers to the student as a leader and agent of change in society. The sixth part presents the curriculum revisions and its possible notifications to the Puerto Rico Board of Education (CEPR). Some instances of the substantial changes are presented which, by regulatory provision, must be notified to the CEPR by the academic unit or the Central Office.

In addition, this document includes a series of appendices that aim to support the work of curriculum review. Among them are: the "Guidelines for curriculum development (2016)", resolution models, various taxonomies, a Syllabus template, and the "Guide for the Development of the Competency Profile of Graduates (August 2013)" which was developed by the Vice Presidency to support the processes of learning assessment. The 2018 edition of this document updates the information related to the syllabus and clarifies aspects related to the competency profile of graduates.

We hope that the document continues to fulfill the purpose for which it was created. If you have any questions, you can contact Dr. Jose A. Rodríguez, Institutional Director of the Office of Curricular Affairs (OAC), of the Vice Presidency of Academic and Student Affairs (VAAE), at 787-766-1912, extensions 2298 and 2498, or by email to <u>jarodriguez@inter.edu</u>.

PART I REVIEW OF SINGLE ACADEMIC PROGRAMS

## **REVIEW OF SINGLE ACADEMIC PROGRAMS**

## I. Criteria

- 1) Time elapsed since the last review. The University begins the curricular review processes of its academic programs every five years.
  - a. If it is an existing academic program, it is based on the effective date of the implementation of the last curricular review of the program.
  - b. If it is a new program, it starts from the academic year of its implementation.
- 2) Indications of a licensing or accrediting agency.
- 3) Standards and criteria of professional accrediting agencies.
- 4) Substantial changes in the professional competencies of the discipline that the graduate must possess for the job market, graduate programs or professional schools.
- 5) Substantial changes in the external environment, such as new technology, employability of graduates, as well as laws and regulations governing the exercise of the profession.
- 6) Changes in state and federal laws and regulations applicable to higher education programs and institutions.
- 7) Results of assessment processes.
- 8) Institutional priorities identified in the Systemic Strategic Plan.
- 9) Decrease in enrollment.

## II. Process for the curricular review of single academic programs

- 1) The Vice Presidency of Academic and Student Affairs (VAAE), through the Office of Curriculum Affairs (OAC), prepares the "Systemic Plan for Curricular Reviews", in accordance with the criteria identified in the previous section. The Plan presents the academic offer of the System with the academic units that are authorized to offer it. In addition, it identifies when the last curriculum review was completed and became current and in which academic year of the five-year cycle of the Plan the review process should begin.
- 2) The VAAE forwards the "Systemic Plan for Curricular Reviews " to Rectors and Deans of Academic Affairs of each academic unit for the planning of curricular review process.
- 3) The Dean of Academic Affairs sends the Plan to the department (or school) directors, with a copy to the division deans, when applicable.
- 4) The department directors plan and organize the curricular review works, in accordance with the date assigned to start the review of the academic program, according to the "Systemic Plan for Curricular Reviews" or other priorities identified in the academic unit.
- The department director designates a departmental committee of faculty that will be responsible for reviewing the academic program. This committee designates its leader or president.
- 6) The campus committee may request guidance or technical assistance from the Dean of Academic Affairs, the Academic Senate and these, in turn, from the University Council and the VAAE.
- 7) The departmental committee prepares its work plan and develops the curriculum proposal with the consensus of the faculty.

- 8) The department director submits the proposal to the Dean of Academic Affairs, who will turn it to the Academic Senate of the Academic Unit.
- 9) The Academic Senate studies the proposal and acts on it.
- 10) The Academic Senate refers the resolutions approved by the Assembly to the rector for consideration and corresponding action.
- 11) The proposal approved by the rector is referred to the University Council for consideration and corresponding action.
- 12) The University Council studies the proposal and supporting documents, and do the relevant consultations through the Executive Secretariat, if applicable.
- 13) If approved in the Assembly by the University Council, the proposal will be considered by the President of the University.
- 14) If approved by the President of the University, the VAAE determines the effective date of the proposal (i.e., when the curricular changes will take effect) and if it requires any notification to the JIP by the campus.
- 15) The VAAE modifies and creates the courses in the Banner system, as the case may be.

PART II REVIEW OF SHARED ACADEMIC PROGRAMS

## **REVIEW OF SHARED ACADEMIC PROGRAMS**

## I. Criteria

- 1) Time elapsed since the last review. The University begins the curricular review processes of its academic programs every five years.
  - a. If it is an existing academic program, it is based on the effective date of the implementation of the last curricular review of the program.
  - b. If it is a new program, it starts from the academic year of its implementation.
- 2) Indications of a licensing or accrediting agency.
- 3) Standards and criteria of professional accrediting agencies.
- 4) Substantial changes in the professional competencies of the discipline that the graduate must possess for the job market, graduate programs or professional schools.
- 5) Substantial changes in the external environment, such as new technology, employability of graduates, as well as laws and regulations governing the exercise of the profession.
- 6) Changes in state and federal laws and regulations applicable to higher education programs and institutions.
- 7) Results of assessment processes.
- 8) Institutional priorities identified in the Systemic Strategic Plan.
- 9) Decrease in enrollment.

## II. Process for the curricular review of shared academic programs

- 1) The Vice Presidency of Academic and Student Affairs (VAAE), through the Office of Curriculum Affairs (OAC), prepares the "Systemic Plan for Curricular Reviews", in accordance with the criteria identified in the previous section.
- 2) The VAAE forwards the "Systemic Plan for Curricular Reviews " to Rectors and Deans of Academic Affairs of each academic unit for the planning of curricular review process.
- 3) The VAAE determines the creation of an Institutional Committee. In consultation with the Deans of Academic Affairs of the academic units that offer the program, designates the leading campus and manages the participation of a representative from faculty. Each academic unit also appoints an alternate representative of the unit when necessary. The representatives of the academic units establish an agile and effective means of communication and consultation with the faculty.
- 4) The VAAE asks the deans of Academic Affairs of the academic units that offer the academic program to designate a faculty representative.
- 5) The VAAE provides guidance and technical assistance on the curriculum review process, the preparation of syllabus, the drafting of the curriculum review proposal and others, as requested.
- 6) The Institutional Committee prepares a work plan that fits a maximum of eighteen (18) months and develops the curriculum proposal, considering the recommendations of the faculty of the academic units.

- 7) Each unit representative collects the reactions of his faculty and sends them to the Institutional Committee. This, in turn, considers and integrates those that are relevant.
- 8) The VAAE facilitates the necessary consultations through the representatives in the Institutional Committee or the Dean of Academic Affairs of the units involved and informs the Institutional Committee of the result. For example:
  - a. the modification of shared courses or that belong to other disciplines.
  - b. the modification of programs with budgetary impact.
- 9) The Institutional Committee prepares the proposal and sends it to the VAAE for evaluation.
- 10) The VAAE sends the proposal of curricular revision to the leading campus, to be submitted to the Academic Senate for the corresponding action.
- 11) In special circumstances, the proposal for curricular revision could be presented in another Academic Senate other than the leading campus. To change it, the VAAE must have the consent of the first executive or Dean of Academic Affairs of the leading campus.
- 12) The Academic Senate of the leading campus studies the proposal and supporting documents. The corresponding action is taken no later than two (2) months after receiving it. After the Academic Senate acts, the Rector's Actions are referred to the University Council with a copy to the rector.
- 13) If approved in the Assembly by the Academic Senate, the University Council studies the proposal and supporting documents, and do the pertinent consultations through the Executive Secretariat.
- 14) In case that the VAAE had to make an official consultation as part of the review process, the consultation report will be sent to the Executive Secretariat of the University Council for the corresponding action.
- 15) If approved in the Assembly by the University Council, the curricular revision will be considered by the President of the University.
- 16) If approved by the President of the University, the VAAE determines the effective date of the proposal (i.e., when the curricular changes will take effect).
- 17) The VAAE or the academic unit, as the case may be, informs the JIP of any changes that, in accordance with the current "JIP Regulation", require notification.
- 18) The VAAE prepares the course equivalence table and modifies and creates the courses in the Banner system, as the case may be.

### III. Operational framework of the institutional committees

- 1) All members must provide email and telephone number to facilitate communication with the Institutional Committee and the Office of Curricular Affairs (OAC).
- The Institutional Committee must prepare a Work Plan that includes the activities or tasks to be completed, the calendar and the person or academic unit responsible for the task (see Annex 1). The committee sends a copy of it to the OAC.
- 3) The calls for meetings are issued by the VAAE with a copy to the Dean of Academic Affairs or by email to the committee member with a copy to the Dean of Academic Affairs.
- 4) The Leader or Secretary of the Institutional Committee informs the dates of the meetings to the OAC at least two (2) weeks in advance:
  - a. by email or phone
  - b. must indicate date, place and time
- 5) Meetings can be held in academic units, by videoconference or other technological means through the Internet.
- 6) The Leader or Secretary of the Institutional Committee keeps record of attendance and a minute with the agreements taken on each one of the meeting held.
- 7) The consultations to the faculty through the representative of the academic unit in the Institutional Committee must be made in writing and with evidence (signatures) of the faculty consulted.
- 8) Consultations on the modification of shared courses (used by other academic programs) are conducted through the VAAE.
- 9) The Leader or Secretary of the Institutional Committee maintains evidence of the consultations made and the reactions received to use it as supporting documents when the proposal is seen in the Academic Senate and in the University Council.
- 10) Statistical data, such as graduation rates and number of students in the academic program, must be requested from the OAC by the Leader or Secretary of the Institutional Committee.
- 11) The Leader or Secretary of the Institutional Committee shall submit the progress reports requested to the OAC.
- 12) The members of the Institutional Committee will certify in writing or through an act (minute) of the Institutional Committee that the proposal of curricular revision was consulted with the colleagues of their academic unit when the consultation is not done by the VAAE through the Deans of Academic Affairs.

## IV. Maximum time for the review of academic programs

In order to expedite the processes of curricular revision, the "Procedure for Curricular Articulation", as amended in 2008, stipulates the following (see Actions of the President of March 2, 2008, pages 25-26):

1) The Institutional Committee has a maximum of eighteen (18) months to complete the curriculum review proposal. This provision entered into force in August 2008.

2) The Academic Senate of the leading campus has a period of no more than two (2) months to act on the proposed revision.

## PART III THE CURRICULAR REVIEW PROPOSAL

## THE CURRICULAR REVIEW PROPOSAL

#### I. Content

The OAC verifies that the Institutional Committee has included the following information in the proposal:

- 1) Introduction
  - Brief description of the proposed revision and its scope (could be optional)
- 2) Resolutions and justifications for the consideration of the Academic Senate and the University Council
- 3) Support Documentation
  - a. Sequential of the program by academic term
  - b. Program goals, Program objectives, and Competency profile of the graduates (in text form, see Annex 2)
  - c. Curricular Alignment Table for the program (see Appendix 3) that shows the relation between:

#### 1. Program Goals

- a. It refers to the general purposes of the program in terms of the professional to be developed for a globalized and diverse society (see Part V).
- b. They must emerge from the description of the program.
- c. They must include the cognitive, affective and psychomotor dimensions.

#### 2. **Program Objectives**

- a. It refers to the specific aspects that the program aspires to achieve in terms of knowledge, skills and attitudes for a globalized and diverse society (see Part V).
- b. They must emerge from the Program Goals.

#### 3. Competency profile of the graduates

- a. It refers to the professional competencies of the program graduate.
- b. Competition is a skill that consists of processes, concepts and general attitudes that are developed gradually and evolutionarily through the social interaction that occurs in the classroom or virtual settings.
- c. The descriptions of the courses help identify that competency profile of the graduate.
- d. It includes the areas of knowledge (what you should know), skills (what you can do or execute) and attitudes (what attitudes and values you should possess) in the context of a globalized and diverse society (see Part V).
- e. The VAAE developed a "Guide for the development of the competency profile of the graduate". August 2013 (see Appendix 11).
- f. The alignment of the competency profile with the courses of the program is essential for the development of the assessment plans in Tk20. Therefore, institutional committees must complete the Template for the Development of the Curriculum Map for Tk20. This template includes the alignment of

competencies and courses, as well as their level and emphasis (see Appendix 12).

- Level Indicates the complexity of the competency, which is classified into one of three categories: Basic, Intermediate or Advanced.
- Emphasis Indicates the distribution of time devoted to the development of the competency in the course in one of three categories: Low, Intermediate or High.

The assessment instrument and the metric (numerical indicator of the expectation of student learning achievement) can be determined by the institutional committee or in the academic unit.

#### 4. Program Courses

- a. The courses must be linked to the competencies profile of the graduate.
- b. The courses that respond to each of the graduate's competencies are identified.
- d. Syllabus of new and current modified courses
- e. Fiscal impact report when the proposed revision entails an increase in program costs
- f. Report of the facilities and equipment necessary for the program, such as closed or specialized laboratories, if applicable
- g. Commitment letters from practice centers, if applicable
- h. Other documents may be required depending on the changes proposed changes

## II. Order of the resolutions

The University Council requires that the review of academic programs that include associate and bachelor degrees and minor concentrations / specialties be presented as separate matters. If the academic program includes associate's and bachelor degrees, the bachelor review is presented first, followed by the associate's degree review. For example:

- Subject A: Review of BBA in Accounting
- Subject B: Review of AAS in Accounting
- Subject C: Review / Creation of the Minor Concentration in Professional Accounting

On the other hand, the order to present the resolutions changed, effective February 2016 (see Actions of the President of the First Ordinary Meeting of the University Council of November 20, 2015, pp. 5-6). The new order is listed below.

- RN-1 Program title
- RN-2 Program description
- RN-3 Competency profile of the graduates
- RN-4 New courses
- RN-5 Elimination of courses (from Catalog)
- RN-6 Course modifications (code, number, titles, descriptions, prerequisites, credits)

RN-7	Academic Requirements of the degree <ul> <li>General Education Requirements</li> </ul>
	<ul> <li>Core Requirements</li> </ul>
	<ul> <li>Major Requirements</li> </ul>
	<ul> <li>Major Requirements</li> <li>Minor requirements (its use is not recommended)</li> </ul>
	<ul> <li>Related Requirements</li> </ul>
	<ul> <li>Specialty Requirements</li> </ul>
	<ul> <li>Subspecialty Requirements (its use is not recommended)</li> </ul>
	<ul> <li>Subspecially Requirements (its use is not recommended)</li> <li>Prescribed Distributive Requirements</li> </ul>
	<ul> <li>Elective Courses (minimum of 3 credits for Bachelor degrees)</li> </ul>
RN-8	Requirements for admission to the program (when different from institutional ones)
NIN-0	<ul> <li>Documents to apply for admission</li> </ul>
	<ul> <li>Minimum academic index (may be higher than the minimum established by</li> </ul>
	the University)
	<ul> <li>Certificates, licenses, among others</li> </ul>
	<ul> <li>Interview (not authorized for undergraduate level and for the graduate level</li> </ul>
	requires authorization from the Vice President)
RN-9	Requirements for retention of the program (when different from institutional ones)
	<ul> <li>Academic Index</li> </ul>
	<ul> <li>Minimum grades</li> </ul>
	<ul> <li>Others</li> </ul>
RN-10	Requirements for transfers (when different from institutional ones)
	<ul> <li>Minimum academic index</li> </ul>
	<ul> <li>Approved courses</li> </ul>
	Interview (not authorized for undergraduate level and for the graduate
	level requires authorization from the Vice President)
	<ul> <li>Authorization from Program director</li> </ul>
RN-11	Requirements for graduation (when different from institutional ones)
	Minimum academic index
	<ul> <li>Required grades</li> </ul>
	<ul> <li>Exams, thesis or dissertation</li> </ul>
	<ul> <li>Practices, clinical experiences</li> </ul>
	<ul> <li>Time limit to complete the degree</li> </ul>
	ppendices 4 and 5, "Guidelines for curriculum development at the Inter American
	ersity of Puerto Rico" and "Models of resolutions for the consideration of the Academic
Sena	te and the University Council <sup>®</sup> , respectively.

## III. Important aspects in the preparation of the proposal and resolutions

#### 1) Course title

- 1. It should not be very extensive, since Banner only provides space for 30 characters.
- 2. There must be a direct relationship between the title and the description of the course.
- 2) Course description
  - 1. It includes the level of thinking skills (see Appendix 6, "Taxonomies for writing course descriptions and objectives").
  - 2. The level of thinking skills is linked to the content.

- 3. It should include the thematic areas of the content.
- 4. It does not include a list of isolated topics.
- 5. The wording should be in complete sentences.
- 6. Verbs must be substantiated (Examples: Study, Description, Analysis, Integration, Practice, Application, Evaluation).
- 7. After the first sentence in the course description, expressions such as: "Emphasis on ...", "Includes ...", can be used.
- 8. It should not include teaching or evaluation activities.
- 3) Course prerequisites
  - 1. They must be included as part of the description.
  - 2. Include prerequisites that are really necessary (impact the sequential).
  - 3. Verify that they do not have a higher code than the course. Exceptions to this rule includes codifications established by policies in the Catalog for Special Topics, Seminars and Practices (see Appendices 7 and 8, "Course Coding System for Undergraduate Level" and "Course Coding System for Graduate Level", respectively).
  - 4. Verify that no requirements are omitted (i.e., hidden requirements). The list of courses and the total credits included in the resolution of the Degree Requirements must reflect those courses that are the requirements of others.
- 4) Course credits
  - 1. Verify that the number of credits is correct (see Appendices 4 and 9, "Guidelines for curriculum development at the Inter American University of Puerto Rico" and "How to determine credits for courses", respectively). The University defines one (1) credit for an academic term, as indicated below:
    - Fifteen (15) hours of face-to-face contact and a minimum of 30 hours of academic activities related to the course outside the classroom; or its equivalent in online academic activities
    - b. Fifteen (15) hours of face-to-face contact of the integrated conference-laboratory modality and a minimum of 30 hours of academic activities related to the course outside the classroom; or its equivalent in online academic activities
    - c. 30-45 hours of closed face-to-face or virtual laboratory
    - d. 45-60 hours of supervised practice
  - 2. Verify the number of credits with the hours of practice.
- 5) Coding
  - 1. Verify that the rules of the General or Graduate Catalog are followed (see Appendices 7 and 8, "Course Coding System for Undergraduate Level" and "Course Coding System for Graduate Level", respectively).
  - 2. For the fourth digit of encodings 197, 291, 297, 397, 491, 497, 597, 691, 697, 797, 891 and 897, letters may be used instead of numbers (497A, 497B, 697A, 697B). In the review proposal it can be presented as 491\_ and later, it could be determined the codes that are available in the Banner system.
  - 3. Verify that there is congruence between coding and content. For example: 4000 level courses should generally respond to the most complex levels of thinking.
  - 4. Use a different code when it is proposed to increase or reduce the credit of an existing course.

- 6) New courses
  - 1. Check if there are courses in the institutional catalogs that can be used instead of creating them.
  - 2. Verify if there are courses in the President's Actions that, although not yet included in the institutional catalogs, can be used instead of creating them.
  - 3. Verify that new courses do not have the same name as another existing course.
  - 4. If it is an Associate Degree, verify that the courses are predominantly of level 1000 and 2000.
- 7) Total of credits
  - 1. Apply the parameters established by the University (see Appendix 4, "Guidelines for curriculum development at the Inter American University of Puerto Rico"). For example:
    - Associate: 60-65 credits
    - Bachelor: 120-130 credits
    - Master: minimum of 30 credits
    - Doctorate: minimum of 30 credits
    - Professional certificate: minimum of 12 credits
  - 2. The total amount of credits of the academic program must be competitive.
  - 3. The sequential program must comply with the institutional policies of the maximum credits that a student could enroll in an academic term (e.g., semester or trimester).

#### IV. Syllabus

 Use the template for the preparation of syllabus (see Appendix 10, "Syllabus Template", effective in September 2016. This template was incorporated with the warnings and notes approved by the Board of Trustees that entered into effect in August 2008, 2009 and 2016. It also includes the modification of the title of the "Special Note" on "Honesty, fraud and plagiarism", as approved by the Board of Trustees in March 2013. Also, in 2013 seven observations were included.

In addition, it considers the provisions of the May 2017 version of the Faculty Manual (sections 3.3.5, 3.3.6 and 3.3.7, pages 33-35) and the 2017 version of the General Student Regulations (Article 2, section A, pages 2-5), as well as the "2012 CEPR Regulation", currently JIP.

#### 2) Heading

- a. Identify the Institution (Inter American University of Puerto Rico)
- b. The name of the academic unit is not included when the syllabus is the product of the review work of an Institutional Committee.
- c. Include the name of the academic program.

## 3) Course information

a. Course title

- Must be brief
- Have a direct relationship with the course
- b. Code and number
  - Four-letter codes that identify the academic program in English (for example: BADM, BIOT, COMP, EDUC, MUSI, NURS, PSYC, RELI, TURI).
  - The OAC can be consulted for acronym selection and code availability in the Banner system.

- Complies with the policies included in the institutional catalogs (see Appendices 7 and 8, "Course Coding System").
- c. Credits
  - Example: Three (3), Four (4)
- 4) Description
  - a. It should reflect the level of thinking of the course and the assigned coding.
  - b. Use the term "academic term" and not "academic semester."
  - c. It includes:
    - Total laboratory or practice hours (if applicable) for the academic term and not for weeks because the courses are offered in different terms
    - concurrent courses, if applicable
    - courses prerequisites, if applicable
    - minimum grade, if applicable (Thesis: TP / P / NP; Dissertation: DP / P / NP; Project: PP / P / NP; Integrative Seminar: P / NP)
    - credits
- 5) Objectives
  - a. Start this section with the following: It is expected that, at the end of the course, the student be able to:
  - b. Since August 2009, only the course objectives (previously known or referred to as "terminals" or "generals") are included.
    - The academic units can develop the specific objectives that contribute to achieving the objectives of the course for assessment activities and the design of lessons for online courses.
    - Each objective must have a minimum of two (2) specific objectives.
    - The topics in the course content help identify the specific objectives.
  - c. The course objectives emerge from the thematic areas or the skills included in the course description.
- 6) Write objectives that are relevant for the development of competencies in the discipline or area of study and measurable in terms of observable behavior (see Appendix 6):
  - a. Benjamin S. Bloom Cognitive Taxonomy (1956), the version reviewed by Lorin W. Anderson & David R. Krathwohl (2001), and the version reviewed by Andrew Churches (2008) for the digital era.
  - b. Elizabeth Jane Simpson Psychomotor Taxonomy (1966)
  - c. Affective Taxonomy by David R. Krathwohl, Benjamin S. Bloom & Bertram B. Masia (1964)
  - d. Taxonomy of Levels of Depth of Knowledge by Norman L. Webb (2002)
  - e. Cognitive Taxonomy by Robert J. Marzano (2001)

The University recognizes the existence of different taxonomies for the drafting of objectives, as well as the fact that Bloom's taxonomy, in its original or revised version, continues to be the most commonly used.

The level of thinking used in a specific objective should not exceed that of the course objective. For example: If the objective of the course is "Apply", the specific objective should not be "Evaluate".

- 7) Use a verb for objective whose execution by the student is observable.
  - a. For example: Instead of saying: "Study and analysis of ...", it should say "Analysis of ...". "Analysis" is a higher level of thinking than "Study.
  - b. There may be an exception to this rule when a course requires skills, such as "Design, creation and evaluation of ..."
- 8) The verb must be in infinitive (examples: Study, Contrast, Apply, Analyze Evaluate, Create)
- 9) Content
  - a. The thematic areas and topics to be covered in the course.
  - b. The thematic areas respond to the course description.
  - c. The topics respond to the thematic areas.
- 10) Activities
  - Its purpose is to achieve the objectives of the course. For example: Conference
    - a. Socialized discussion
    - b. Debates
    - c. Forum
    - d. Focus group
    - e. Colloquium
    - f. Research projects or activities
    - g. Books or articles discussion
    - h. Case studies
    - i. Problem solutions
    - j. Simulations
    - k. Individual work
    - I. Collaborative work
    - m. Cooperative work
    - n. Oral reports
    - o. Written report
    - p. Information search exercises
    - q. Journals
    - r. Multimedia
    - s. Blogs
    - t. "Assessment"
    - u. Others

11) Evaluation criteria

Criteria for determining student academic achievement

- a. Partial exams
- b. Final exam or equivalent evaluation
- c. Written works
- d. Research work
- e. Homework
- f. Quizzes
- g. Portfolio
- h. Logs
- i. Individuals and group work
- j. Others

Note: The JIP requires that each evaluation criteria include the suggested value or percent of the grade or final grade.

- 12) Educational resources
  - a. Educational materials that can be used for activities and the achievement of course objectives.
  - b. They must be updated (no more than five years since their publication, unless they are classics in the discipline).
  - c. Use the accepted style in the discipline to present the bibliographic information (APA, MLA, Turabian, University of Chicago, others) in all the program syllabuses.
  - d. Include the access portal and the name of the appropriate databases for the course through the CAI.

CAI Database

http://cai.inter.edu/listado\_db.htm

- e. It is recommended that they be classified by category, as applicable to the course:
  - Text books (graduate level courses usually do not require text books)
  - Supplementary readings (professional magazines, newspapers)
  - Audiovisual resources (DVD, CD-ROM, movies, videos)
  - Electronic resources and databases. Include the name or title of the website and its address. For example:

Education Resources Information Center (ERIC) http://www.eric.ed.gov

#### 13) References

- a. Reference or support materials for the course.
- b. It is not required for the achievement of the course objectives, although it supports the course.
- c. It must be updated (no more than five years since its publication, unless it includes classics in the discipline).
- d. Use the accepted style in the discipline to present the bibliographic information (APA, MLA, Turabian, University of Chicago, others) in all the program syllabuses.
- e. Include the access portal and the name of the appropriate databases for the course through the CAI.

CAI Database

http://cai.inter.edu/listado\_db.htm

- f. It is recommended that they be classified by category:
  - Books
  - Magazines
  - Newspapers
  - Audiovisual resources (DVD, CD-ROM, movies, videos)
  - Electronic resources and databases. Include the name or title of the website and its address. For example:

National Science Foundation (NSF) http://www.nsf.gov/

14) Special Notes, Warnings or Explanations for the Syllabus

- a. The Board of Trustees has approved three (3) and Presidency approved one.
  - Auxiliary services or special needs (effective August 2008)
  - Honesty, fraud and plagiarism (effective August 2008)
  - Use of electronic devices (effective August 2009)

- Compliance with the dispersions of Title IX (2016).
- b. Special notes required in the academic unit or course could be included, but not in the institutional (or systemic) version of the syllabus.
- c. The institutional syllabus will include the four official notes, as they appear in the 2016 Syllabus Template.

## V. Syllabus modifications

- 1) Allowed modifications
  - a. Enrich and update the content without eliminating what is established in the institutional syllabus. The deletion of a topic or subtopic would proceed if it is obsolete.
  - b. Review and modify the activities of the course (with the exception of the practices for which, at the level of the Program or of the Institutional Committee, a minimum of required activities has been agreed).
  - c. Review and update educational resources and bibliography.
  - d. Change the textbook.
  - e. Change the evaluation criteria (with the exception of the practices for which, at the level of the Program or the Institutional Committee, a minimum of evaluation criteria has been agreed and thus reflected in the syllabus or the Practice Manual).
- 2) Not-allowed modifications
  - a. The academic units cannot change the coding, the title or the description of the course, since they require the action of the Academic Senate, the University Council, the President and the Vice Presidency of Academic and Student Affairs, as applicable.
  - b. The academic units must not modify or change the minimum content or the objectives agreed by the faculty in the institutional syllabus. However, if it is necessary to modify content or objectives to meet the requirements of licensing and accrediting agencies, update content or improve the wording of the objectives on the recommendation of experts, the level, content and description of the course should be taken into consideration. In addition, the campus must send to the Vice Presidency of Academic and Student Affairs an electronic copy of the revised syllabus, to be disclosed to the other academic units.
  - c. The institutional records of the General Education Program (PEG) will be modified through institutional committees coordinated by the Vice Presidency of Academic and Student Affairs.

## PART IV TRANSVERSAL AXES FOR CURRICULAR DEVELOPMENT OF THE INTER AMERICAN UNIVERSITY OF PUERTO RICO

#### TRANSVERSAL AXES FOR CURRICULAR DEVELOPMENT OF THE INTER AMERICAN UNIVERSITY OF PUERTO RICO

The University is committed to the integral development of the student, especially at the undergraduate level of his academic formation. That is why, the following thematic axes or conductive threads for the curricular development of the Institution have been postulated:

1) Christian-ecumenical values,

- 2) ethical values, and
- 3) democratic and civic values.

The University hopes to contribute to the moral, ethical and civic development of the student through an articulated curriculum that integrates the values that distinguish the University.

The President, Lcdo. Manuel J. Fernós, in his "Message to the Twentieth University Council at its Ordinary Meeting of March 18, 2011," stressed the importance of revitalizing the teaching of values. For this, the President identified three steps (pp. 6-7):

1) reflect on the practical meaning of each one of the values,

2) analyze in how many and which courses the student can apply values, and

3) design the instruments and practices for assessing attitudes.

The President's proposal is not based on "adding more courses, but on establishing a common thread through the curriculum. Each course can attend one or several values, promote particular topics and, together, provide an articulated educational experience that exposes the student, through the curriculum, to the teaching of values" (p. 5).

## PART V INTERNATIONALIZATION OF THE CURRICULUM AT THE INTER AMERICAN UNIVERSITY OF PUERTO RICO

#### INTERNATIONALIZATION OF THE CURRICULUM AT THE INTER AMERICAN UNIVERSITY OF PUERTO RICO

The Inter American University of Puerto Rico has made its internationalization a strategic priority. To this end, it has adopted the *Model for Comprehensive Internationalization* of the *Center for Internationalization and Global Engagement* (CIGE) of the *American Council on Education* (ACE). The ACE defines comprehensive internationalization as "a strategic and coordinated process that seeks to align and integrate policies, programs and initiatives that position the most globally oriented and internationally connected higher education institutions" (American Council on Education on Education, s.f.). This model is based on the following six interrelated areas.

- 1) Articulated Institutional Commitment
- 2) Administrative Leadership, Structure, and Staffing
- 3) Curriculum, Co-curriculum, and Learning Outcomes
- 4) Faculty Policies and Practices
- 5) Student Mobility
- 6) Collaboration and Partnerships

The internationalization of the curriculum means that students are exposed to international perspectives and the development of global skills (Green & Olson, 2003). The development of these competencies is materialized through the curriculum, since, as argued by Knight (1994), cited in Jones and Brown (2014), "the curriculum is the backbone of the internationalization process" (p. 117).

That is why, the document Guides for curriculum development at the Inter American University of Puerto Rico (2016) states that,

The University is committed to the internationalization of the curriculum that tends to the integral formation of the student with the professional competencies that allow him to perform effectively in a professional world and socially globalized and diverse. In this way, the University contributes to the development of professionals who, as leaders or agents of change, can contribute to social transformation in the communal, local, national, regional or international context.

On the other hand, given that the internationalization of the curriculum is not limited to student and teacher mobility, an international curriculum aims to impact all students through internationalization at home (internationalization at home or IaH). This includes, but is not limited to, working with the following elements of the curriculum through the General Education Program, majors and specialties, as applicable:

- 1) Goals
- 2) Competency profile of graduates
- 3) Course title or description
- 4) Objectives or expected learning outcomes
- 5) Thematic content of the course
- 6) Student learning activities
- 7) Student learning evaluation
- 8) Varied educational resources (for example: media, authors, approaches, languages)

Internationalization at home (IaH) emerges as an alternative to academic mobility (De Wit, Jaramillo, Gacel-Ávila & Knight, 2005). In addition, this form of internationalization of the curriculum is suitable for face-to-face, online and international students. Moreover, the IaH is inclusive because it aspires for every university student to complete their program with the skills of a professional and citizen who, without having to mobilize from the university or their country of residence, can effectively perform in a globalized society and diverse.

Therefore, curricular development at the University, whether through the creation or revision of academic programs, must be based on the need and relevance of offering a curriculum focused on these expectations.

## PART VI THE CURRICULAR REVIEWS AND THE BOARD OF POSTSECONDARY INSTITUTIONS OF PUERTO RICO (JIP)

#### THE CURRICULAR REVIEWS AND THE BOARD OF POSTSECONDARY INSTITUTIONS OF PUERTO RICO (JIP)

The Regulations for the Licensing of Higher Education Institutions in Puerto Rico (approval in progress), establishes the substantial programmatic changes that need to be informed or notified to the Board of Postsecondary Institutions of Puerto Rico (JIP). Among them, we can highlight the following:

- 1. Changes in admission policies or requirements
- 2. Changes in graduation requirements, including review of programs to add or redistribute courses and amount of credits
- 3. Changes in the main executives of the institution
- 4. Changes in institutional catalogs
- 5. Consortiums, agreements or academic collaboration agreements between educational institutions.

The curricular changes resulting from the revisions of the Institutional Committees will be reported in the *Formulario Cambios significativos que hay que notificar a JIP 29.2 VAAE*. Once completed, the leader of the Institutional Committee of the shared program or the contact person of the single program will send the completed form to the Office of Curricular Affairs (jarodriguez@inter.edu) with a copy to the Office of Accreditation and Licensing (mortiz@inter.edu). The Office of Accreditation and Licensing (OAL) will be responsible for processing the form to the JIP.

Information related to the regulations and provisions established by the Board of Postsecondary Institutions of Puerto Rico, may be consulted through its website <u>http://www.ce.pr.gov</u>. For more information or advice on accreditation and licensing matters, please contact Dr. Maritza Ortiz, Institutional Director of the Accreditation and Licensing Office, at 787-766-1912, extensions 2313 and 2373, or by email to <u>mortiz@inter.edu</u>.

#### REFERENCES

American Council on Education (ACE). (s/f). *CIGE Model for Comprehensive Internationalization.* Retrieved from <u>http://www.acenet.edu/news-room/Pages/CIGE-Model-for-Comprehensive-Internationalization.aspx</u>

- Anderson, L. W. & Krathwohl, D. L. (Eds.) (2001). A taxonomy for learning, teaching and assessing: a revision of Bloom's taxonomy of educational objectives. New York: Addison Wesley Longman.
- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: Handbook I, The cognitive domain*. New York, David McKay & Co. Retrieved from <a href="http://www.lhup.edu/swillia6/courses/math316/documents/TWS\_documents/TWS\_Factor\_2\_learning\_domains.pdf">http://www.lhup.edu/swillia6/courses/math316/documents/TWS\_documents/TWS\_Factor\_2\_learning\_domains.pdf</a>
- Churches, A. (2009, October). *Taxonomía de Bloom para la era digital*. Retrieved from <u>http://www.eduteka.org/pdfdir/TaxonomiaBloomDigital.pdf</u>
- Consejo de Educación de Puerto Rico. (2012). *Reglamento para el licenciamiento de instituciones de educación superior en Puerto Rico (Reglamento Núm. 8265 del 9 de octubre de 2012)*. Retrieved from <a href="http://www2.pr.gov/agencias/cepr/inicio/DocumentosCEPR/Documents/Reglamentos/Reglamento%20Licenciamiento
- De Wit, H., Jaramillo, I. C., Gacel-Ávila, J., & Knight, J. (Eds.) (2005). *Educación superior en América Latina. La dimensión internacional.* Bogotá, Colombia: Banco Mundial en coedición con Mayol Ediciones, S.A. Retrieved from <a href="http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2006/11/10/00090341">http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2006/11/10/00090341</a>
- Eduteka. (2002). *La taxonomía de Blooom y sus dos actualizaciones.* (reviewed February 2011). Retrieved from <u>http://www.eduteka.org/TaxonomiaBloomCuadro.php3</u>
- Fernós, M. J. (2011). Mensaje al Vigésimo Consejo Universitario en su reunión del 18 de marzo de 2011.
- Gallardo, K. (2009, September). La Nueva Taxonomía de Marzano y Kendall: una alternativa para enriquecer el trabajo educativo desde su planeación. Retrieved from <u>http://www.cca.org.mx/profesores/congreso\_recursos/descargas/kathy\_marzano.pdf</u>
- Green, M. F. & Olson, C. (2003). *Internationalizing the campus: A user's guide*. Washington, D. C.: American Council on Education.
- Jones, E. & Brown, S. (2014). La internacionalización de la educación superior: perspectivas institucionales, organizativas y éticas. Madrid, España: Narcea, S.A. de Ediciones.
- Krathwohl, D.R., Bloom, B.S., and Masia, B.B. (1964). *Taxonomy of educational objectives: Handbook II: Affective domain*. New York: David McKay Co. Retrieved from <u>http://classweb.gmu.edu/ndabbagh/Resources/Resources2/krathstax.htm</u>

Marzano, R. J. (2001). A new taxonomy of educational objectives. In A. Costa (Ed.), *Developing minds* (3rd ed.) (pp. 181-189). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2001). *Designing a new taxonomy of educational objectives*. Experts in Assessment Series, Guskey, T. R., & Marzano, R. J. (Eds.). Thousand Oaks, CA: Corwin Press.

Marzano, R. J. (2001). *Taxonomía de Marzano*. Retrieved from <u>http://ixil.izt.uam.mx/pd/lib/exe/fetch.php/trimestre0:referencias:taxonomia\_marzano-1.pdf</u>

Middle States Commission on Higher Education (2009). *Degrees and Credits Guidelines*. Retrieved from <u>http://www.msche.org/documents/Degree-and-Credit-Guidelines-062209-FINAL[1].pdf</u>

Pickard, M. J. (2007, Spring/Summer). The new Bloom's taxonomy: An overview for family and consumer sciences. *Journal of Family and Consumer Sciences Education, 25*(1), 45-55. Retrieved from <u>http://www.natefacs.org/JFCSE/v25no1/v25no1Pickard.pdf</u>

Simpson, E. J. (1966). The classification of educational objectives: Psychomotor domain. *Illinois Teacher of Home Economics, 10*(4), 110-144. Retrieved from <u>http://eric.ed.gov/PDFS/ED010368.pdf</u>

Universidad Interamericana de Puerto Rico. *Catálogo General 2015-2017* (electronic version). Retrieved from <u>http://documentos.inter.edu/</u>

Universidad Interamericana de Puerto Rico. *Catálogo Graduado 2015-2017* (electronic version). Retrieved from <u>http://documentos.inter.edu/</u>

Universidad Interamericana de Puerto Rico. (2017). *Manual de la Facultad*. Retrieved from <u>http://documentos.inter.edu/</u>

Universidad Interamericana de Puerto Rico. (2008). Orden de las resoluciones. (Acciones del Presidente del 20 de noviembre de 2015, pp. 5-2).

Universidad Interamericana de Puerto Rico. (2008). *Procedimiento para la articulación curricular.* (Acciones del Presidente del 2 de marzo de 2009, pp. 25-26). Retrieved from <a href="http://consejo.inter.edu/Documentos/Procedimiento%20para%20la%20articulacion%20curricular.pdf">http://consejo.inter.edu/Documentos/Procedimiento%20para%20la%20articulacion%20curricular.pdf</a>

Universidad Interamericana de Puerto Rico. (2017). *Reglamento General de Estudiantes.* Retrieved from <u>http://documentos.inter.edu/</u>

Universidad Interamericana de Puerto Rico. (2008). *Servicios auxiliares o necesidades especiales.* Acciones de la Junta de Síndicos.

Universidad Interamericana de Puerto Rico. (2008). *Honradez, fraude y plagio.* Acciones de la Junta de Síndicos.

Universidad Interamericana de Puerto Rico. (2009). Uso de dispositivos electrónicos. Acciones de la Junta de Síndicos.

- Vicepresidencia de Asuntos Académicos, Estudiantiles y Planificación Sistémica. (2016). Guías para el desarrollo curricular en la Universidad Interamericana de Puerto Rico.
- Vicepresidencia de Asuntos Académicos y Estudiantiles y Planificación Sistémica. (2016). *Modelo de prontuarios.*

Vicepresidencia de Asuntos Académicos, Estudiantiles y Planificación Sistémica. (2011). *Plan Sistémico de revisiones curriculares, años académicos 2010-2011 al 2014-2015.* 

- Vicepresidencia de Asuntos Académicos, Estudiantiles y Planificación Sistémica. (2015). *Plan Sistémico de revisiones curriculares, años académicos 2015-2016 al 2019-2020.*
- Webb, N. L. (2002, March). *Depth-of-Knowledge levels for four content areas*. Retrieved from <u>http://www.providenceschools.org/media/55488/depth%20of%20knowledge%20guide%</u> <u>20for%20all%20subject%20areas.pdf</u>
- Webb, N. L. (2002, March). Depth of knowledge (DOK) levels. Retrieved from http://www.pdesas.org/main/fileview/Instruction\_Depth\_of\_Knowledge.pdf

APPENDICES

## Appendix 1

## WORKING PLAN (Template)

Academic Programs:

Campus:

Group Leader / Campus:

Activity or Task	Person / Campus Responsible	Date	Comments/ Observations

OAC Rev. 04/2011; 12/2019

## Appendix 2

## PROGRAM GOALS AND OBJECTIVES AND COMPETENCY PROFILE OF GRADUATES (TEMPLATE)

## Program Goals

- 1) 2) 3)

## **Program Objectives**

A. Knowledge

- 1) 2) 3)

## B. Skills

- 1)
- 2) 3)

## C. Attitudes

1) 2)

# **Competency Profile of Graduates**

The program is designed to develop the competencies that allow the student:

A. Knowledge

Option A

Demonstrate knowledge and comprehension of:

- 1) the concepts of...
- 2) the models of...
- 3) the theories

#### Option B

Demonstrate knowledge to:

- 1) explain the concepts of...
- 2) identify the models of...
- 3) distinguish the theories of...

# Option C

- 1) know the concepts...
- 2) know the models...
- 3) know the theories...

#### B. Skills

- 1) Analyze...
- 2) Apply...
- 3) Design...
- 4) Evaluate...

# C. Attitudes

- 1) Recognize the importance...
- 2) Value...
- 3) Appreciate...

#### Comments:

The verbs used in the writing of competencies are examples to guide the user. In the case of knowledge competencies, we must be careful not to include or confuse activities with competencies. On the other hand, knowledge and understanding constitute the first two levels (of six) of Bloom's cognitive taxonomy, and the first level of knowledge of Norman Webb's taxonomy.

If it is intended to present the modification of an approved competency profile and published in the institutional catalogs, the resolution would be presented in a column format with current text and proposed text.

OAC Rev. 04/2011; 08/2013; 02/2016; 01/2018; 12/2019

Use verbs from the first two levels of Bloom's taxonomy.

#### CURRICULUM ALIGNMENT TABLE

PROGRAM \_

# (Template)

PROGRAM GOALS	PROGRAM OBJECTIVES	COMPETENCY PROFILE OF GRADUATES	COURSES
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			
10)			

OAC Rev. 04/2011; 08/2013; 02/2016; 12/2019

It is recommended that institutional committees complete the Template for the development of the Tk20 curriculum map. This template includes the alignment of competencies and courses, as well as their level and emphasis.

- Level Indicates the complexity of the competition, which is classified into one of three categories: Basic, Intermediate or Advanced.
- Emphasis Indicates the distribution of time dedicated to the development of the competition in the course in one of three categories: Low, Intermediate or High.

The assessment instrument and the metric (numerical indicator of the expectation of student learning achievement) can be determined by the institutional committee or the academic unit.

#### GUIDELINES FOR CURRICULUM DEVELOPMENT AT THE INTER AMERICAN UNIVERSITY OF PUERTO RICO (February 2016)

The development and review of academic programs are pillars of the university work and a reflection of our commitment to academic excellence. These guides are based on the documents "Degrees and Credits"<sup>1</sup> and "Credit Hour Policy"<sup>2</sup> of the Middle States Commission on Higher Education (MSCHE) and the Report of the Special Committee for Curriculum Analysis of Major Concentrations of the University Council<sup>3</sup>. Therefore, curriculum development at the University should be guided by the following parameters.

#### I. Total of Credits for the Academic Programs

- 1) Associate: 60-65 credits
- 2) Bachelor: 120-130 (for four years programs)
- 3) Master: minimum of 30 credits
- 4) Doctorate: minimum of 30 credits
- 5) First Level Professional
  - i. Law: 83 credits
  - ii. Optometry: 140 credits
- 6) Professional Certificate: minimum of 12 credits
- 7) Minor (undergraduate): 18-27 credits
- 8) Specialization (graduate): 9-12 credits

Note: Exceptions to these credit parameters may arise to meet professional accreditation requirements.

# II. Hours-Credit

The University defines one (1) credit for an academic term, as indicated below:

- Fifteen (15) hours of face-to-face contact and a minimum of 30 hours of academic activities related to the course outside the classroom; or its equivalent in online academic activities
- Fifteen (15) hours of face-to-face contact of the integrated conference-laboratory modality and a minimum of 30 hours of academic activities related to the course outside the classroom; or its equivalent in online academic activities
- 3) 30-45 hours of closed face-to-face or virtual laboratory
- 4) 45-60 hours of supervised practice

# III. Curricular components

- 1) Undergraduate level
  - General Education Program (PEG) requirements
  - Core requirements (if applicable)
  - Major requirements
  - Minor requirements (if applicable)
  - Related requirements (if applicable)
  - Prescribed Distributive Requirements (if applicable)

<sup>&</sup>lt;sup>1</sup> Effective June, 26, 2009

<sup>&</sup>lt;sup>2</sup> Effective August 23, 2012, Rev. October 30, 2012

<sup>&</sup>lt;sup>3</sup> Report presented to University Counsil on April 12, 2010

- Electives courses (minimum of 3 credits for bachelors, but the component is optional for associates, masters and doctorates)
- Minor program (if one is chosen)
- 2) Graduate level
  - Core course requirements (if applicable)
  - Specialization requirements
  - Operational requirements (if applicable)
  - Sub-specialization requirements (if applicable)
  - Prescribed Distributive Requirements (if applicable)
  - Electives courses (if applicable)
  - Minor Specialization (if one is chosen)

#### **IV. Definitions**

- Learning Outcomes: It refers to statements of what students are expected to be able to achieve as a result of a learning activity. These can be at the level of academic program, course or instructional unit.
- Curricular Map: It refers to the articulation, alignment or congruence between the different components of the curriculum, such as goals and objectives of the program, competency profile of the graduate and courses.
- 3) **Program Goals:** It refers to the general statements of the purposes of the academic program, which essentially respond to the needs of society, students and discipline.
- Program Objectives: It refers to the dimensions of knowledge, skills and attitudes related to the goals of the program that contribute to the achievement of the goals of the academic program.
- 5) Competency Profile of Graduates: It refers to the knowledge, skills and attitudes competencies that the student must demonstrate as a result of having completed the program. In addition, it establishes a direct relationship between the competencies required for the exercise of the profession and the contents of the academic programs. The competency profile of the graduate is equivalent to the learning outcomes at the academic program level.
- 6) General Education Requirements: It refers to general education courses that aim to form a person with an integral education about human knowledge. For the associate degree 24 credits are required and for the bachelor degree 48 credits are required.
- Core courses Requirements: It refers to the fundamental courses in an area or discipline of studies that serve as the basis for more than one concentration or specialty.
- 8) **Minor requirements:** It refers to the courses required in a particular discipline at the undergraduate level.
- 9) **Sub-concentration requirements:** It refers to the courses required as part of a specific area of study within a concentration at the undergraduate level.

- 10) **Related requirements:** It refers to the set of courses that do not respond directly to the discipline of the program, but are necessary to complete the desired academic formation.
- 11) **Specialization requirements**: It refers to the courses required in a particular discipline at the graduate level.
- **12)** Sub-specialization requirements: It refers to the courses required as part of a specific area of study within a specialization at the graduate level.
- 13) **Prescribed Distributive Requirements:** It refers to courses within a concentration or specialization suggested by specialists in the discipline for their relevance or affinity with the academic program (equivalent to targeted electives).
- 14) **Operational requirements:** It refers to credits related to the research, thesis and dissertation requirements that are part of a graduate program (for example, Doctorate in Education).
- 15) **Combined Study Course (Hybrid):** It refers to the course offered through the combination of face-to-face and online study modalities. The combined study requires fifty percent of the teaching-learning processes in contact hours (faculty-students) and fifty percent of work through the technological platform for distance learning used by the University. The set of contact hours and those corresponding to distance activities is equivalent to the credit hours of the corresponding classroom courses.
- 16) On-line course: It refers to the course offered through the technological platform for distance learning used by the University. The teaching-learning processes and the communication and interactivity between faculty-student and student-student is carried out through said platform. The academic work required in the online course is equivalent to the credit hours of face-to-face courses.
- 17) Study by Contract with Web Support: It refers to the course offered as a result of a written agreement signed by the student, the department director and the professor assigned to the course. This modality implies a face-to-face contact, with a previously established periodicity, and a continuous interaction between the professor and the student, through the technological platform for distance learning used by the University. The set of contact hours and distance activities is equivalent to the credit hours of the corresponding classroom courses.
- 18) **Elective Course:** It refers to the credits required in an academic program, which the student selects according to their academic and professional interests or preferences.
- 19) **Minor Concentration:** It refers to the option that a student has to complete 18 to 27 credits in a discipline or study area of their preference other than their major concentration at the undergraduate level.
- 20) **Minos Specialization:** It refers to the option that a student has to complete from 9 to 12 credits in a discipline or area of study of their preference other than their specialization at the graduate level.

- 21) Practice: It refers to the courses of experiences in real work scenarios, under the supervision of a professor, which are considered part of the requirements of the degree.
- 22) **Clinical Practice:** It refers to the courses of experiences in real work scenarios, under the direct and continuous supervision of a professor during the hours in which the student is in the practice scenario.
- 23) Internship: It refers to those learning experiences in real scenarios in which the student participates and that the University offers as part of the exchanges, agreements or agreements with other institutions. These internship experiences are not part of the degree requirements. However, when the internship experience replaces or is validated by a course in the student's academic program, it will be part of the degree requirements.
- 24) Laboratory courses must specify their nature in the description, as indicated below.
  - a. Face-to-face Closed Laboratory: Educational experience that is carried out in a specific physical installation that the student attends at a specific time. The environment is controlled and supervised. It involves the payment of a fee that is calculated considering the number of teaching hours ("lecture"), laboratory and the total credits of the course. Laboratory hours count to determine course credits and teaching academic load.
  - b. Virtual Closed Laboratory: Educational experience that is carried out through the institutional platform for distance education from any place that has access to the Internet. The environment is controlled and supervised. It involves the payment of a fee that is calculated considering the number of teaching hours ("lecture"), laboratory and the total credits of the course. Laboratory hours count to determine course credits and teaching academic load.
  - c. **Face-to-face Open Laboratory:** Educational experience that is carried out in a physical facility provided by the Institution with a stipulated service schedule. The student attends the laboratory, depending on their availability. It is used to provide the student with additional hours complementary to the course content. It involves the payment of a fee. Laboratory hours do not count to determine course credits or teaching academic load.
  - d. **Virtual Open Laboratory:** Educational experience that is carried out through the institutional platform for distance education from any place that has access to the Internet. It is used to provide the student with additional hours complementary to the course content. It involves the payment of a fee. Laboratory hours do not count to determine course credits or teacher academic load.
  - e. **Conference-laboratory:** Educational modality that integrates the conference and the laboratory in the place or medium used for the teaching and learning process. This modality is equivalent to the conference for purposes of determining the credits of the course and the academic load of the professor. In addition, it entails a fee for the modality (not for the credits of the course) similar to that of the open laboratory and applicable when the course is offered in person.

#### V. Transversal Axes for Curriculum Development

The University is committed to the integral development of the student, especially at the undergraduate level of his academic formation. That is why, the following thematic axes or conductive threads for the curricular development of the Institution have been postulated:

1) Christian-ecumenical values,

- 2) ethical values, and
- 3) democratic and civic values.

The University hopes to contribute to the moral, ethical and civic development of the student through an articulated curriculum that integrates the values that distinguish the University.

#### VI. Internationalization of Curriculum

The University is committed to the internationalization of the curriculum that tends to the integral formation of the student with the professional competencies that allow him to perform effectively in a professional world and socially globalized and diverse. In this way, the University contributes to the development of professionals who, as leaders or agents of change, can contribute to social transformation in the communal, local, national, regional or international context.

On the other hand, given that the internationalization of the curriculum is not limited to student and teacher mobility, an international curriculum aims to impact all students through internationalization at home (internationalization at home or IaH). This includes, but is not limited to, working with the following elements of the curriculum through the General Education Program, majors and specializations, as applicable:

- 1) Goals
- 2) Competency profile of graduates
- 3) Course title or description
- 4) Objectives or expected learning outcomes
- 5) Thematic content of the course
- 6) Student learning activities
- 7) Student learning evaluation
- 8) Varied educational resources (for example: media, authors, approaches, ages)

languages)

These Guidelines for curriculum development at the Inter American University of Puerto Rico shall be effective immediately upon the signature of the President.

The original version (in Spanish) of the 2016 Guidelines was approved by the President on February 5, 2016, and replaces the amended version of May 29, 2013.

#### RESOLUTIONS FOR THE CONSIDERATION OF THE ACADEMIC SENATE AND THE UNIVERSITY COUNCIL (Template)

# REVIEW OF THE BACHELOR IN SCIENCES IN BIOLOGY WITH CONCENTRATION IN BIOTECHNOLOGY

#### R27SA-PON-N-1 Program Title

That in the <u>General Catalog 20xx-20xx</u>, page xxx, the title of the Bachelor of Science be modified to xxxxxxxxxx, as follows:

Current text	Proposed Text
BACHELOR IN SCIENCES IN BIOLOGY WITH CONCENTRATION IN BIOTECHNOLOGY	BACHELOR IN SCIENCES IN BIOTECHNOLOGY
(Cross out the text that is deleted or modified)	(Underline new or modified text)

# JUSTIFICATION:

The field of biotechnology has taken much relevance and its own identity as a cutting-edge field of study in science and technology, and not as a concentration of a B.S. in biology. In addition, job offers in this field require the job candidate to have a B.S. in Biotechnology.

# R27SA-PON-N-2 Program Description

That in the <u>General Catalog 20xx-20xx</u>, electronic version, page xxx, the description of the Program be modified, as indicated below:

Current Text	Proposed Text		
Bachelor of Science in Biology with a concentration in Biotechnology	Bachelor of Science in Biotechnology		
The Program is designed to	The Program is designed to		
The Program <del>prepares</del> professionals with the skills to work in the industry. The graduate of this Program The Arecibo, Barranquitas and Bayamón enclosures are authorized to offer this Program.	The Program <u>aims to form</u> professionals who can work in industry <u>and technology research</u> <u>centers.</u> The graduate of this Program The <u>Aguadilla</u> , Arecibo, Barranquitas, Bayamón, <u>Guayama and Ponce</u> academic units are authorized to offer this Program.		

# JUSTIFICATION:

The Program Description is modified to clarify ...

# Comments:

- 1) Be careful with the language used. For example, it is not the same "aim for the graduate to develop the competencies" than "guarantees that the graduate possesses the competencies".
- 2) All paragraphs that are part of the current text of a policy or norm should be included. If all are not modified, the beginning of the paragraph or sentence followed by ellipses is included. The inclusion of all paragraphs or sentences avoids doubts about the intention of the proposed resolution. In this way, it is clear which texts are deleted, added or modified.

#### **R27SA-PON-N-3** Competency Profile of Graduates

That in the <u>General Catalog 20xx-20xx</u>, electronic version, pages xxx-xxx, the Competency Profile of Graduates for the Bachelor of Science in Biotechnology is included, as indicated below:

#### **Competency Profile of Graduates**

The program is designed to develop the competencies that allow the student:

#### D. Knowledge

Option A

Demonstrate knowledge and comprehension of:

- 1) the concepts of...
- 2) the models of...
- 3) the theories

#### Option B

Demonstrate knowledge to:

- 1) explain the concepts of...
- 2) identify the models of...
- 3) distinguish the theories of...

#### Option C

- 1) know the concepts...
- 2) know the models...
- 3) know the theories...

Use verbs from the first two levels of Bloom's taxonomy.

#### E. Skills

- 1) Analyze...
- 2) Apply...
- 3) Design...
- 4) Evaluate...
- F. Attitudes
  - 1) Recognize the importance...
  - 2) Value...
  - 3) Appreciate...

#### JUSTIFICATION:

The verbs used in the writing of competencies are examples to guide the user. In the case of knowledge competencies, we must be careful not to include or confuse activities with competencies. On the other hand, knowledge and understanding constitute the first two levels (of six) of Bloom's cognitive taxonomy, and the first level of knowledge of Norman Webb's taxonomy.

If it is intended to present the modification of an approved competency profile and published in the institutional catalogs, the resolution would be presented in a column format with current text and proposed text.

# That in the General Catalog 20xx-20xx, electronic version, pages xxx-xxx, the following new courses for the Bachelor of Science in Biotechnology be included, as indicated below: **BIOT XXXX TITLE** Study of ... Analysis of .... It requires a total of 30 teaching hours and 45 hours of closed lab. Prerequisites: BIOL XXXX and XXXX. Concurrent with BIOL XXXX. Approval with a minimum grade of C.

#### 3 credits

# **BIOT XXXX TITLE**

Analysis of .....

**BIOT XXXX TITLE** 

R27SA-PON-N-4

New courses

3 credits

3 credits

Application of.....

# **JUSTIFICATION:**

- 1) BIOT XXXX: This course is included in similar curriculums at other universities in Puerto Rico and the United States, such as....
- 2) BIOT XXXX:
- 3) BIOT XXXX:

# Comments:

- 1) It is recommended to provide a justification for each course.
- 2) The closed laboratory can be face-to-face or virtual.

#### R27SA-PON-N-5 Elimination of courses

That in the <u>General Catalog 20xx-20xx</u>, electronic version, pages xxx-xxx, under the Bachelor of Science in xxxxxx, the following courses be removed from the Catalog:

BIOL XXXX	XXXXXXXXXXXXX
BIOL XXXX	XXXXXXXXXXXXX

3 credits 4 credits

#### **JUSTIFICATION:**

- BIOL XXXX: This course is not necessary for the graduate profile of this Program and is not used by other programs.
- 2) BIOL XXXX:

Comments: It is recommended to provide a justification for each course. If the justification is the same, then it can be presented as a single justification in the form of a paragraph. In the case of courses that will be removed from the Degree Requirements, but not from the Catalog, it is not necessary to include a resolution for these purposes. It only requires crossing out the course in the "Current text" column of the resolution modifying the Degree Requirements.

# R27SA-PON-N-6 Course modifications

That in the <u>General Catalog 20xx-20xx</u>, electronic version, pages xxx-xxx, the following Bachelor of Science in xxxxxxx courses be modified, as follows:

Current text	Proposed text
BIOL 4980-XXXXXXXXXXXXXXXXXX	BIOL <u>4985</u> XXXXXXXXXXXXXXXXX
Current description.	Proposed Description
Cross out text that is deleted or modified.	Underline proposed text.
	Use different code if credit changes.
2 credits	
	<u>3</u> credits
BIOL XXXX XXXXXXXXXXXXXXXXXX	BIOL XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Current description.	Proposed Description
Cross out text that is deleted or modified.	Underline proposed text.
3 credits	
	3 credits
BIOL XXXX XXXXXXXXXXXXXXXXXXX	BIOL XXXX XXXXXXXXXXXXXXXXXX
Current description.	Analysis of Application of It includes
Cross out text that is deleted or modified.	It requires a total of 30 teaching hours and 45
	hours of closed lab. Prerequisites: BIOL
3 credits	XXXX and XXXX. Concurrent with BIOL
	XXXX. Approval with a minimum grade of B.
	3 credits
	Proposed Description
	Underline proposed text.

# JUSTIFICATION:

- 1) BIOL 4980: The program code is changed because a change in course credits is proposed, since a laboratory was included.
- 2) BIOL XXXX:

Comments:

- 1) A single resolution is presented for all courses that will be modified.
- 2) It is recommended to provide a justification for each course.
- 3) Modify the course code if it is proposed to increase or reduce the total credits of the course.

# R27SA-PON-N-7 Academic Requirements of the degree

That in the <u>General Catalog 20xx-20xx</u>, electronic version, pages xxx-xxx, the requirements of the Bachelor of Science in xxxxxxxxxx be modified, as indicated below:

Current text REQUIREMENTS FOR THE BACHELOR IN SCIENCE IN xxxxx			Proposed text REQUIREMENTS FOR THE BACHELOR IN SCIENCE IN xxxxx				
							General Education Requirements48 creatCore Requirements34 creatMajor Requirements*27 creatPrescribed Distributive Requirements-9 creatElectives Courses-3 creatTotal-118
General Edu	cation Requirements – 48 c	redits		General Educa	ation Requirements – 48 cre	dits	
There are	e required			There are	required		
Core Require	ements – <del>31</del> credits			Core Requirer	nents – <u>18</u> credits		
BIOL XXXX	XXXXXX		4	BIOL XXXX	XXXXXX		4
BIOL XXXX	xxxxxx		4	BIOL XXXX	XXXXXX		4
BIOL XXXX	xxxxxx		4	BIOL XXXX	xxxxxx		4
BIOL XXXX	XXXXXX		3	BIOL XXXX	XXXXXX		3
BIOL XXXX	XXXXXX		3	BIOL XXXX	XXXXXX		3
CHEM XXXX	XXXXXX		4				
MATH XXXX	XXXXXX		5				
PHYS XXXX	XXXXXX		4				
Major Requir	ements* – <del>27</del> credits			Major Require	ments* – <u>31</u> credits		
BIOL XXXX	xxxxxx		3	BIOL XXXX	xxxxxx		3
BIOL XXXX	XXXXXX		2	BIOL XXXX	XXXXXX		3
				BIOL XXXX	XXXXXX		3
BIOL XXXX	XXXXXX		1	BIOL XXXX	xxxxxx		1
BIOL XXXX	XXXXXX		3	BIOL XXXX	XXXXXX		3
BIOL XXXX	XXXXXX		3	BIOL XXXX	xxxxxx		3
BIOL XXXX	XXXXXX		4	BIOL XXXX	xxxxxx		4
BIOL XXXX	XXXXXX		4	BIOL XXXX	XXXXXX		4
BIOL XXXX	XXXXXX		3	BIOL XXXX	XXXXXX		3
BIOL XXXX	XXXXXX		4	BIOL XXXX	XXXXXX		4
				Related Requi	rements – 13 credits		
				CHEM XXXX	xxxxxx		4
				<u>MATH XXXX</u>	XXXXXX		<u>5</u>
				PHYS XXXX	xxxxxx		4
	istributive Requirements -				stributive Requirements - <u>6</u> redits from the following cours		
BIOL XXXX	XXXXXX		3	BIOL XXXX	xxxxxx		3
BIOL XXXX	XXXXXX		3	BIOL XXXX	XXXXXX		3
BIOL XXXX	XXXXXX		3				Ť
BIOL XXXX	XXXXXX		3	BIOL XXXX	xxxxxx		3
BIOL XXXX	XXXXXX		3	BIOL XXXX	XXXXXX		3

Electives	Courses -	- 3-credits
-----------	-----------	-------------

Electives Courses - 6 credits

\*Specialization if graduate level.

#### JUSTIFICATION:

- 1) An increase in the total credits of the Program is proposed to meet the minimum of 120 credits for a bachelor.
- 2) Non-concentration courses are relocated under the Related Requirements category.
- 3) The Prescribed Distributive Requirements credits are reduced to increase the credits of Elective Courses. In this way, the student interested in graduate studies may select other courses necessary for the program of interest.
- 4) The concentration is strengthened with the inclusion of the BIOL XXXX course.

### **R27SA-PON-N-8** Admission requirements to the program

That in the <u>General Catalog 20xx-20xx</u>, electronic version, pages xxx-xxx, the Requirements for Admission to the Bachelor in Sciences in xxxxxxxxx be modified, as follows:

Current text	Proposed text
Deserved evict	Admission Requirements
Does not exist	To be admitted to the Program, the student
	must:
	<u>1. Have a minimum general average of 2.25 at the university level.</u>
	2. Have passed the BIOL XXXX course (XXXXXXXXXX) with a minimum grade of B.
	<u>, , , , , , , , , , , , , , , , , , , </u>

#### JUSTIFICATION:

Admission Requirements are included to strengthen the profile of the student admitted to the Program. The Program aspires that the student can carry out graduate studies, so the BIOL XXXX course helps determine if the student masters the basic knowledge and skills necessary for the Program's concentration courses.

# **R27SA-PON-N-9 Program retention requirements**

That in the <u>General Catalog 20xx-20xx</u>, electronic version, pages xxx-xxx, the Bachelor of Science in xxxxxxxxxx Retention Requirements be modified / included, as follows:

Current text	Proposed text
Does not exist	Retention requirements
	To remain in the Program, the student must
	maintain a minimum overall average of 2.25.

# JUSTIFICATION:

Retention Requirements that are articulated with the Admission and Graduation Requirements are included.

Comments: It is recommended to use the "Retention Requirements" section to refer to the norm at the program level and leave the "Satisfactory Academic Progress Rules" section to the general norm of the University.

## R27SA-PON-N-10 Transfers requirements

That in the <u>General Catalog 20xx-20xx</u>, electronic version, page xxx, the Transfer Requirements of the Bachelor in Sciences in xxxxxxxxx be modified / included, as follows:

Current text	Proposed text		
Transfer requirements	Transfer requirements		
To be admitted to the Program the student from another campus must have a minimum general average of 2.25.	To be admitted to the Program, the student must have a minimum general average of 2.25 <u>from the academic unit or the accredited</u> <u>university of origin.</u>		
(Cross out the text that is deleted or modified)	(Underline new or modified text)		

#### **JUSTIFICATION:**

The proposed rule allows the Admission Requirements to be the same for all students interested in being admitted to the Program, regardless of the academic unit or university of origin.

Comments: This resolution may include the Transfer Requirements (for a student from another university or a student from another academic unit) or both.

# **R27SA-PON-N-11** Graduation Requirements

That in the <u>General Catalog 20xx-20xx</u>, electronic version, page xxx, the Bachelor of Science in xxxxxxxxxx Graduation Requirements be modified / included, as follows:

Current text	Proposed text		
Graduation Requirements	Graduation Requirements		
<ol> <li>Have a minimum overall average of 2.25.</li> <li>Pass the BIOL XXXX (Research Project) course with a minimum grade of C.</li> </ol>	<ol> <li>Have a minimum overall <u>and major</u> average of 2.25.</li> <li>Pass the BIOL XXXX (Research Project) course with a minimum grade of <u>B</u>.</li> </ol>		
(Cross out the text that is deleted or modified)	(Underline new or modified text)		

# JUSTIFICATION:

it is proposed to increase the minimum concentration average to attend a report by the accrediting agency ... In addition, it is proposed that the minimum BIOL XXXX grade be B because of the importance of the course for those students who aim to work in research centers or to study a graduate degree.

Comments: The minimum grade for the approval of an undergraduate course is D and for a graduate course is C. Therefore, if you want to require a higher grade than the one defined in Banner, the course description must be modified to include the following: Pass with a minimum grade of B.

If you have any questions about how to present a resolution, you can contact the Office of Curricular Affairs of the Vice Presidency of Academic and Student Affairs or the Academic Senate of your academic unit. The latter has access to the formats, Actions of the President and other documents that the University Council places on Blackboard for the benefit of the university community.

Dr. José A. Rodríguez Arroyo Institutional Director Office of Curricular Affairs

# TAXONOMIES FOR WRITING COURSE DESCRIPTIONS AND OBJECTIVES

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Annotate	Associate	Apply	Acclaim	Fix	Accumulate
File	Change	Sketch	Group	Categorize	Appreciate
Outline	Conclude	Calculate	Analyze	Collect	Argue
Quote	Compare	Catalog	Calculate	Combine	Show
Know	Compute	Sort out	Categorize	Compile	Calibrate
Tell	Contrast	Complete	Sort out	Compose	Qualify
Say	Decide	Build	Compare	Conclude	Categorize
Deduct	Differentiate	Delineate	Contrast	Build	Compare
Define	Argue	Show	Criticize	Create	Test
Describe	Distinguish	Develop	Debate	Deduct	Conclude
Find	Explain	Discover	Deduct	Derive	Consider
Enumerate	Express	Draw	Disarm	Develop	Note
Write	Formulate	Design	Decompose	Diagram	Contrast
Specify	Identify	Dramatize	Discover	Design	Criticize
Identify	Illustrate	Make	Crumble	Join	Decide
Indicate	Report	Exemplify	Decide	Write	Describe
Read	Interpretate	Exercise	Differentiate	Specify	Detect
List	Locate	Elaborate	Discriminate	Schematize	Diagnose
Call	Manifest	Employ	Distinguish	Establish	Discriminate
Locate	Notify	Test	Focus	Formulate	Distinguish
Memorize	Give opinion	Examine	Schematize	Generalize	Judge
Mention	Predict	Experience	Examine	Devise	Choose
Name	Prepare	Implant	Experience	Integrate	Estimate
Match	Recognize	Interpretate	Identify	Drive	Evaluate
Recite	Remember	Illustrate	Illustrate	Modify	Experience
Recognize	Refresh	Modify	Infer	Order	Hypothesize
Remember	Refer	Modular	Inspect	Organize	Rank
Register	Relate	Operate	Research	Plan	Justify
Narrate	Narrate	Organize	Order	Prepare	Measuremer
Repeat	Summarize	Practice	Pose	Produce	Monitor
Select	To reveal	Predict	Weigh	Propose	Try out
Point	Check	Prepare	Ask	Project	Recommend
Underline	Translate	Produce	Try out	Prescribe	Refuse
		Program	Recognize	Rebuild	Check
		Perform	Relate	Tell	Select
		Restructure	Summarize	Summarize	Appraise
		Relate	Pull apart	Propose	Assess
		Solve	Point	Synthesize	
		Transfer	Solve	Suppose	
		Use		Theorize	

# I. Benjamin S. Bloom Cognitive Taxonomy (1956)

Remember	Understand	Apply	Analyze	Evaluate	Create
Annotate	Associate	Apply	Acclaim	Accumulate	Fix
File	Change	Outline	Group	Appreciate	Combine
Outline	Conclude	Calculate	Analyze	Argue	Compose
Quote	Compare	Catalog	Calculate	Show	Make
Know	Compute	Classify	Categorize	Calibrate	Build
Tell	Contrast	Complete	Sort out	Qualify	Create
Say	Decide	Build	Compare	Categorize	Develop
Deduct	Differentiate	Delineate	Contrast	Compare	Diagram
Define	Argue	Show	Criticize	Check	Draw
Describe	Distinguish	Develop	Debate	Conclude	Design
Find	Explain	Discover	Deduct	Consider	Elaborate
Enumerate	Express	Draw	Disarm	Verify	Join
Write	Formulate	Design	Decompose	Contrast	Write
Specify	Identify	Dramatize	Discover	Criticize	Generate
Identify	Illustrate	Make	Crumble	Decide	Generalize
Indicate	Report	Exemplify	Decide	Describe	Devise
Read	Interpretate	Exercise	Differentiate	Detect	Integrate
List	Locate	Elaborate	Discriminate	Diagnose	Invent
Call	Manifest	Employ	Distinguish	Discriminate	Modify
Locate	Notify	Try out	Focus	Distinguish	Organize
Memorize	Give opinion	Examine	Schematize	Prosecute	Plan
Mention	Predict	Experience	Examine	Choose	Prepare
Name	Prepare	Implant	Experience	Estimate	Program
Match	Recognize	Interpretate	Identify	Evaluate	Produce
Recognize	Remember	Illustrate	Illustrate	Experience	Propose
Remember	Refresh	Modify	Infer	Hypothesize	Perform
Recite	Refer	Modular	Inspect	Rank	Rewrite
Register	Relate	Operate	Research	Justify	Reorder
Narrate	Narrate	Organize	Order	Judge	Synthesize
Repeat	Summarize	Practice	Pose	Measure	Draw
Select	Reveal	Predict	Weigh	Monitor	
Point	Check	Prepare	Ask	Try out	
Underline		Produce	Try out	Recommend	
		Program	Recognize	Refuse	
		Perform	Relate	Review	
		Restructure	Summarize	Select	
		Relate	Separate	Appraise	
		Solve	Point	Assess	
		To transfer	Solve		
		Use	-		
		Utilize			

II. Benjamin S. Bloom Cognitive Taxonomy, as reviewed by Lorin W. Anderson & David R. Krathwohl (2001)

OAC Rev. 05/2011

Remember	Understand	Apply	Analyze	Evaluate	Create
Search or search in	Annotate	Load	Link	Collaborate	Encourage
Mark	Categorize	Share	Reverse engineer	Comment on a blog	Lead
Bookmark	Comment	Run	Recombine	Moderate	To film
favorite sites	Label	Edit	Gather	Participate in	Make a blog
Participate in the social	Do advanced searches	Play	information	networks	Podcasting
network	Do Boolean	Upload files	Validate	Try out	Make video "blog
Highlight	searches			To post	Mix
Use bullets	Make journalism in			Rework	Participate in a wiki
	blog format			Check	
	Subscribe			Program	
	Use Twitter / Facebook				To post
	Facebook				Remix

# III. Benjamin Bloom's taxonomy for the Digital Age, as reviewed by Andrew Churches (2008)

# The communication spectrum in the digital or virtual environment includes:

To collaborate	Communicate on Twitter	Talk ("online chatting")	Instant messaging	Participate in networks	Make Skype videoconferences
Comment	/ Microblogs Answer	To debate	Moderate	Ask/ Question	Meet on the net
Communicate by email	Contribute	Text writing	Negotiate	Publish and make blogs	Check

OAC 05/2011

Perception	Set	Guided Response	Mechanism	Complex Answer	Adaptation	Creation
Distinguish	Locate	Сору	Build	Coordinate	Adopt	Build
Hear	Adjust	Decide	Illustrate	Evaluate	Build	Create
Observe	Assemble	Imitate	Indicate	Demonstrate	Change	Design
Try out	Locate	Repeat	Handle	Sustain	Develop	Produce
Touch	Prepare	Introduce	Mix	Operate	Give	
	Place	Discover	Fix			

# IV. Elizabeth Jane Simpson Psychomotor Taxonomy (1966)

# V. Affective Taxonomy by David R. Krathwohl, Benjamin S. Bloom & Bertram B. Masia (1964)

Receive	Respond	Valuing	Internalization	Characterization
Accumulate	Answer	Argue	Summarize	Act
Ask	Applaud	Assist	Add	Avoid
Select	Assist	Complete	Alter	Discriminate
Combine	Argue	Debate	Organize	Deploy
Control	Discuss	Deny	Swing	Influence
Describe	Follow	Describe	Combine	Drive
Differentiate	Do	Differentiate	Compare	Modify
Follow	Run	Explain	Complete	Practice
Give	Practice	Follow	Defend	Preach
Hold	Present	Form	Define	Qualify
Identify	Read	Increase	Argue	Categorize
Hear	Recite	Protest	Explain	Resist
Locate	Report	Start	Formulate	Check
Name	Write	Invite	Generalize	Serve
Point	Tell	Link	Identify	Use
Separate		Justify	Integrate	Verify
Use		Propose	Modify	
		Report	Prepare	
		Share	Tell	
		Work		

OAC Rev. 04/2011

Level I	Level II	Level III	Level IV
Recall	Skill/Concept	Strategic	Extended
		Thinking	Thinking
Define	Compare	Integrate	Compose
Calculate	Contrast	Create	Plan
Tell	Classify	Explain	Develop
Locate	Relate	Formulate	Create
Order	Identify	Infer	Apply
Name	Describe	Generalize	Edit
Select	Formulate	Play	Design
Use	Organize	Predict	Use
Establish	Specify	Justify	Explain
Measure	Find	Explain	Sustain
Replace	Choose	Analyze	Research
Draw	Solve	Develop	Argue
Fix	Summarize	Try	Locate
Recognize	Extend	Argue	Try
Establish	Apply	Self-evaluate	Extend
Place	Solve	Hold	Generalize
Use	Decide	Apply	Decide
Show	Explain	Build	Monitor
Approximate	Justify	Conclude	Propose
Complete	Formulate	Support	Produce
Match		Correct	Collate
Follow instructions		Produce	Defend
emember parts and shapes		Generate	Evaluate
		Compose	Judge
		Criticize	Distinguish
		Collaborate	Validate
		Visualize	Check
		Correlate	

# VII. Taxonomy of Levels of Depth of Knowledge by Norman L. Webb (2002)

OAC 04/2011

#### VII. Cognitive Taxonomy by Robert J. Marzano (2001)

Robert Marzano (2001) proposes a taxonomy consisting of: a) The System of Consciousness of Being that determines the degree of motivation for

new learning.

stored in

memory.

but its

it is not

b) the Metacognition System that elaborates the action plan,

c) the Cognition System that processes the information, and

d) the Domains of Knowledge that provide the necessary content.

#### **Cognition System**

The mental processes of the Cognitive System act from the Domains of Knowledge. This gives access to information for the use of knowledge. Marzano divides the Cognitive System into four processes, each of which requires the previous process:

- a) knowledge / memory,
- b) understanding,

c) analysis and

d) the use of knowledge.

#### System of Consciousness of Being

The Consciousness

Metacognition

System of Beina is Use of knowledge composed of controls Analysis the attitudes. beliefs thought processes and feelings that Apply knowledge in Knowledge / Understanding and regulates the determine the specific situations: Memory Use what they have other systems. Set individual learned to create new Decision goals and make motivation to Identify the details of making: use knowledge and apply decisions about complete a certain the information that Remember the it in new situations. knowledge to what information is task. The factors are important. make information necessary and that contribute to Relation: identify Remember and decisions exactly as it was or which cognitive motivation are place the information important make process will be the importance, similarities and in the appropriate decisions permanent best to achieve a effectiveness and differences category. about the use certain objective. emotions. between Synthesis: of knowledge. Specification of Name: identify knowledge. Identify most of the Problem goals: or recognize the Importance Classification: components of a solving: use the information student can Assessment: the identify concept and omit knowledge to establish a plan student can categories the insignificant solve structure is not of goals related determine how related to details of it problems or necessarily to knowledge. important the superior and sub Representation: solve understood. knowledge is and Process knowledge. problems present the the reason for Execute: monitoring: the Error analysis: information in about their perception. student can Perform a identify errors in knowledge. categories to make monitor procedure, but the Efficacy the presentation it easier to find it Experimental execution of Assessment: and use of and use it. research: use necessarily knowledge. the student can knowledge. knowledge to understood identify their Clarity Generalizations: generate and how it was beliefs about monitoring: the build new evaluate produced. skills that will student can generalizations hypotheses or improve their determine to or principles generate and performance or what extent he based on evaluate understanding of has clarity in knowledge. hypotheses certain knowledge. about Specifications: knowledge. Precision knowledge. identify specific Evaluation of Monitoring: the applications or Research: Emotions: the student can logical use student can determine the consequences of knowledge to identify emotions extent to which knowledge. conduct before a certain knowledge is research or knowledge and necessary. can conduct the reason why a research certain emotion about arises. knowledge. Motivation Assessment: the student can identify their level of motivation to improve their performance or understanding of

					the knowledge
					and the reason
					for their
					performance.
Domains of knowledge					

Domains of knowledge

Information: organization of ideas, such as principles, generalizations and details (terms and facts). The principles and generalizations are important because they allow more information to be stored with less effort categorizing the concepts. Mental Processes: You can align complex processes, such as writing, and simpler processes that enclose a series of activities that are not necessary to perform in a specific series of steps.

Physical Processes: These depend on the area of learning and the complexity of the activity. They occur in activities such as those in the reading process (eye movement from left to right) and in movements to perform physical exercises that require strength and balance.

OAC Rev. 04//2011

# COURSE CODING SYSTEM FOR UNDERGRADUATE LEVEL

The coding of courses consists of a four-letter alphabetical section that identifies the subject of the course and a four-digit numerical section that identifies the level of the course, the course itself and the sequence in cases where it exists.

The first digit indicates the level of complexity of the course material, which is closely related to the year of studies in which the student normally takes the course. The digits 0 to 4 are used to identify the level of complexity as presented below:

- 0 Pre-university certificate program courses.
- 1 Undergraduate first level courses.
- 2 Undergraduate second level courses.
- 3 Undergraduate third level courses.
- 4 Undergraduate fourth level courses.

The second and third digits are used to identify courses within the same level.

The fourth digit indicates the sequence of two courses within the same level and in the other cases indicates that there is no sequence. The sequence is indicated with digits 1 and 2.

In addition to the meaning of the individual digits, there are combinations of digits with significant value in the course codes as explained below:

- 1. The use of zero (0) as the first digit of the numerical code indicates courses of the preuniversity certificate program.
- 2. The following combinations in the first three digits indicate a special type of course as presented below:
  - a) Associate degrees
    - 1) Combination 197 is used to identify Special Topics in all disciplines.
    - 2) Combination 291 is used to identify supervised practice courses.

3) Combination 297 is used in all disciplines to identify seminars whose titles are not specified in the Catalog.

- b) Bachelor degrees
  - 1) The combination 397 is used to identify Special Topics in all disciplines.
  - 2) Combination 491 is used to identify supervised practice courses in all disciplines.
  - 3) The combination 497 is used in all disciplines to identify seminars whose titles are not specified in the Catalog.

Source: General Catalog 2019-2020

OAC Rev. 09/2015; 12/2019

# COURSE CODING SYSTEM FOR GRADUATE LEVEL

The coding of courses consists of a four-letter alphabetical section that identifies the subject of the course and a four-digit numerical section that identifies the level of the course, the course itself and the sequence in cases where it exists.

The first digit indicates the level of complexity of the course material, which is closely related to the year of studies in which the student normally takes the course. The digits 5 through 8 are used to identify the level of complexity of the graduate courses as presented below:

- 5- Fundamental courses and Master's introductory courses.
- 6- Advanced Masters courses.
- 7- Fundamental courses and doctoral introductory courses.
- 8- Advanced PhD courses.

The second and third digits are used to identify courses within the same level.

The fourth digit indicates the sequence of two courses within the same level and in the other cases indicates that there is no sequence. The sequence is indicated with digits 1 and 2.

In addition to the meaning of the individual digits, there are combinations of digits with significant value in the course codes as explained below:

- a) Master degree
  - 1. The combination 597 is used to identify Special Topics in all disciplines.
  - 2. The combination 691 is used to identify supervised practice courses.
  - 3. The combination 697 is used to identify seminars whose titles are not specified in the catalog.
  - 4. The combination 699 is used to identify theses in all disciplines.
- b) Doctoral degree
  - 1. The combination 797 is used to identify Special Topics in all disciplines.
  - 2. The combination 891 is used to identify supervised practice courses.
  - 3. The combination 899 is used to identify theses in all disciplines.

Source: Graduated Catalog 2019-2020

OAC Rev. 09/2015; 12/2019

# HOW TO DETERMINE CREDITS FOR COURSES

#### **Conference and Conference-Laboratory \***

To determine the credits of a course that uses conference (teaching hours) or conferencelaboratory, the number of contact hours per week for 15 weeks (academic semester) is used as a reference. One (1) credit is granted for every 15 contact hours during the academic term (see Appendix 4, "Guidelines for curriculum development at the Inter-American University of Puerto Rico" and the section "Student Academic Load" in the General Catalog):

1 hour of weekly conference or conference-laboratory = 15 hours = 1 credit 2 hours per week of conference or conference-laboratory = 30 hours = 2 credits 3 hours per week of conference or conference-laboratory = 45 hours = 3 credits 4 hours per week of conference or conference-laboratory = 60 hours = 4 credits

\* The conference-laboratory is a modality that integrates theory (conference) with practice (laboratory). This modality is equivalent to the conference for purposes of determining the credits of the course and the academic load of the professor. In addition, it entails a fee for the modality (not for the credits of the course) similar to that of the open laboratory and applicable when the course is offered in person.

#### Conference + Closed Laboratory (Face-to-face or Virtual)

One (1) credit is granted for every 30 to 45 hours of virtual or face-to-face closed laboratory (see Appendix 4, "Guidelines for curriculum development at the Inter American University of Puerto Rico" and the section of "Student Academic Load" in the Catalog General):

1 weekly hour of conference + 2 of closed laboratory (30 hours) = 2 credits

2 weekly hours of conference + 2 of closed laboratory (30 hours) = 3 credits 2 weekly hours of conference + 3 of closed laboratory (45 hours) = 3 credits 2 weekly hours of conference + 4 of closed laboratory (60 hours) = 4 credits 2 weekly hours of conference + 5 of closed laboratory (75 hours) = 4 credits 2 weekly hours of conference + 6 of closed laboratory (90 hours) = 4 credits 3 weekly hours of conference + 2 of closed laboratory (30 hours) = 4 credits 3 weekly hours of conference + 3 of closed laboratory (45 hours) = 4 credits 3 weekly hours of conference + 4 of closed laboratory (60 hours) = 5 credits 3 weekly hours of conference + 5 of closed laboratory (75 hours) = 5 credits 3 weekly hours of conference + 6 of closed laboratory (90 hours) = 5 credits 3 weekly hours of conference + 6 of closed laboratory (90 hours) = 5 credits 4 weekly hours of conference + 2 of closed laboratory (30 hours) = 5 credits 4 weekly hours of conference + 4 of closed laboratory (30 hours) = 5 credits 4 weekly hours of conference + 2 of closed laboratory (30 hours) = 5 credits 4 weekly hours of conference + 3 of closed laboratory (30 hours) = 5 credits 4 weekly hours of conference + 4 of closed laboratory (75 hours) = 5 credits 4 weekly hours of conference + 4 of closed laboratory (60 hours) = 5 credits 4 weekly hours of conference + 5 of closed laboratory (60 hours) = 6 credits 4 weekly hours of conference + 5 of closed laboratory (75 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of conference + 6 of closed laboratory (90 hours) = 6 credits 4 weekly hours of

#### **Practices**

One (1) credit is granted for every 45-60 hours of experiences in real work scenarios, under the supervision of a professor (see Appendix 4, "Guidelines for curriculum development at the Inter American University of Puerto Rico"). You should talk about the academic term and indicate the total minimum hours required.

3 credits = 135-180 hours in the academic term 4 credits = 181-240 hours in the academic term 5 credits = 241-300 hours in the academic term 6 credits = 301-360 hours in the academic term 7 credits = 361-420 hours in the academic term 8 credits = 421-480 hours in the academic term 9 credits = 481-540 hours in the academic term

Note: As the University has different academic terms, it is important that the course description expresses the total number of hours required by the course in the "conference-laboratory" and "conference and laboratory" modality in the academic term. For example:

- Requires 30 teaching hours and 45 hours of closed laboratory
- Requires 45 hours of conference-laboratory

OAC Rev. 05/2011; 08/2013; 02/2016; 12/2019

#### SYLLABUS TEMPLATE (SEPTEMBER 2016)

PROGRAM \_\_\_\_\_

# SYLLABUS

## I. GENERAL INFORMATION

Course Title	:	
Code and Number	:	
Credits	:	
Academic Term	:	
Instructor	:	
Office Hours and Location	:	
Office Telephone	:	
E-mail	:	

#### II. DESCRIPTION

Includes course requirements.

# III. OBJETIVOS

It is expected that, at the end of the course, the student can:

- 1.
- 2.
- 3.
- 4.
- 5.

# IV. CONTENT

- A. Topic
  - 1. Subtopic
    - 2. Subtopic
- B. Topic
  - 1. Subtopic
  - 2. Subtopic
- C. Topic
  - 1. Subtopic
  - 2. Subtopic

# V. LEARNING ACTIVITIES

- 1.
- 2.
- 3.

#### VI. EVALUATION

The value assigned to each evaluation criterion should be included to determine the final grade in the course. For example:

	Total	600	100
Assignments		100	10
Quizzes		100	15
Final Exam or equivalent		100	25
3 Exams		300	50
			Grade
		Score	% of Final

#### VII. SPECIAL NOTES

#### A. Auxiliary services or special needs

All students who require auxiliary services or special assistance must request these at the beginning of the course or as soon as they know that they need them, through the proper registry, in \_\_\_\_\_\_.

#### B. Honesty, fraud, and plagiarism

Dishonesty, fraud, plagiarism and any other inappropriate behavior in relation to academic work constitutes major infractions sanctioned by the General Student Regulations. The major infractions, as stated in the General Student Regulations, may have as a consequence, suspension from the University for a definite period greater than one year or the permanent expulsion from the University, among others sanctions.

#### C. Use of electronic devices

Cellular telephones and any other electronic device that could interrupt the teaching and learning processes or alter the environment leading to academic excellence will be deactivated. Any urgent situation will be dealt with, as appropriate. The handling of electronic devices that allow students to access, store or send data during evaluations or examinations is prohibited.

#### D. Compliance with the Provisions of Title IX

The Federal Higher Education Act, as amended, prohibits discrimination because of sex in any academic, educational, extracurricular, and athletic activity or in any other program or function, sponsored or controlled by a higher education institution, whether or not it is conducted within or outside the property of the institution, if the institution receives federal funds.

In harmony with the current federal regulation, in our academic unit an Assistant Coordinator of Title IX has been designated to offer assistance and orientation in relation to any alleged incident constituting discrimination because of sex or gender, sexual harassment or sexual aggression. The Assistant Coordinator can be reached by phone at \_\_\_\_\_, extension \_\_\_\_, or by e-mail

The Normative Document Titled **Norms and Procedures to Deal with Alleged Violations of the Provisions of Title IX** is the document that contains the institutional rules to direct any complaint that appears to be this type of allegation. This document is available in the Web site of Inter American University of Puerto Rico (www.inter.edu).

# VIII. EDUCATIONAL RESOURCES

Textbooks Supplementary Readings Audiovisual Resources Electronic Resources (include title or name and URL)

#### IX. BIBLIOGRAPHY (or REFERENCES)

Books Magazines Newspapers Audiovisual Resources Electronic Resources (include title or name and URL)

**Month/Year** Note: Always include the month and year when the syllabus was prepared or revised/updated.

# **Observations of the Office of Curricular Affairs regarding the syllabus:**

- 1) **General Information:** The title, code and credits of the course must respond to the information of the Catalog that applies or to the Actions and authorizations of the President after the publication of the Catalog.
- 2) **Description:** The description of the course must respond to the information of the Catalog that applies or to the Actions and authorizations of the President after the publication of the Catalog.
- 3) **Objectives:** This model of record only includes the objectives of the course (formerly known as general or terminal objectives). However, it is recognized that, for the instructional design of the lessons of the courses, the instructor will also use specific objectives. This is the case, for example, of the lessons for online courses.
- 4) **Special Notes:** Include the special notes that appear under that section, and that were approved by the Board of Trustees or the President. The blanks must be completed with the information that applies to your academic unit. In addition, this section could include other warnings required by the academic unit or related to the course.
- 5) **Educational Resources:** This section refers to the specific resources that are necessary for the achievement of the course objectives. Educational resources should be reviewed and updated as often as necessary.
- 6) **Bibliography:** This section refers to the reference or support materials for the course, as applicable. The bibliography should be reviewed and updated as often as necessary.
- 7) The syllabus could include other particular elements or components of an academic program that meet the requirements of a professional accrediting entity. For example:
  - a) The evaluation or assessment activities
  - b) The competencies profile of the graduate that will be worked on in the course. This works in those courses that are exclusively for use in an academic program. For example: Engineering, Nursing.
- 8) **Month/Year:** Include the month and year of preparation of the syllabus or of the last institutional, campus, academic department or instructor review. The syllabus should always be reviewed, even if they do not undergo major changes. For example, educational resources, bibliography, among others are reviewed. **The date should always be included.**

OAC/VAAEPS Rev. 10/2004; 08/2008; 03/2009; 08/2009; 08/2013; 01/2018; 12/2019

# GUIDE FOR THE DEVELOPMENT OF THE COMPETENCY PROFILE OF GRADUATES (AUGUST 2013)

#### INTRODUCTION

The Guide for the Development of the Competency Profile of the Graduates has the fundamental purpose of giving direction to the curricular development of the Inter American University of Puerto Rico (UIPR) in the following processes: creation or review of the competency profile of graduates, review of the academic offer and creation or revision of the syllabus according to the competency profile established for each program.

In the development of the Competency Profile of the Graduates of each academic program, the UIPR commitment to the student body is established. These profiles establish the results of the expected learning in the curriculum of the UIPR academic and program offering. These learning expectations are based on a continuous process of review and articulation of the skills that graduates must demonstrate in the different social, labor, professional and personal settings.

The creation of a Competency Profile allows to establish a direct relationship between the competencies required for the exercise of the profession and the contents of the academic programs. The Competency Profile of the Graduates establishes the curricular guidelines of the competencies that the student must demonstrate as a result of having traveled the route drawn on the curriculum map of their program. For the UIPR, the curriculum is the central axis of the teaching activity and the starting point for the instructional, programmatic and institutional assessment.

It is important to highlight that the *Guide for the development of the competency profile of graduates* is the result of a reflection activity completed by the members of the administration and faculty of different academic units that participated in an event coordinated by the Vice Presidency of Academic and Student Affairs (VAAE) of the UIPR. This Guide was prepared by Dr. Luis Rafael Morales Sánchez, Professor of Education of the Barranquitas Campus, and VAAEPS curriculum advisor.

# ¿What are the Student Learning Outcomes?

The definitions of learning outcomes presented below contextualize the concept in different *dimensions or levels of curriculum development:* 

- Learning outcomes are statements of what students are expected to be able to do as a result of a learning activity. (Jenkins and Unwin, 2001)
- Learning outcomes are statements that specify what students will know and be able to do as a result of a learning activity. The results are usually expressed as knowledge, skills and attitudes. (American Association of Law Libraries)
- A learning outcome is a written statement of what the successful student is expected to be able to do at the end of a unit or course. (Adam, 2004)
- Learning outcomes are explicit statements of what we want our students to know, understand or be able to do as a result of completing a course. (University of New South Wales, Australia)
- Learning outcomes describe what students are able to demonstrate in terms of knowledge, skills and attitudes when completing an academic program. (Quality Enhancement Committee, Texas University)

In order to generate a clear and understandable meaning about the concept of curriculum in this Guide, some conceptions or definitions about it are included:

- The curriculum is a study plan or program that, on the basis of some fundamentals, organizes teaching and learning objectives, contents and activities in a sequential and coordinated way (Peters, 1977).
- The curriculum is a work plan that allows a system, educational institution or teacher to
  organize the teaching process systematically and strategically. The curriculum is
  conceived as a work plan, giving coherence and integration to all decisions and actions
  that take place in the classroom, from the formulation of teaching objectives and the
  preparation of materials to the design of evaluation activities (Gimeno, 1988).
- The curriculum represents a hypothesis of educators about the learning process that students will carry out throughout their studies to achieve certain goals (Villarini, 1996).
- The curriculum functions as a map that indicates the trip and the territory that will be covered through the teaching and learning processes in its different dimensions (Dewey, 1973).

## I. Articulation of learning outcomes with the different levels of curriculum development

Learning outcomes are established for the different levels of the curriculum taking into consideration the cycles in which learning occurs. These levels can assume a deductive or inductive approach depending on the level of the curriculum design in which they wish to establish learning outcomes. Learning outcomes may be aligned with the following structural levels in curriculum development:

- **Daily lessons:** it consists of the teacher's plan in his/her instructional curriculum based on the programmatic curriculum. This plan consists of lessons that contain all the components of the curriculum design: objectives, content, sequence, scope and integration and teaching and evaluation activities.
- Units of study: it consists of the plan that is elaborated within the instructional curriculum through the development of curricular segments or maps of the different thematic units contained in the course. Its period of teaching time is more extensive, but as in the daily lesson plan, it must contain the following elements: objectives, content, sequence, scope and integration and teaching and evaluation activities.
- **Courses:** it consists of the themes of the units in which the course is divided. This is organized around a general teaching plan or syllabus.
- Academic programs: the elaboration of the program curriculum is centered on topics that facilitate curricular integration at all levels (programs, courses, units, daily lessons) facilitating that the different academic disciplines appear as diverse perspectives for the study of the same topic. The program curriculum requires the development of a competency profile of graduates, that is, to identify the knowledge, skills and attitudes that they must have developed as a result of the learning promoted through the different courses of the academic program. The programmatic curriculum has to be concrete, that is, respond to issues of great relevance and topicality; in addition, it must obey the specific characteristics of the student population it serves and, for that reason, the program curriculum must be continually reviewed.
- **U.I.P.R Curriculum:** it consists of the curricula of all the academic programs of the UIPR. The UIPR curriculum adapts to the constant changes that occur in society and responds to the demands and social and personal needs of the students, as well as to the field of knowledge of the various disciplines. It is framed in its mission statement and goals.

# Figure 1: Articulation of learning outcomes at different levels of curriculum development

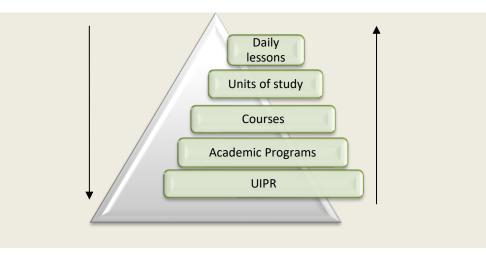


Figure 1 shows a graphic illustration of the coherence of the curriculum through the common thread that links the daily experiences of the teaching and learning processes of the instructional curriculum that is revealed through the daily lessons and the units of study with the purposes and goals contained in the curricula of the academic programs, and the mission and goals pursued by the UIPR.

# II. Characteristics of the learning outcomes in relation to the levels of the curricular development

All the academic programs of the UIPR are based on its mission and goals, which are intended to be achieved through the study of different disciplines. However, the goals of each program are based on the educational values and needs of the student and the needs of society. These goals are operationalized in the classroom through the general objectives of each program and the specific contents that are expressed through the objectives established in the different courses.

# A. Academic Program Goals

- 1) The goals are general statements of the purposes of the program that essentially respond to the needs of society, students and discipline.
- 2) The goals are aimed at what the program should achieve in the future, and particularly, what students should be able to do at the end of the study program.
- 3) The goals serve as the basis for the most precise and observable development of the objectives.
- 4) Goals should never be perceived as permanent or fixed (Brown, 1995).
- 5) The goals do not describe specific topics or contents of the curriculum.

- 6) The goals are written in general terms and provide direction for the development of the curriculum.
- 7) They should be broad enough to delimit the overall objectives of the curriculum and follow from the description of the program.

Below are several examples of goals of an academic program:

- 1) Develop professionals focused on the domain of knowledge related to the Criminal Justice discipline.
- 2) Promote the understanding of the problems of crime from their causes and social effects.
- 3) Promote research and the use of technology as a means to generate the production and construction of knowledge that result in the improvement of prevention and intervention practices that are carried out in the Criminal Justice System.
- 4) Develop a critical and comprehensive attitude towards social problems that affect healthy living in society.
- 5) Develop commitment to the ethical dimension of professions related to the field of Criminal Justice.

## **B.** General Program Objectives

Once the goals on which the curriculum of the academic program is based are determined, they are converted into practical and operational objectives.

- 1) The general objectives of the program must be related to the goals and must contribute to their achievement and operationalization.
- 2) Each general objective of the program must be categorized in the dimensions of knowledge, skills and attitudes.

Below are some examples of general objectives:

- 1) Generate theoretical knowledge related to the State and Federal Criminal Justice System (knowledge).
- 2) Analyze the problems of crime based on their causes and social effects (skill).
- 3) Use critical and creative thinking in problem solving and decision making related to the area of Criminal Justice **(skill)**.
- 4) Use research and technological advances for the production and construction of knowledge in the areas that make up Criminal Justice (skill).
- 5) Integrate the ethical and legal values and principles that guide justice in a democratic society into professional practice (attitudes).

# C. Competencies

Competencies is a skill that consists of processes, concepts and general attitudes that develop gradually and evolutionarily through the social interaction that occurs in the classroom or virtual medium. It is the ability to understand, appreciate, do and execute in a variety of situations specific to the subject of teaching (Villarini, 1996).

The competencies must be expressed in the following dimensions:

- Knowledge: describes the knowledge that the student must acquire as a result of the learning and teaching processes. What should the student know??
- Skills: It describes what the student should be able to execute with the knowledge acquired. What should the student be able to do?
- Attitudes: describes the predisposition for the acceptance of certain attitudes and values.
   What attitudes and values should the student possess?

When writing the statement of a competency, the following aspects must be taken into consideration:

- 1) The competencies must be written in such a way that they clearly present what the student has to do to demonstrate their learning.
- 2) Verbs of observable and measurable behavior should be used to write skills and attitudes competencies. In the writing of knowledge competencies, only what the student should know as a result of the academic experiences developed in the courses is indicated.

Below are some examples of writing knowledge, attitudes and skills competencies expressed as student learning outcomes:

- 1. Example of writing knowledge competency in terms of the learning outcome:
  - a. 85% of students will demonstrate mastery of knowledge related to research designs.
    - i. Metric (assessment standard): 85% of students
    - ii. Competency: Knowledge related to research designs.
    - iii. Assessment: Objective test (Table of specifications)
- 2. Example of writing skill competency in terms of the learning outcome:
  - a. 80% of students will apply research designs to solve problems related to the area of Criminal Justice.
    - i. Metric: (assessment standard): 80% of students

- ii. Competency: Apply research designs to solve problems related to Criminal Justice.
- iii. Assessment: Research proposal (Analytical rubric)
- 3. Example of writing the attitude competency in terms of the learning outcome:
  - a. 100 of the students will express the importance of the ethical principles of research.
    - i. Metric (assessment standard): 100% of students
    - ii. Competency: Demonstrate the importance of ethical research principles.
    - iii. Assessment: Reflective essay (Analytical rubric)

# D. Types of competencies in an academic program:

All academic programs should promote the development of the following types of competencies:

- 1. *General competencies:* These are the general professional competencies related to the core courses of the program. These aim to develop the fundamental knowledge of the profession.
- 2. *Specific competencies*: They are the technical competencies related to the courses of the concentration or the specialty. These aims to develop procedural knowledge and specific or technical skills in the professional future.

# E. Competency profile of graduates:

The competency profile of graduates consists in the description of the characteristics that are required from the professional to solve the social and personal needs after having completed the requirements of an academic program. The creation of a competency profile allows to establish a direct relationship between the competencies required for the exercise of the profession and the contents of the academic programs (Arnaz, 1981).

In general, the graduate's profile begins with an assertion such as the following:

- The Program is designed to develop the skills that allow the student:
- The Program is designed to develop general and specific competencies that allow the student:

Then we proceed to express the competencies in the dimensions of knowledge, skills and attitudes as presented in the following examples:

## 1. Knowledge:

a. Know (or demonstrate knowledge of) research designs related to the area of Criminal Justice.

# 2. Skills:

a. Apply research designs to solve problems related to the area of Criminal Justice.

# 3. Attitudes:

a. Recognize (or Manifest) the importance of ethical research principles.

It should be noted that the statements of the competency profile of graduates are aimed at establishing the results of general learning in the dimensions of knowledge, skills and attitudes and are achieved in the long term once the student has completed the academic program courses. The terminal objectives are stated in the medium-term learning outcomes and are achieved through the thematic units of the course. The specific objectives are enunciated of the results of the most specific learning that are related to the sub-themes of the units and are developed through the daily lessons of the.

It is important to note that to develop the competency profile of graduates only the core courses and concentration or specialty of the academic program will be used. Distributive and elective courses will not be considered for this purpose.

# Figure 2: Articulation of the competency profile in the different components of the curriculum

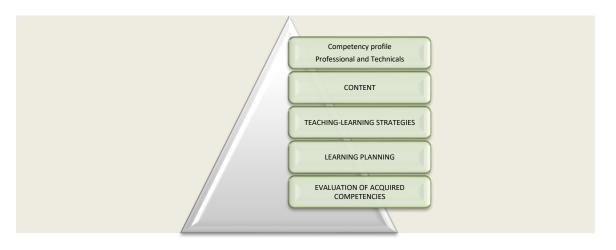


Figure 2 shows the different structural components of curriculum development that intervene in a coherent way in the achievement of learning outcomes expressed in the profile of general and specific competencies of academic programs. In addition, it establishes the link that must exist between the contents of the courses and strategic learning planning and the systematic, valid and reliable evaluation as a mean to demonstrate the achievement of program competencies.

## F. Questions that guide the elaboration of the competency profile of graduates:

The following questions should be asked to give direction to the elaboration of the competency profile of graduates of the academic program:

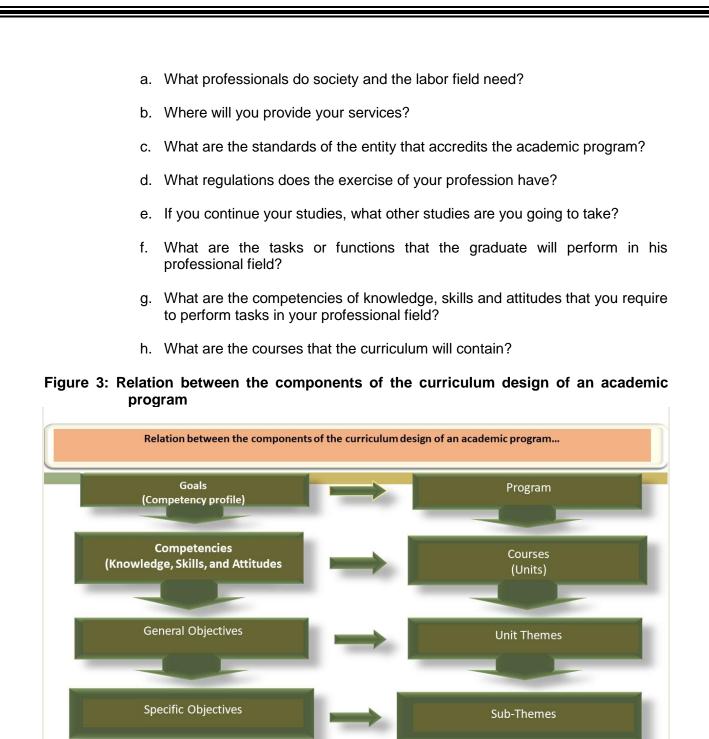


Figure 3 shows the correspondence that must exist between the learning outcomes expressed in the different structural levels of the curriculum design. These student learning results are established in different time cycles: long, medium and short term. In addition, the structural levels, as well as the results of the learning pursued by each of them, have different scopes in the student's learning expectations, ranging from the general to the specific.

Below is a model that exemplifies the articulation between goals, general objectives, competencies and courses in an academic program.

Goals	General Objectives	Competencies	Courses
1. Develop professionals focused on the domain of knowledge related to the Criminal Justice discipline.	Generate theoretical knowledge related to the State and Federal Criminal Justice System.	Know the interaction between the state and federal legal system, individuals and society. Apply criminological theories to the comprehensive study of the relationship between laws, individuals and society. Demonstrate a critical attitude towards the study of the interaction of the legal system of Puerto Rico, individuals and society.	CJUS 5010 Law and Society CJUS 5055 Criminology CJUS 5080 Public Policy and State and Federal Justice Systems
2. Promote the understanding of the problems of crime from their causes and social effects.	Analyze the problems of crime based on their causes and social effects.	Analyze the social and legal aspects of juvenile delinquency, as well as the theories, factors and conditions associated with this social problem. Analyze the factors and conditions that lead people to create dependence on psychoadictive or illegal substances and criminal behavior. Demonstrate a positive attitude towards people with deviant behavior who are in the process of rehabilitation.	CJUS 5237 Juvenile Justice CJUS 5613 Addiction, Criminality and Rehabilitation

# Table 1: Example: Articulation of goals, general objectives, competencies and courses in an academic program

Goals	General Objectives	Competencies	Courses
3. Promote research and the use of technology as means to generate the production and construction of knowledge that result in the improvement of prevention and intervention practices carried out in the Criminal Justice System.	Use research and technological advances for the production and construction of knowledge in the areas that make up the criminal justice field.	Know the methodology of social-scientific research. Apply the methodology of social-scientific research to the development of research in the area of criminal justice. Recognize the importance of research as an effective mean for the production and construction of knowledge in the area of criminal justice.	CJUS 5060 Methodology of Social-Scientific Research CJUS 5070 Applied Social- Scientific Research in Criminal Justice
4. Develop a critical and comprehensive attitude towards social problems that affect healthy living in society.	Use critical and creative thinking in problem solving and decision making related to the area of Criminal Justice.	Know the social and legal aspects of juvenile delinquency. Evaluate the effectiveness of prevention, treatment and rehabilitation strategies used with people with deviant behavior.	CJUS 5237 Juvenile Justice CJUS 5613 Addiction, Criminality and Rehabilitation
5. Develop commitment to the ethical-legal dimension of professions related to the field of Criminal Justice in their social function.	Integrate the ethical and legal values and principles related to the field of Criminal Justice into professional practice.	Apply ethical and legal values to the field of criminal justice.	All courses

Table 1 shows in a hypothetical way the articulated relationship between goals, general objectives, competencies and courses in an academic program. It can also be seen that the goals of the program are framed in the needs of society, the personal needs of the students and the knowledge and content of the discipline. These in turn are operationalized through the general objectives of the program, which are categorized into knowledge, skills, and attitudes. These general objectives are always directed to the field or professional area in which the graduate will perform. In addition, there is a coherence between each of the different statements of the learning outcomes of the knowledge, skills and attitudes competencies and the courses of the program.

It is important to indicate that the competency profile presented in the example does not necessarily respond to the Master's Program in Arts in Criminal Justice.

# Figure 4: Summary of the curriculum articulation process to achieve the competency profile of graduates of an academic program

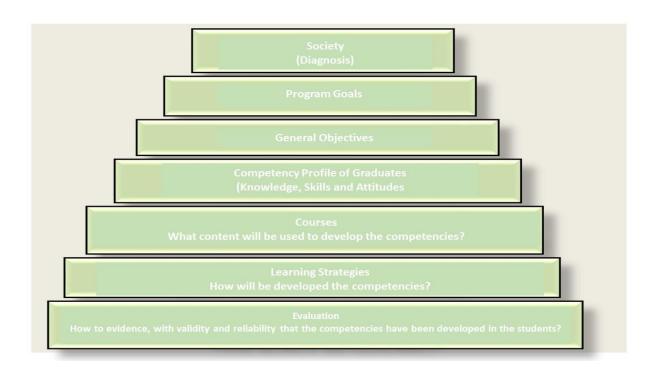


Figure 4 shows the components and dimensions that have to be considered in the process of developing the competency profile of graduates of the academic program. In addition, it illustrates the process that is followed in the curricular development that begins through a diagnosis of needs that considers society, students and discipline. From this diagnosis emanate the goals of the program, which begin to be operationalized through the general objectives of the program. These serve as the basis for the development of the competency profile of the graduate, which will be developed through the contents of the courses that make up the study program. The curricular development also takes into consideration, among other aspects, the teaching strategies that will be used for the development of the competencies and the evaluation that will demonstrate with validity and reliability that the competencies have been developed in the students.

## Inter American University of Puerto Rico

Vice Presidency of Academic and Student Affairs

# ASSESSMENT INSTRUMENT FOR THE EVALUATION OF THE COMPETENCY PROFILE OF GRADUATES OF ACADEMIC PROGRAMS

## Program:

**Purpose:** The purpose of this assessment instrument is to establish the quality criteria that will be directed to faculty members and administrators who participate in curricular review committees at different levels at the Inter American University of Puerto Rico in the process of creating or reviewing the competency profile of graduates of academic programs. This instrument establishes the descriptors of the execution levels for each of the criteria contained in the rubric. These will serve as guides to determine the extent to which the Competency Profile of Graduate identified for each academic program responds to its goals and objectives.

*Instructions:* Mark with a ( $\sqrt{}$ ) the rating scale that best represents the level of performance of the evaluated criteria. Use the following assessment scale in the assessment process of the Competency Profile of Graduates of the Academic Program:

## Rating scale and descriptors of execution levels:

Rating	Descriptors	Acronym
2	Fully meets the criteria	СТ
1	Partially meets the criteria	СР
0	Do not meets the criteria	NC

Criteria	2	1	0	
	СТ	СР	NC	Comments
Program Goals: The following criteria should be	conside	red in its	formulat	on:
1. They are written as general statements of the				
purposes of the program and essentially				
respond to the needs of society, students and				
discipline.				
2. They are broad enough to delimit the general				
objectives of the curriculum and emerge from				
the description of the program.				
<ol> <li>Do not describe specific topics or content from the program curriculum.</li> </ol>				
			l	
. Program General Objectives: The following crite	eria shou	uld be co	nsidered	in its formulation:
1. The objectives establish how to operationalize				
in a practical way the goals on which the				
curriculum of the academic program is based.				
2. They are related to the goals and contribute to				
their achievement.				
3. The objectives of the program are categorized				
in the dimensions of knowledge, skills and				
attitudes.				
I. Program competencies: The following criteria s	hould be	conside	red in its	formulation:
1. The competencies are categorized in the		Γ		
dimensions of knowledge, skills and attitudes.				
dimensions of knowledge, skills and attitudes. 2. The knowledge competencies are directed to				
<ul><li>dimensions of knowledge, skills and attitudes.</li><li>2. The knowledge competencies are directed to the knowledge that the student must acquire</li></ul>				
<ul><li>dimensions of knowledge, skills and attitudes.</li><li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching</li></ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes</li> </ul>				
<ul><li>dimensions of knowledge, skills and attitudes.</li><li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching</li></ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes What should the student know?</li> </ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes What should the student know?</li> </ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes What should the student know?</li> <li>Skills competencies are aimed at what the student should be able to execute with the knowledge acquired.</li> </ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes</li> <li>What should the student know?</li> <li>3. Skills competencies are aimed at what the student should be able to execute with the</li> </ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes What should the student know?</li> <li>3. Skills competencies are aimed at what the student should be able to execute with the knowledge acquired. What should the student be able to do?</li> </ul>				
<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes What should the student know?</li> <li>3. Skills competencies are aimed at what the student should be able to execute with the knowledge acquired. What should the student be able to do?</li> <li>4. Attitudinal competencies are directed</li> </ul>				
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<ul> <li>dimensions of knowledge, skills and attitudes.</li> <li>2. The knowledge competencies are directed to the knowledge that the student must acquire as a result of the learning and teaching processes What should the student know?</li> <li>3. Skills competencies are aimed at what the student should be able to execute with the knowledge acquired. What should the student be able to do?</li> <li>4. Attitudinal competencies are directed towards achieving the student's predisposition for the acceptance of certain attitudes and values.</li> </ul>				

Criteria	2	1	0	
	ст	СР	NC	Comments
<ol> <li>General competencies are identified (They are those related to the core courses of the program and aim to develop the fundamental knowledge of the profession).</li> </ol>				
<ol> <li>Specific competencies are identified (These are related to the concentration courses and are aimed at developing procedural knowledge and technical skills in the professional future.). *</li> </ol>				

\* These criteria will apply to those academic programs whose curricular design includes concentrations or specialties.

### **Recommendations:**

Rev. 08/2013

Prepared by: Luis R. Morales Sánchez, Ed. D. Professor of Education Translated: 12/2019

Translated by: José A. Rodríguez Arroyo Institutional Director Curriculum Affairs

#### REFERENCES

Armstrong, D. V. (1992). Developing and documenting the curriculum. Boston: Allyn and Bacon.

Arnaz, José A. (1987). La planeación curricular. México: Trillas.

Beane, J. A. Ed. (1995). *Toward a coherent curriculum*. Virginia: ASCD.

Brown, J. D. (1995). Chapter 3: Goals and objectives. The elements of language curriculum: A systematic approach to program development (pp. 71-107). Boston: Heinle & Heinle.

Dewey, J. (1978). Democracia y educación. Revised. Buenos Aires: Losada.

- Departamento Educación de Puerto Rico. (2000). *Marcos conceptuales y curriculares*. San Juan, Puerto Rico: DPR.
- Departamento Educación de Puerto Rico. (2003). *Proyecto de renovación curricular: fundamentos teóricos y metodológicos.* Instituto Nacional para el Desarrollo Curricular (INDC), San Juan: DEPR.
- Gimeno, J. S. (1981). Teoría de la enseñanza y desarrollo del currículum. Madrid: Anaya.

Glatthorn, Allan. (2003). Developing a quality curriculum. Waveland Press, Inc., Illinois.

Goodson, I. F. (2000). El cambio en el currículo. Barcelon: Octaedro.

- Hale, Janet A. & Dunlap, Richard, F. (2010). *An educational leader's guide to curriculum mapping: creating and sustaining collaborative cultures.* Thousand Oaks, CA.: Corwin.
- Hale, Janet A. (2008). A guide to curriculum mapping: planning, implementing and sustaining de process. Thousand Oaks, CA.: Corwin.
- UIPR, Vicepresidencia de Asuntos Académicos, Estudiantiles y Planificación Sistémica (2013). Guía para la revisión de programas académicos únicos y compartidos.

Universidad Interamericana de Puerto Rico. (2008). Manual de la facultad.

Jacobs, Heide Hayes. (2004). Getting results with curriculum mapping. Alexandria, VA: ASCD.

Jacobs, Heide. (2003). *Mapping the Big Picture: Integrating Curriculum and Assessment K-12*. ASCD, Baltimore, MD.

Krull, Edgar. (2003). Hilda Taba. Revista Trimestral de Educación. Vol. XXXIII, núm. 4. UNESCO.

Mager, R. F. (1984). *Preparing instructional objectives. 2nd ed.*, Belmont, California: Pitman Learning.

McLean, J & Looker, P. (2006). University of New South Wales Learning and Teaching Unit. Available online: <u>http://www.ltu.unsw.edu.au/content/course\_prog\_support/outcomes.</u>

Oliva, P. (1990). Developing the curriculum. Boston: Little, Brown and Co.

- Ortiz García, Ángel. (2008). *Diseño y Evaluación Curricular*. Editorial Edil, Inc., Río Piedras, Puerto Rico.
- Orstein, A. y Hunkins, F. P. (2002). Curriculum *Foundations: Principles and Issues.* Englewood Cliffs; Prentice-Hall.
- Osters, S and Tiu, F. (2006), *Writing measurable learning outcomes. Article available* on: <u>http://qep.tamu.edu/documents/Writing-Measurable-Learning-Outcomes.pdf</u>

Peters, R. S. Filosofía de la educación. México: Fondo de Cultura Económica.

Posner, G. J. (2005). Análisis del Currículo. New York: McGraw Hill.

Smith, P. & Ragan, T. (1999). Instructional design. New York: John Wiley & Sons, Inc.

Rivera Viera, D. (2003). El perfil del egresado: punto de partida para la revisión curricular.

- Udelhofen, Susan. (2005). *Key to curriculum mapping: strategies and tools to make it work.* Thousand Oaks, CA.: Corwin.
- Villarini, A. R. (1996). *El Currículo orientado al desarrollo humano integral.* San Juan: Biblioteca del Pensamiento Crítico.

Villarini, A. (1991). Manual para la enseñanza de destrezas de pensamiento. Puerto Rico: Pell.

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# Appendix 13

# FORM: NOTIFICATION OF SIGNIFICANT CHANGES TO THE BOARD OF POSTSECONDARY INSTITUTIONS 29.2 VAEE

### INTER AMERICAN UNIVERSITY OF PUERTO RICO

### ACADEMIC UNIT: RECINTO

### Notification of significant changes to the Board of Postsecondary Institutions of the Department of State of Puerto Rico

Significant changes to be notified to the JIP as soon as it is effective: Article 29.2

#### ART. 29.2 Significant changes that DO NOT require JIP Certification, but must be notified

- □ Changes in admission policies or requirements
- □ Changes in graduation requirements, including review of programs to add or redistribute courses and amount of credits
- □ Changes in the main executives of the institution
- □ Changes in institutional catalogs
- Consortiums, agreements or academic collaboration agreements between educational institutions.

#### Section 29.3 Content of the notification (applies to all change options)

A. Title Modification (if applicable)

Current	Revised

### B. Description of the change, including justification, purpose and effective date:

• Click or tap here to enter text.

Credits redistribution	Before		
Now			
General Education Requirements			
Core Courses Requirements			
Major Requirements			
Prescribed Distributive Requirements			
Elective Courses			

#### C. Curriculum design that responds to such changes:

- Click or tap here to enter text.
- D. Description of new courses (if applicable):
  - Click or tap here to enter text.

E. Change in the curricular design from current text to the revised text:

	Current Revised						
	EMENTS OF (current name of progr	am)	REQUIREMENTS OF (proposed name)				
Core Cou	Core Courses Requirements			rses Requirements			
Specializa	Specialization Requirements		Specialization Requirements				
	TOTAL			TOTAL			
	CORE COURSE	ES RE	QUIEREMI	ENTS			
Course	Course	crs.	Course	Course	crs.		
Code			Code				
	SPECIALIZ	ATION	REQUIRE	MENTS			
Course	Courses	crs.	Course				
Code			Code				

- F. Updated information to be published in the institution's catalog or in any other publication:
  - Click or tap here to enter text.
- G. Information on how the change will be notified to the academic community:
  - Click or tap here to enter text.
- H. Explanation of how change affects enrolled students:
  - Click or tap here to enter text.
- I. In case of re launching an academic offer that has been in default for three years or less and has a curriculum maintained as approved by the JIP, include a copy of the Certification issued by the JIP.
  - Click or tap here to enter text.
- J. In case of a consortiums, agreements or academic collaboration agreements between educational institutions, include a copy signed by the parties.
  - Click or tap here to enter text.

Note: Changes in the name of the program or academic offer that does not imply a change in the level or in the curricular approach of the academic offer, will be submitted to the JIP through the electronic platform PLES Art. 28.8